

Stanley David Gedzelman

GENIAL ATHEISM

presents a holistic overview of the nature, history, and allure of both religion and atheism. It answers questions that have long plagued atheists, agnostics, and believers alike, such as:

- Why do many believers hate atheists and fear atheism?
- Why have religions been so relentless in their attempts to root out and destroy atheism?
- Why have religions failed as moralizing forces?
- Why do so many believers clutch at magic while they flee from science?
- What aspect of human nature accounts for religion's persistence in the face of the triumphs of reason and the advances of science?

Here is a sample.

"Our capacity to reason has raised us to rule over the animals, and to understand and manipulate nature, so that we can probe to our cores and soar toward the stars. But the magnificent, powerful conscious mind is only a veneer that yields, even grovels on demand, before the might of the unconscious mind bubbling below. The hidden unconscious, with all its drives and fears, primed by primordial and infantile programming, commands us in so many ways and compels and rivets us to beliefs and opinions that we arrogate to the free will of our intellects or ascribe to some external deity."

Other books by Professor Stan Gedzelman are:

- 1. The Science and Wonders of the Atmosphere
- 2. The Soul of All Scenery: A History of the Sky in Art
- 3. Calculus: Your Royal Road to Genius
- 4. Sub Ways: Memoir and Reflections of a Professor Turned Substitute Teacher.

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Stanley David Gedzelman

14 July 2021

"Thank God there's no God."

TO LIFE

AND TO

MY FATHER, MILTON, WHO TAUGHT ME TO READ THE LINES

MY MOTHER, RITA, WHO TAUGHT ME TO READ BETWEEN THE LINES

TO MY UNCLES, BERT AND JESSE, WHO LOVED TO THINK

AND TO LEON WARSHAW WHO AIMED ME TOWARDS WISDOM

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This book can be found on the website

www.stanrenaissainceman.com

The website contains the four books below plus many other works

- 1. The Soul of All Scenery: A History of the Sky in Art
- 2. Calculus: Your Royal Road to Genius
- 3. Sub Ways: Memoir and Reflections of a Professor Turned Substitute Teacher
- 4. Genial Atheism

Cover Photo: Taken from Michelangelo's *Creation of Adam* in the Sistine Chapel and Hubble's View of Barred Spiral Galaxy NGC 1672.

PREFACE

Why did I write *Genial Atheism* (aside from hoping to better understand myself and my fellow humans) and what does the title mean?

There are millions of cookbooks, billions of dieting, exercise, and how to succeed books, and trillions of inspirational books extolling the blessings and miracles of faith and religion. Surely then, there is a call for one more of the teeny handful of books on atheism to offer an alternative to religion's inordinate influence and control over our lives.

Each book on Atheism occupies a different niche, its perspective deriving from the author's expertise and orientation. *Genial Atheism* is more personal than average. It devotes more time and effort explaining what drives so many of us to believe so ardently in a personal God that no one can see and to blindly join religions that urge and may even demand we give our lives or take the lives of others. It includes more on the history and evolution of religion and atheism, and has the advantage of standing on the shoulders of noble predecessors.

Genial Atheism is distinguished by rejecting the assertion by many atheists that reason will free us from the fetters of religion and the dogged belief in phantasms. Our capacity to reason has raised us to rule over the animals, and to understand and manipulate nature, so that we can probe to our cores and soar toward the stars. But our magnificent, powerful conscious mind is only a veneer that yields, even grovels on demand, before the might of the unconscious mind bubbling below. The hidden unconscious, with all its drives and fears primed by primordial and infantile programming, commands us in so many ways and compels and rivets us to beliefs and opinions that we arrogate to the free will of our intellects or ascribe to some external deity.

The main delusion conventional believers suffer involves ascribing our inner powers and weaknesses to external beings. First, we ascribe our sense of tranquility, confidence, majesty, and our talents to a God we see as a controlling and too often, threatening or punishing parent. Second, we blame our inner sense of turmoil, fear, and terror, and perhaps our shortcomings to a Satan who tosses and tempts us with uncontrollable drives and desires that lead us to sin but provide our vital lifeblood.

Genial atheists know all are subject to the same drives and fears but that they are more curious and have a greater ability and willingness to question than believers. They also know that they have somehow wrested themselves free of the atavistic, misguided and false belief that our inner drives, yearnings, and fears are external and lie outside ourselves. Oh, and what marks a *genial* atheist? Quite simply, genial atheists welcome you to believe in any God, angel, Satan, devil, and doctrine you want, so long as you do not attempt to impose your beliefs on anyone else (which, of course so many believers can't resist doing). Then you can rest assured that genial atheists will keep their lack of belief in these phantasms to themselves.

What is wonderful about *Genial Atheism* or any book on Atheism is that no one will force you to read it. But what is more wonderful and even more important, is that no one can *prevent* you from reading it, at least wherever religion has lost its power as censor.

Is Genial Atheism harsh on religion and belief? Genial Atheism is a polemic, no bones about it. But despite the title, its primary advocacy is neither against individual belief in a personal God, which everyone should be entitled to, no matter how absurd and childish, nor against spiritual or religious type sentiments and inspirations, which can be glorious. What Genial Atheism primarily rails against first is the dictatorial mindset of religious or secular tyrants, who would impose their beliefs and dogmas on everyone and suppress, silence, and squash all independent thought and dissent. Their mindset is cogently expressed by Matthew 12:30, "He that is not with me is against me; and he that gathereth not with me scattereth abroad." I excoriate the first phrase as the calling card of all autocrats, and diagnose the second as an illustration of their unbounded and unwarranted arrogance. Second, Genial Atheism calls out the gullibility, indeed, eagerness of followers, with their collectivist mindset, to carry out the most vicious wishes and demands of their leaders, doctrines, or groups.

Any organized power seeks to impose its views on all. That is human nature. The idea of separation of Church and State, written in the diluted version of James Madison's initial statement of the First Amendment to the Constitution of the United States that Congress was able to agree on, expressed a key component of the Founders' intent to ensure the establishment of a secular democratic Republic, whose people were free to follow any religion, presumably so long as it harms no one else.

The fact, however, is that organized religion (and totalitarian states) occupy special niches in the arena of stricture, for controlling and corralling human minds and spirits lies at their cores. In a world of infinite options of things to do and to learn it is insane for anyone to submit to an option whose focus and imperative is to limit or shut off so many good options that life offers.

Genial Atheism expresses umbrage at the prerogatives organized religion arrogates to itself, exposing its bogus claims to moral rectitude, how it promulgates stultifying irrational fears, imposes myriad divisive,

exclusionary and nonsensical rules and restrictions, and mandates punishments for violations of any of these, which violations it invariably condemns as sins. For years I remained silent in the face of these outrages, but the straw that finally goaded me to write *Genial Atheism* is a grievance that became clear and strong as our country grew more than ever divided into opposing intransigent camps.

We are constructed with clannish tendencies as a matter of simian survival and Paleolithic progress, but I cannot abide blind advocates who embrace a position the moment their team or leader takes it and oppose the identical position the moment the opposing team or leader takes it. They may firmly believe their positions and the 'facts' they cherry pick to support them. Their reasoning and rhetoric may sound eloquent and ingenious. But the starting and ending points are always preset. It is a form of self hypnosis, but more than that. Such acolytes may wink at or even participate in murder or holocausts and exterminations committed in the name of the gods or dogmas they believe in. They will allow or execute monstrous crimes so as to protect themselves from their worst inner fears, which they will never acknowledge or recognize, while they make the absurd claim that they are fulfilling the demands of and protecting their omnipotent, omniscient God or leader.

If *Genial Atheism* can ameliorate in any degree this all too inhuman human tendency or condition in one person then, as the saying goes, it will have saved the entire human race. That's not bad for a start.

14 July 2021

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TABLE OF CONTENTS

CHAPTER 1. THE PERSONAL BASIS	1
1.1 THE AWAKENING	1
1.2 PRELUDE FOR A GENIAL ATHEIST	2
1.3 MY GOALS	4
1.4 THE PREMISES: THE CORE	5
1.5 LEAD-UP TO MY REVELATION	7
1.6 MY REVELATION	9
1.7 MY BELIEFS IN BRIEF	11
CHAPTER 2. LIFE AS AN ATHEIST	14
2.1 WHO IS AN ATHEIST?	14
2.2 HOLY INCONSISTENCIES	16
2.3 ILLITERACY AND TIME LAGS	18
2.4 ATHEISTS ARE SOLOISTS	20
2.5 ATHEISTS ARE TRAITORS	21
CHAPTER 3. DESCENT TO RELIGION	26
3.1 RELIGION'S DUAL DOMAIN	26
3.2 RELIGION: A GIANT AMOEBA	29
3.3 HYSTERIA, CHEERLEADERS, CEDARHURST	29
3.4 A PLAY: SETUP FOR THE INITIATE	32
3.5 STORYLAND INCULCATION	33
3.6 LIMITING AND DISPARAGING REASON	37
3.7 A WORLD OF ALTERNATIVE FACTS	39
CHAPTER 4. RELIGION'S CON JOB	41
4.1 RELIGION AND SELF-CONGRATULATION	41
4.2 MORAL BEHAVIOR AND RELIGIOUS BELIEF	42
4.3 THE GOLDEN PRINCIPLE: MORAL MATURITY	47
4.4 SATAN AND EVIL	48
4.5 RELIGION IS SPOILED BY HUMANS	49
4.6 ATHEISTS IN THE TRENCHES	49
4.7 ARGUMENTS FOR GOD	50
4.8 TWO GREATEST PROOFS OF GOD'S EXISTENCE	52
CHAPTER 5. RELIGION'S CORE	53
5.1 FAIRY TALES, RULES, PUNISHMENTS	53
5.2 EXTERNALIZING AND PSYCHOLOGY	56
5.3 EXTERNALIZING AND RATIONALIZATION	59

5.4 REVELATIONS AND MYSTICAL EXPERIENCES	59
5.5 REPETITION, HYPNOTISM, MEDITATION	63
5.6 IT'S HARD TO CHANGE	64
5.7 FREE WILL AND BIOPSYCHOLOGY	65
5.8 ON TRIAL – JUDGMENT DAY	69
5.9 SACRIFICE AND IMMOLATION	69
5.10 SEX	74
5.11 CLIMATES FOR FAITH	77
5.12 COMMUNISM, RELIGION, AND GOD	78
5.13 FUNDAMENTALISTS VS MODERATES	79
CHAPTER 6. PUTTING RELIGION IN ITS PLACE	81
6.1 HUMOR – PAINFUL TRUTH	81
6.2 LIFE – THE BRIGHT SIDE	84
CHAPTER 7. RELIGIOUS TIME AND GEOLOGIC TIME	87
7.1 IN THE BEGINNING	87
7.2 MORTALITY, FLOODS, MAKEOVERS	88
7.3 PLAGIARISM	90
7.4 CREATION TIME AND GEOLOGIC TIME	95
CHAPTER 8. THE NATURAL HISTORY OF RELIGION	104
8.1 THE SETUP FOR BELIEF	104
8.2 MENTAL GROWTH AND RELIGION'S ORIGINS	106
8.3 MENTAL DESIGN FLAWS: OPTICAL ILLUSIONS	111
8.4 SOCIAL GROWTH AND RELIGION'S ORIGINS	115
8.5 ARCHAEOLOGICAL EVIDENCE	117
8.6 THE CAMBRIAN EXPLOSION AND RELIGION	120
8.7 THE ENLIGHTENMENT	125
8.8 COEVOLUTION OF RELIGION AND SCIENCE	126
CHAPTER 9. ATHEISM AND REASON EMERGE	128
9.1 CLOSET ATHEISM	128
9.2 THE ENLIGHTENING SCIENTIFIC REVOLUTION	133
9.3 JEAN MESLIER'S TESTAMENT	139
9.4 THE HALFWAY HOUSE OF DEISM	147
9.5 ATHEISM'S MOMENT IN THE SUN	150
9.6 ENLIGHTENED FORAYS INTO PASSION	152
CHAPTER 10. THE DEEPER LAYERS OF BELIEF	160
10.1 THE SUBLIME, SUPERMAN, AND SOCIETY	160
10.2 EVOLUTION VS THE BIBLE	165

10.3 GOD IS DEAD: SUPERMEN IN ACTION	171
10.4 WOMEN JOIN THE FRAY	172
10.5 CLEANING UP AND POWERING UP	176
10.6 ENTER THE PSYCHOLOGISTS	178
10.7 PLUMBING THE DEPTHS	181
CHAPTER 11. MODERN ATHEISM	192
11.1 OF HUMAN BONDAGE	192
11.2 SATIRE-DAY	193
11.3 UNAPOLOGETIC ATHEISTS	202
11.4 GENETICS SHREDS INTELLIGENT DESIGN	211
11.5 DAWKINS AND DELUSION	213
11.6 HITCHENS: RELIGION AS POISON	215
CHAPTER 12. CONCLUSION: ATHEISM EMERGENT	222
INDEX	224

CHAPTER 1

THE PERSONAL BASIS

1.1 THE AWAKENING

Life is its own adventure, for life is all there is. This life!

Last night you went to sleep a believer. This morning you woke to find your faith has vanished. There is no God. Religion has lost its underpinning. It is falling away, baseless, empty, false, and devoid of meaning and value. Now, you are on your own. The feeling may be thrilling, it may be liberating, it may be neutral, or it may be terrifying (at least at first). It will not be easy, for religion remains powerful. All the comfort you always relied on – the certainty or at least the hope that you will be guided and protected for all your life and perhaps afterward for all eternity – has evaporated. At the same moment, if your family and community are orthodox, they withdraw their support system from you forever – you, the apostate, the traitor.

You did not ask for this revelation with all its attendant consequences, but it came anyway. It came as if by magic, not from God but from within you. You cannot undo it. Perhaps it came because you wanted, even craved to be on your own, to be master of your own fate. Now you must deal with new questions or old questions with new significance. What must you do with the rest of your life? Where can you find meaning? Where can you find solace?

Now you must find new answers. Where will you find them? You will find them where your revelation came – within yourself. You must learn faith anew – but now, in yourself. Nature has equipped us with the tools for this faith – the yearning, the hunger, the urge, and the joy of life.

What can replace religion? Not science! Not knowledge! Why won't science and knowledge replace Religion? For starters, contrasting science with religion is like contrasting spartan with alluring diets. Science is Vegan. Religion is fried chicken and ice cream.

Religion begins at the precise point that science and knowledge end. Science is everything we can see in front of the curtain. Religion is everything we can't see beyond the curtain. Even though the advances of science and knowledge have put religion in full retreat and will continue

to advance step by step as they disprove claim after claim of religion, the territory beyond the curtain of religion remains infinite.

All science can do and has done is to prolong life, decrease physical pain, proliferate options, and increase understanding. That merely increases the amount of time we fear death. Only religion can promise us eternal life. Finite reality can never compete with infinite fantasy.

But once you have had your revelation the fantasy of God has lost its grip. It is now a mere fairy tale to you. You have passed beyond it. You must learn to accept it and even have fun with it.

You are on your own, but you are not alone. Countless others have taken the road before you or are on the road now, and the road is getting more crowded. Many atheists, certainly all atheist politicians, are quiet about it, but enough tell or have told of their transformative adventures. You will learn to see your road, for you are more intelligent and resourceful than most. And if you feel you need help or justification, I will try to help support you on that wide road even as I wander along it and discover it for myself.

1.2 PRELUDE FOR A GENIAL ATHEIST

I hate the propagandistic expression, "Hardened Atheist."

Call me a genial atheist. Almost no one who knows me thinks that I am genial, but as an atheist I generally am. Whenever one of the faithful asks me if I believe in God, I confess most humbly that I am an atheist. If the question is asked with a pleasant manner and without the obnoxious follow-up moralizing or proselytizing, I ask the questioner to pray for this atheist and hope to leave it at that. If I am asked if I am spiritual, I answer that I think so, and that is near the truth, for I have numinous experiences – great feelings of inspiration, of idealism, of yearning. (I often cry at passionate music or exquisite art, which can be religious, such as Pavarotti singing Schubert's *Ellen's Third Song = Ave Maria*, or Michelangelo's *The Creation of Adam*)

Only if I am repeatedly harangued about God will I add that God is the Tooth Fairy for Adults.

Conventional wisdom says, "Never talk about politics or religion". Facts that counter or even disprove ardent religious and political opinions may shock and offend believers but will almost never change their minds, for such opinions rise from the unconscious core; the only way to change a 'true' believer's mind is to change his or her core. That rarely happens.

Even though I know it won't do any good, I do admit that I *feel* like saying to my believing friends and acquaintances, "There is no God! Get over it! We all love a good Fairy Tale. But it is long overdue for adults to acknowledge when a Fairy Tale is a Fairy Tale."

I would love to say this. But I don't. So, in the sense that I seldom proselytize, seldom initiate confrontation, and seldom challenge people's misguided and absurd beliefs, I *am* generally a genial atheist.

One gracious model of a genial atheist was the philosopher, Jorge Santayana (despite his arrogance and advocacy of Eugenics). Born in Madrid, Spain, in 1863, the family moved to the beautiful, medieval walled city of Avila, where he lived until 1872. He then left Catholic Spain and rejoined his mother in the largely Protestant United States. At Harvard, Santayana became a student and later a colleague of the psychologist William James, author of the seminal contribution to the psychology of religion, *The Varieties of Religious Experience: A Study in Human Nature* (1902), where he taught philosophy. Santayana is perhaps most famous now for his epigrams, including, "Those who cannot remember the past are condemned to repeat it", and, "Fanaticism consists in redoubling your efforts when you have forgotten your aim."

Santayana was an Atheist, but he also called himself an Aesthetic Catholic. He seemed tolerant of religion, although in a different form than it typically takes, as the following quotes from *The Life of Reason; Or, The Phases of Human Progress* (1905) suggest.

"Experience has repeatedly confirmed that well-known maxim of Bacon's that 'a little philosophy inclineth a man's mind to atheism, but depth in philosophy bringeth men's minds about to religion.' At the same time, when Bacon penned that sage epigram... he forgot to add that the God to whom depth in philosophy brings back men's minds is far from being the same from whom a little philosophy estranges them."

"My atheism, like that of Spinoza, is true piety towards the universe, and denies only gods fashioned by men in their own image, to be servants of their human interests."

Santayana's view of religion in capsule form was, all we can know is Nature, and we resonate spiritually with its ineffable mystery and beauty. Along with that comes a sense of what is morally right, which is centered on empathy for others and respect for the natural world.

As a result of this view, Santayana has been considered a founder or forerunner of Religious Naturalism. Even though the depth and intensity of spiritual feelings differ greatly from one person to another, I think my views are close to that, as you will see.

1.3 MY GOALS

I write mainly for myself. I write for pleasure and joy to clarify my thoughts, to gather data and information, to learn, to gain wisdom. I also write to vent, as I am sure you already realize. I restrain myself only to the extent that I don't feel I incur a great risk from some fanatical Muslim lunatic (I am clearly being redundant here) who, after burning the flag of the United States will be so incensed at someone drawing a cartoon of Muhammad or burning a copy of the Quran that he will go out and try to kill whatever declared enemies he has not already killed. Though I do not wish to deny anyone their beliefs, no matter how idiotic I feel they are, (for I have lost some of my childhood arrogance and have acquired some empathy for others – after all, though I am not trapped religiously, I see I am trapped in other ways) what has always bothered me about most believers is that they feel compelled to impose their beliefs on everyone around them including the children they conceive.

In researching this book, I feel that I have stepped into and continue traversing an Aladdin's Cavern marked for me alone. But unlike Aladdin, who had to heed the Moroccan Magician's warning not to succumb to the fatal temptation to touch or even brush against a single thing as he passed through four halls laden with coins and gems until he had obtained the magic lamp, I have not been able to resist turning aside. The more I read on the subject, which includes countless delightful distractions, and the more I think and learn – yes, even the more progress I make – the further behind I fall. Of course, if you are reading this, I have either finished it or I am finished.

This book will be my only platform on the subject; I stand on no soap box in the park, preaching to those who wish to mock or be entertained by eccentrics or lunatics. This book will be my forum for my story, my beliefs, my thinking, my understanding, and my growth in the sphere of religion. If anyone should happen to read this and benefit from it that will be great. I expect nothing, I hope for much, and all is possible.

Even though I write primarily for myself, I do hope this book reaches others. My goals for my readers are (aside from understanding me better) to 1: help atheists find, accept, and justify themselves given the importance of atheism to humankind and all the inherent difficulties and

united opposition atheists face from believers, and, 2: enable believers to question their adamantine faith, reinforced by all their doctrines, texts, and social pressures, and in the process question the idea that atheists are evil and doomed to perdition.

I would not presume to be able to convert a believer to atheism. It is near impossible to convert a believer to atheism or to change anyone's religious beliefs (or favorite teams), and that is not the attempt here. In the anonymously published *Theological-Political Treatise* (1670), Baruch Spinoza wrote,

"There's no hope of its pleasing [the believing common man] in any way! I've seen how stubbornly the mind is gripped by the prejudices that it has embraced under the guise of piety."

But if someone's eyes are ready to open and this book provides the impetus that would be great. So, let's get started!

1.4 THE PREMISES: THE CORE

Ayn Rand (one of my favorite atheists until she crowned herself a cult leader) warned, "Check your premises". My first premise is that religious belief is a psychological projection of nightmares, dreams, inner feelings onto the universe – an externalizing with no connection to external reality. The psychological need for belief is so strong that believers will reject reason and all facts that seem to conflict with their beliefs.

My second premise is that having constructed a wish-world, believers use reason post-mortem to rationalize beliefs already held and to give the gloss of sober, reasoned maturity to what is the product of infantile hopes and fears. Thus, religious beliefs, doctrines, dogmas, and theologies are designed to appear as thorny, weighty, profound, and legitimate issues, but scratch below their surface and all are exposed as dissembling window-dressing veneers scrambling to disguise their cores and roots.

Accepting the various doctrines, etc. on the surface plane renders them like paradoxes such as, can there be a self-Creator, can the perfectly good, omnipotent one sin, err, create a stone he cannot lift, or make 1+1=3. The arguments over such issues are interminable, as history has amply demonstrated. The greatest minds have taken multiple, opposite sides of every issue. Each ends exactly where it began with no resolution except through superior eloquence perhaps, and superior force for sure.

And just what is the nature of religions' cores?

I see it as primarily psychological, and thus within us. As an atheist, I deny any external bases or beings. Is it arrogant to be so dismissive of the profound thoughts and reflections that the religious founders and their countless acolytes have concocted through the ages? I acknowledge their great minds, but no matter how eloquently they pontificate on things that have never been observed or documented they have no greater insight than anyone. Indeed, much of religious founders' arrogance and charisma mimics the certitude, and is the product, of 3-year-olds. Who, tell me, will now stand up to defend the defunct but once immortal Gods of the extinct Sumerian, Egyptian, or Greek religions propounded by some of the great, imaginative minds of their times?

Two examples illustrate what I consider to be the core of religious issues. In *Walden* (1854), Henry David Thoreau wrote,

"If anything ail a man, so that he does not perform his functions, if he have a pain in his bowels even...he forthwith sets about reforming—the world."

If this is true, and I believe it contains great truth, many of our public complaints or stances, whose merits we can debate at length, are at their core nothing more than the products of constipation or diarrhea. *To find the truth, follow the money of the stomach ache.*

The second example is from *Cyrano de Bergerac* (1897) by Edmond Rostand. Cyrano secretly and hopelessly loves his cousin Roxanne, whom he sees as inaccessibly beautiful while he sees himself as irretrievably ugly. In Act 2, Scene 8, Cyrano has just left a meeting with Roxanne, where she dashed his romantic hopes by telling him she loves Christian de Neuvillette, a handsome but shallow man. When a crowd of cadets and the hated Count de Guiche fill the room Cyrano gives a fiery, defiant speech telling that to maintain his lofty principles he will fight the immoral world to the bitter end. But his friend, Le Bret sees through the ruse. Off to one side, he whispers to Cyrano,

Le Bret: "Speak proud aloud to the world! But whisper the truth into my ear—she does not love you, does she?" Cyrano: "Hush!"

No matter how we analyze the content of Cyrano's fiery speech and defiant stance, no matter how we delve into and ponder their fine and subtle points, we miss everything if we do not realize that they were but

the masks of a disconsolate, hopeless, rejected lover (as Cyrano realized). To find the truth, follow the money of the heart.

And, so it is with so many religious issues and theological arguments. Answering them point by point gets you nowhere if you miss their true foundation, design, and motives. How do you sleuth out those motives and designs? Ad hominem arguments have this merit – if you know where they are coming from, you know where they are going to.

So, where am *I* coming from? Probably from the same place as many, many others. Even so, the story cannot be complete or accurate without knowing. I'll tell you as best I know and as best I can.

1.5 LEAD-UP TO MY REVELATION

"All children are born Atheists". Baron d'Holbach, 1772.

Yes, we are all born atheists and most of us would probably remain so if we were not marinated in religion and its fairy tales and doctrines from the moment we are born. In turn, we can't help becoming marinades. So, now we are chained to gods. Once chained, we want everyone else bound to the chain gang. So, in most societies, atheists have been forced to pass through the gauntlet of God. This makes it difficult and hence, courageous to be a conscious, deliberate atheist. But we are also thinkers. This means that thoughts seep through on how we acquired our communal flavors and questions arise about the validity of the fairy tales.

How did I revert to atheism? Perhaps I always had a strain of the pragmatic – that is, not seeing is not believing. When I was four my Aunt Jean, whom I loved, died. I had no thoughts of God. I just knew that I would never see her again. As a child I don't remember thinking much, if at all, about God. I guess I just assumed there is a God but because I did not grow up in a religious family the thought was not overbearing. The first time I can remember thinking about religion was as an eight-year-old kid. To the best I can recall, religion at that age meant maturity to me, likely because it made adults, and even kids look so serious.

Being or appearing religious was one way to feel and appear grownup. As the oldest son, I was proud to attend services with my father on the evening of Yom Kippur, the Jewish Day of Atonement, when the entertainment to me was the reciting of the annual pledges to the synagogue. I wanted my Dad's pledge to be one of the largest, which it wasn't, and I wanted Sam Goody's (founder of Sam Goody's Records) pledge to be even larger than it was, likely because I imagined riches rivalling those piled up in the towering vault of Scrooge McDuck. Years

later I despised this public display as the art of invoking shame through venality.

On some Saturday mornings when I was about eight, I attended the Kiddie Shabbos Service. I don't remember how I found out about it but I do remember that I did it on my own. There was no compulsion or urging, and no friend or family attended with me. I was the youngest kid there. All the other kids were in Hebrew School, knew the prayers and songs, and could read Hebrew. I alone was ignorant, but that neither shamed nor bothered me. None of the other kids teased me or paid me any attention. Being with the older kids gave me the aura of maturity.

At one point I do not remember, I came home from the Service and insisted to my mother that we become religious. My mother told me that she said, "That means no bacon". I love bacon, so that apparently ended my attempt to convert the family or myself.

About that age, I lost a tooth and told my parents so that the Tooth Fairy, who I did not believe in, and who I knew was one of my parents, might slip a dime under my pillow when I was asleep. But one of my cheap parents – I think it was my mother – told me that I knew there was no tooth fairy. It was a sad moment for me and not because I was disillusioned. It was sad because I knew I wasn't getting that dime.

A telling incident occurred in that same time period, when I was either eight or nine years old. Bayswater, the town I grew up in, was about 90% Jewish but mostly casual and secular. One girl in the class, Patty, was Christian. Patty, a mediocre, but well-behaved student, was the teachers' pet year after year, perhaps because my teachers may also have been Christian. In any case Patty did have one outburst, likely because she had been provoked by one of the Jewish children. She stood up and yelled out, "Jesus is the true God." I clearly remember thinking that she was out of her mind. Had I grown up in a Christian community, where I was in the minority and would likely have been picked on for being a Jew, I don't think I would have had that cavalier reaction. It is quite likely that I would have sought out my landsmen and been far more parochial and tribal in my attitude and hence less likely to become an atheist. The sociological setting we live in has a strong influence on our beliefs. By the way, I didn't like it that Patty was picked on. I thought it was gratuitous meanness and bullying.

The question of belief in God scarcely entered my mind during my 4½ years in Hebrew School. In the months following my Bar Mitzvah I intended to continue Hebrew School and at the least finish out the year. Oh, the intention was strong but the will was weak. I only went a few times before disappearing forever. Junior High School was too

demanding for this disorganized adolescent and I was under no compulsion to continue.

I joined the Sunday morning Tallis and Tefillin Club as a new Bar Mitzvah, but after going a few times, gave that up as well. Silence reigned for a few months until the pivotal event.

1.6 MY REVELATION

My revelation occurred during the Jewish High Holidays in September, 1958, two months before I turned 14. I remember the moment clearly. The congregations for Rosh Hashanah and Yom Kippur were too large to be housed in the small synagogue so a huge tent was erected. As I entered the tent from one side, I pulled aside a flap just as the people were bending and bowing. Instantly it appeared to me that there was no basis for what they were doing and that there is no God. And although I now have much more knowledge of religion, my opinions and basic assessments have not changed from that day.

My instantaneous revelation as an Atheist was similar to Salman Rushdie's. At the age of about 17, Rushdie happened to look out of the classroom window to the school Chapel, which he felt to be monstrously ugly and thought,

"What kind of God would live in a house as ugly as that?... Obviously no self-respecting God would live there – in fact, obviously, there was no God." *Joseph Anton*

My revelation was matter-of fact. I felt no ecstasy, no elation, no depression, no fear, indeed, no strong emotion other than a sense of clarity and the conviction that my revelation was true. I am pretty sure though that I did experience a distinct feeling of maturity and superiority over the conforming mass of unthinking adults. That should not be surprising. It may well be why such revelations often occur during adolescence, a transformative time of life, when you realize that you are on your own, perhaps because the procreative force in you has switched on. But the revelation did not transform my outward life, and for years I continued to feel immature in the adult world.

My revelation seemed to come out of the blue; it was not prompted by any conversations I can recall with family or friends, or by any reading on the subject of atheism. My father was what I would call a conventional Jew, who attended synagogue only during the High Holidays and wanted his family there for communal validation. Although

my father could be eloquent, he was silent regarding his beliefs. To this day I don't know if he believed in God although I think his faith was at best weak. [Rushdie knew his father was an atheist. He came from a more expressive family.] My mother at some point refused or resisted joining my father at synagogue and there were very unpleasant fights, which I and my brother, Jack added to. My mother was, however, also mute regarding her beliefs. It was only decades later that she said she became an atheist about the time I was born when she saw her mother suffering after losing her firstborn son, for whom I was named, in World War II. As my mother put it, no God would allow such suffering.

Around 10 August 2019 a new thought dawned on me. A short time earlier, in separate minor conflicts with two brothers-in-law, both told how they tried to live up to their father's impeccable moral code. Such adulation lies outside my experience. In their eyes they can never live up to their father, who in my eyes was a robust, kindly, good, but unexceptional, rule-bound man. I, by contrast was brainwashed by my mother's endlessly repeated harangues about the evils of my father that started about when I was 14 or 15. "How can I live with that man?" "How can I live with that man?" This parroted phrase and talk disqualified my father as a possible object of deification even though when I was about 20, the question dawned on me, "How can that man live with that woman?"

So, perhaps I was programmed to defy authority, along with or after childhood training to be respectful and follow rules, whereas my brothers-in-law, like so many other people, were and are set up and programmed to follow authority and deify the father figure. This puts a great question on the independence and innocence of my revelation. Nonetheless, that revelation upon opening the flap of the synagogue tent was mine. I cannot and do not wish to disavow it.

Because I was largely an obedient and conforming boy, mostly well behaved and reasonably diligent in school, I doubt I would have allowed myself freedom to stray far from my upbringing. Thus, it is much less likely that I would have had such a revelation if I had been brought up in a religious family and community. I probably would have continued thinking religious behavior as mature, moral, responsible, commendable, admirable, and inevitable. *This is Not a Love Story* (2015), a memoir by Judy Brown, showcases the constant reference to God (HaShem = The Name) that is injected into every aspect of ultra-orthodox life to a far greater degree than is almost humorously expressed in *Fiddler on the Roof*. Tradition is extraordinarily difficult to escape from.

I will never know for sure if I would have had my revelation had I been brought up Ultra-Orthodox, where such apostasy would have meant

excommunication by family, friends, and community, but surely, my 'conversion' was much easier given my gentle religious background.

Never forget that to a child the world is populated by giants, as it says in Genesis 6:4, "There were giants in the earth in those days... mighty men of old." What a giant commands you to do, you must do, and what a giant tells you is true, you must believe. Parental dictates come with a lifetime guarantee. Parents remain giants throughout our lives, and if they imposed religion when we were children, we will remain branded with it, even if we leave the fold. Disobedience comes with punishment by a supreme, giant power. Disobey and die. It's much safer to defer.

Given this degree of self-understanding, I should and do avoid feeling supercilious about my conversion to the knowledge of independence, and should not look down and feel cavalier about those who are trapped by dint of immersion from infancy in the religion of their family and community. As I mentioned, I am well aware I am trapped in other ways (I will not divulge).

1.7 MY BELIEFS IN BRIEF

Here is a summary of my beliefs about religion and God.

All religions are built upon the same cornerstone – fear of death. No religion has eliminated death, and I am uncertain as to whether any religion has succeeded in doing anything to prolong life or improve its quality except for the lives of its honored leaders. I am sure there are some truly religious people who have benefited from their belief, but I suspect those beneficiaries would have benefited equally by being immersed in any other human endeavor involving our psyches such as social work, psychology, music, art, or even science. Some of the most spiritual people I have met dedicated their lives and hearts to those secular fields, helping and teaching others.

Thinking about our death leads to thinking about other ultimate questions, to which religion provides its glib, unfounded answers. Although I do think about the origin and evolution of the Earth and of life, I waste no time thinking about the origin of the universe (before the Big Bang or its possible preconditions) because I consider such ultimate questions to be unanswerable. I waste no time thinking about the purpose or meaning of life, because I feel there is no purpose or meaning – there is just life itself, (which I do wonder at) and which can feel pretty wonderful sometimes (even at my age), and pretty bad at others (especially at my age). Also, there is no God – except in people's minds.

God is the Tooth Fairy for Adults – an imagined cause of a perceived effect imposed on all by force, brooking no dissent or question. We believe in God because the proclivity for such belief is built into our biopsychology. A personal God serves as an invisible parent to the child that remains within us.

God is also the marvelous magician who offers us the illusion that we can get something for nothing, and likely something prohibited by the laws of nature, such as life eternal. Getting something for free is the dream of all and the mindset of children. The allure of getting something for free is why we eat more at buffets, is one of the motives for gambling (along with the desire to lose), and is why we prefer magic to science.

In any conflict between magic and science, believers prefer magic because mundane science takes real work and has real limitations. The preference for magic is why believers swallow the bogus long-range weather 'forecasts' of the *Farmer's Almanac*, ignoring its countless misses while celebrating its random hits. At the same time, its followers focus gleefully on any errors of professional meteorologists.

Belief in God is above all the result of our marked tendency to ascribe external causes to our own unrecognized and unacknowledged internal powers. This all too human proclivity to externalize (see §5.2, §5.3 and §9.6) is a prime driver of religion and belief in God.

The less certainty we have the more we claim, the more submission we expect and demand of others, the more authoritatively we speak and act, and the less questioning we tolerate. Therefore, the most enduring, Teflon God we can envision must be the most incapable of disproof – hence, invisible, untouchable, unknowable, silent, hidden, and remote. Little wonder that the concept of God evolved to this elusive status from a once visible, corporal parent walking a Garden of Eden. This removal of God from the physical world guarantees believers and nonbelievers immunity from being proven wrong, or, for that matter, right.

But *I* need proof. Call me a left-brain doubting Thomas. I would believe in God only if I saw him walking around my Garden of Eden. I won't take anyone else's word that they witnessed a miracle or saw or contacted God. I have never been hypnotized but I have seen people who are or who I think are. So, I sort of believe the hypnotic state exists because I have seen people acting and looking different under hypnosis, but I will not be completely convinced until I have myself experienced it.

The only proofs that are legitimate are those that can be replicated, and all such proofs come from science and mathematics. Look not to religion but to physics and chemistry for answers if you wonder about the universe, matter, energy, and natural laws. Look not to religion but to biology if you wonder about life, intelligence and consciousness.

But while science has improved life quality and quantity, it cannot replace religion because not only does it take work and require us to look at facts, it does not and cannot provide the magic and solace that religion can. Again, Science merely increases the amount of time we fear death.

Science is designed to explain phenomena and predict outcomes in terms of more basic or fundamental laws. Once we get to the most basic law or set of laws that we can arrive at, scientists can delve no deeper. To explain or understand why anything, such as mass or energy, exists does not seem to be possible and I am not concerned with attempting to explain what I consider to be unknowable.

But 'explaining' and defending the unknowable is precisely where religion takes over because that is where blind authority can reign. All that religion can supply about a First or Ultimate Cause or a Creator are chimerical assertions, and any specific description we attribute to the nature or properties of that Ultimate Cause or Creator is bound to be wrong, just as the probability of anticipating any complex phenomenon in nature in advance of observation or measurement is infinitesimal. And the more properties that are ascribed to this Ultimate Creator, the lower the miniscule probability of being correct. Such prediction only works with simple situations where induction makes sense, such as filling gaps in the periodic table of the elements, or filling gaps in a table of elementary particles.

Since all the early philosophers were dead wrong about the nature of what they *could* see (recall that their elements were earth – air – fire – water and in some other cultures, also wood and metal) though the atomists got closest, why should we have any expectation that they could possibly be right about the nature or even existence of what no one could see, touch, smell, taste, or feel?

I see three core elements common to all religions (enforced by coercion).

- 1: The Fairy Tale,
- 2: The Rules,
- 3: The Punishments.

Initial pledge status to the fraternity of faith requires submission to some belief so absurd no independent minded person would fall for it. Junior membership is granted when the pledge agrees to the rules and submits to the privilege of being punished. Full membership begins with the onset of punishments, perhaps the ultimate aim of religion in the first place. I will enlarge on all this presently.

CHAPTER 2

LIFE AS AN ATHEIST

2.1 WHO IS AN ATHEIST?

If people didn't tell children about God and then browbeat both God and religion into them, there would be many more atheists because even though many children ask where they or the world came from, the idea of God simply does not arise spontaneously in many people's minds. Such people would be atheists by default. But in our God-imposed society, atheists are forced to make a deliberate choice of dissent.

For starters, an atheist is a person who, when presented with a story of God, doesn't believe it. Atheists don't believe a deity exists. And since there are so many religions and so many versions of God, God includes any self-created person, force, or spirit, who in turn created the universe and everything in it. And it should go without saying that atheists certainly don't believe there is anyone up there in the sky (other than astronauts) watching over us, guiding us, caring for us, and ready at a moment's notice to punish us.

But in order to qualify as a *true* atheist there is one (tough) attendant requirement. Though there can be wonder and admiration, there can be no hero worship of any kind – no apotheosizing of celebrities, athletes, geniuses, saints, or for that matter, no undue demonizing of sinners.

A true atheist cannot embrace and follow some leader, cult, sect or ideology so slavishly and fanatically that it attains the point of deification. Such a person does not qualify as a true atheist even if that person does not believe in a heavenly God. In that sense I agree with the assessment of Eric Hoffer who labeled such people 'true believers' in his classic book on social psychology, *The True Believer* (1951), where he treats fanatical adherents of any mass movement or slavish adulators of any leader as psychological brethren, almost identical under the different skins of their particular ideologies. In fact, to understand everything about mass movements, you need only read *The True Believer* and George Orwell's *Animal Farm* (1945), a riveting allegory focusing on the Soviet Union, but dramatizing how all totalitarian states operate.

Recently, at least in the United States, politics has either added to or taken over much of the role and many of the characteristics of religion; it has become not only more divisive, abrasive, contentious, and fractious, but intolerant and autocratic. In this toxic environment many people are

so sectarian that they defend and support any position or idea their political party or leader espouses and demean any person, position, or idea of the opposite party. That behavior is the give-away. Such people are authoritarians (those who favor blind submission to authority) and have either substituted a god on earth for one in the sky or added the terrestrial god to their celestial god. Therefore, even if they do not believe in a celestial deity, they are not true atheists. Thomas Paine noted this characteristic during the French Reign of Terror in *The Age of Reason* (1794), writing,

"The intolerant spirit of Church persecution had transferred itself into politics; the tribunals...supplied the place of an inquisition, and the guillotine of the stake. The arena may be different; the mindset is the same."

The transfer, indeed, intermingling between organized religion and totalitarian government is time engrained and stained. It seems to already have been in full force at the birth of empires. Kings, Emperors, Sovereigns, Pharaohs, and Tyrants found it useful to dress themselves in religious garb; indeed, they insisted on being treated as gods on earth who rule by Divine Right even though everyone knew they were mortal.

To a large degree the institutions we have are the institutions we deserve, for they are the ones our psyches crave. Too many of us demand the impossible guarantee of the certainty of parental guidance in directing our adult lives.

Atheists don't!

Using the extended definition of atheism to include disbelief in terrestrial gods as well as celestial and infernal gods, it is difficult to think of atheists as 'hardened', perhaps the most common epithet leveled at atheists by believers.

Now let's get to the final question, which, of course, is impossible to answer. Was the universe created of was it not? I can't imagine either scenario. If the universe was *not* created how did it come to be? If it *was* created how did the *creator* come to be? If it was always here, how was that possible? If at some time it appeared out of nothing, how was that possible? As far as I understand Science can't answer these questions. The Big Bang Theory does not pretend to be the answer since it has to start with some unexplained initial state, even if scientists now simulate tentative 'initial' conditions that lead to the singularity preceding the Big Bang.

I think any true atheist, even a cosmologist, won't even touch these imponderables. But atheists do find it compulsory to dismiss the preposterous, anthropomorphic, egotistical, punitive Creators concocted by the JCI trio (Judaism-Christianity-Islam) and other similar religions.

Are atheists different from believers? In most ways, NO! Both can love, hate, feel lonely, embarrassed, sad, depressed, inspired, exuberant, or joyous. Both can be laden with prejudices. Both can yearn and/or feel satisfied. Both can experience feelings of awe and wonder. Atheists, as well as believers can be highly idealistic and lead principled, ethical lives and behave with moral integrity, or can be scoundrels, deviants, criminals, murderers, or lunatics.

How do atheists differ from believers? Atheists simply don't ascribe all such low and high feelings and actions to external sources and don't feel they constitute proofs of the existence of God or Satan. Atheists don't deify. Consequently, atheists are more apt to recognize their prejudices and more likely to try not to act on them. Atheists know that we are on our own and that...

"The world is a lunatic asylum and the inmates are running it."

2.2 HOLY INCONSISTENCIES

Atheists have a hard time swallowing inconsistencies, discrepancies, and outright absurdities (which some savvy theologians realize they are forced to revel in). But such flaws are exactly what you find when you examine the 'divinely inspired' Religious texts. For ordinary writings, textual inconsistencies should be no big matter – a good editor should be able to correct them with little trouble. This would make pointing them out seem like nitpicking. But that is not the case for any religion that claims infallibility or inerrancy for its 'divinely inspired' text. Therefore, we proceed.

A partial list will suffice. Begin with the Old Testament of the Bible, which was written over centuries, and is a compilation that contains some beautiful literature. In some cases there are multiple accounts of the same event, such as two accounts of Creation, that either contradict each other or are inconsistent. In other cases, things are left too vague. Baruch Spinoza, one of the early Biblical analysts, began with the impossibility of Moses being the author of Deuteronomy since it describes his death and events that occurred centuries later. Spinoza then turned to the story of Judah and Tamar, noting that the time involved, a period of 22 years of Joseph's life, was impossibly short to generate four generations of

Judah's offspring. He also pointed out that by subtracting from the life of Jacob and Joseph and the two years of famine preceding the reunion, Jacob was 91 when Joseph was born and about 84 when he married Leah. Given that he worked seven years to win Rachel he was 77 when he began to woo her and was pictured as a passionate young man.

Various other chronologies are wrong. Spinoza attributed this to collecting a range of stories and not checking them for consistency but leaving them jumbled together. Spinoza hypothesized that Ezra (around 450 BCE) cobbled the stories together and died before polishing them, but he was open to other reasonably consistent hypotheses, at least in terms of time.

According to 1 Kings the first Temple was built 480 years after the departure from Egypt but Spinoza added up a minimum of 580 years of documented events and reigns, not including some events and reigns (including the Judgeship of Samuel and the reign of Saul) that took an indeterminate amount of time but at least several generations.

The various books of the New Testament have differing aims and numerous inconsistencies including the lineage of Jesus, and the order of events. Jesus had to descend from King David in order to fulfill the Old Testament presumed prophecy. But Jesus was conceived by the power of the Holy Spirit without any role by Joseph, who presumably descended from David. Then, there were either 28 or 43 generations from David to Jesus and Jesus was either tempted during or after the 40 days he spent in the wilderness. The website, http://www.skeptically.org/bible/id6.html presents 194 such inconsistencies.

In various Suras of the Quran, God alternately fashioned Man from 1: nothing, 2: clay, 3: a sperm drop, 4: dust, 5: a clot of congealed blood. Religious freedom was promised, but then retracted several times with instructions to destroy pagans and penalize partial believers (such as Jews and Christians). Wine was both forbidden and described as a heavenly treat.

Then there are the inconsistencies between the Quran and the Bible. In *Why I Am Not a Muslim* (1995) Ibn Warruq points out several such inconsistencies. For example, in Genesis 7:6 we are told that Noah boarded the Ark when he was 600 years old but the Quran (sura 29: 14) states that Noah was 950 years old when he boarded the ark. At least one of these inerrant accounts must be in error. Where Judges 7: 4-7 refers to God culling Gideon's army by the manner in which the thirsty soldiers drank, the Quran attributes it to Saul's army (Sura 5: 249-250). And, then there is the story of Jesus, who, according to the New Testament was the son of God, and died by Crucifixion. The Quran acknowledges the claim of the Virgin birth of Jesus, stating that Allah created Jesus from dust

like Adam. The Quran accords Jesus the title of Messiah and the status of a prophet but denies he was divine, and asserts that Allah took him to heaven and that he did not die of Crucifixion.

The Hindu Holy Scripts, the Upanishads, of which there are over 200, were transcribed or written over a period spanning almost 2000 years. They also have their inconsistencies and contradictions, and there are differences between the texts of some ancient Upanishads found in different parts of Eastern Asia. Of course, as with all Holy texts written over many generations or even millennia, the earlier Upanishads make no reference to the later Upanishads.

2.3 ILLITERACY AND TIME LAGS

Isn't it strange that so many of the authoritative, divinely inspired texts were written and certified long after the founders died, and that most of the founders were illiterate or barely literate? Religions need time – perhaps a few centuries of debate and conflict – to coagulate their fables, rules, and practices into petrified texts and dogmas. As Eric Hoffer noted in *The True Believer*,

"The conservatism of a religion - its orthodoxy - is the inert coagulum of a once highly reactive sap."

The earliest known Buddhist texts date to the 1st Century BCE. That is some 300 to 400 years after Gautama Buddha died.

Moses, if he lived at all, lived no later than about 1250 BCE. The earliest possible redaction of the Five Books of Moses came at least 600 years later, and may not have come until the exile in Babylon and Persia. The Elephantine Papyri, a cache of Jewish documents found on Elephantine Island in the Nile, near Aswan, Egypt, and which date to between about 500 and 400 BCE make no mention of the Torah or of Moses or of the Patriarchs, and suggest that at least this remote Jewish community was not yet Monotheistic. The earliest extant Biblical texts are the Dead Sea Scrolls, which date from around the time of Christ.

It would help legitimize Christianity if the New Testament were written at the time of Christ. But the earliest Christian writings are Paul's, which do not mention either Mary or Joseph or the Virgin Birth. The earliest of the Gospels, Mark dates from no earlier than about 65 CE, some 35 years after Christ was crucified. The earliest largely extant copy of the New Testament is the *Codex Sinaiticus*, which dates to about 350

CE and contains numerous differences with the current version. It took time to transform a hoped-for Messiah into God.

The Quran was recited by the likely illiterate Muhammad and began to be transcribed and arranged in the generation after his death. According to tradition Uthman in 653 CE (20 years after Muhammad died) oversaw the standardization of the Quran and had all unofficial copies and fragments destroyed.

It appears that at least some of Muhammad's visions, and certainly the first ones, likely provoked by self-imposed isolation and fasting, were psychically legitimate mystical experiences, but several of the later ones were conveniently timed, as immediately after the local Jewish merchants opposed him and when he took upon himself the 'burden' of extra wives. Aisha, favorite wife of Muhammed's later years and apparently a brilliant woman, who was witness to at least one revelation, was sarcastic when it came to the revelation that permitted Muhammad to have more wives than other Muslims, saying, "It seems to me your Lord hastens to satisfy your desire!" There also remains the problem of the so-called Satanic Verses Incident, a later account of a revelation that Muhammad apparently disavowed. And of course, large parts of the Quran are derivative from the Old and New Testaments that Muhammad's Jewish and Christian neighbors knew well.

So too are large parts of the *Book of Mormon*. Joseph Smith, a teller of fairy tales from his fundamentalist childhood, and barely literate as an adult, claimed to have dictated it from Golden Tablets that he claimed to have unearthed in 1827 from the soil of the Burned-over District of New York, the heartland of the Second Great Awakening Fundamentalist Protestant Revival (an ironic misnomer) that began in the late 1790's. (The First Awakening dated from the 1730's.) A year earlier, Smith had been convicted and fined for a scam in which he used a divining stone to seek buried golden treasures, none of which was ever found.

Smith informed everyone around him that the Golden Tablets were written in the Smithian language 'reformed Egyptian', which he could translate and read and which he would not allow anyone else to see. After he had dictated about 130 pages, the wife of the scribe, resentful at seeing her duped husband 'donate' his savings to Smith, confiscated the document and dared Smith to repeat the text, which he couldn't do. After a month or so of haggling some compromise was reached. When the dictation finally ended, Smith claimed that the Golden Tablets, which no one else had ever seen, rose to heaven.

You may believe any of these texts are the Word of God, but I prefer David Hume's probabilistic approach, namely to assess the relative probability of two alternatives. I assess the probability that all these holy texts are ingenious but purely human fabrications as 100% and allow all of the remaining probability to the claims for a divine source and inspiration. Other atheists might assign even more extreme probabilities.

2.4 ATHEISTS ARE SOLOISTS

Deliberate atheists know they must do and must think for themselves. They do not become atheists by joining any organization. That makes atheism a lonely, solitary state. From the moment of the revelation that there is no God, the atheist's imagined support system largely disintegrates. There is no God, no matter how vengeful, demanding and punitive, to offer consolation and salvation to the humble and repentant, no Bible, no matter how absurd or self-contradictory, to offer guidance, no Devil to tempt you to sin that will merit eternal punishment, and no Heaven or Hell to live for eternity despite the obvious evidence that death is the end. There is no atheist church although there are a few atheist organizations. But atheists never pray together.

Atheism seldom offers the comfort of community that religions do. For 15 years my family and I lived in a condominium complex of some 1300 apartments. Every year at the High Jewish Holidays, all alone on my way to the swimming pool I would pass the large auditorium filled with my believing or at least conforming co-religionists. I felt like a Roman in the expiring Roman Empire going to the gymnasium while Christianity was growing and flourishing (and participating in Rome's demise). But I could not see myself attending religious services. The prayers bored me out of my mind, the repetitions revolted me and made me see them as a mind-numbing, brainwashing technique, and I simply could not swallow the fairy tale (though I admit I still love the stories).

Religion also boasts the enormous advantage and allure of pomp and pageantry performed for huge crowds over unadorned and solitary atheism. There are relatively spare sects of Protestantism, which forsake much of the pageantry, but most have grand, communal Church services and sacred holidays and Santa, and some add grotesque revivals and garish Televangelists. Such a mass gathering mentality makes religion an ideal vehicle for grandeur in politics, where mass meetings have proliferated. Christianity, in its politically powerless origins, was savvy enough to "render therefore unto Caesar," made itself serve as a perfect prop for democracy, but also for monarchy and totalitarianism. Atheism lacks the embellished communal pageantry of religion, but is free of coercion, and is democracy's real best ally.

It is not possible to convert anyone to atheism. Organizing atheists is much like the proverbial herding of cats. Atheism cannot provide the gifts, benefits, and organizational strength that religions can and do. But, to repeat, if you simply cannot swallow the fairy tales of religion then you may be compelled to be an atheist.

2.5 ATHEISTS ARE TRAITORS

Atheists do not merely stand alone on their own; they must stand unarmed alone against the distrust, fear, and wrath of the flocks of the faithful.

Believers often use that odious, often deceitful expression, 'hardened atheist'. Thus, for example, even Baron d'Holbach, known to be one of the most genial people of his times, was labeled a hardened atheist. A believer calling someone a hardened atheist is often a case of the pot calling the kettle black. It is not incredulity and legitimate skepticism but rather unyielding, unfounded belief that must be defended inflexibly and vehemently. And if urging fails to convince the atheist or the apostate, the empowered faithful will resort to force.

All 'True' Believers are Authoritarians. They are the hardened ones. They demand blind allegiance, the facts be damned. Loyalty to them is the chief virtue. Their loyalty is almost always directed first to the chief and only second to the virtue. In *The Origins of Totalitarianism* (1958), Hannah Arendt notes that *any* idea content is inimical to producing unquestioning loyalty, the chief means of subjugating the faithful.

"Total loyalty – the psychological basis for total domination... can only be expected from the completely isolated human being... [and] is possible only when fidelity is emptied of all concrete content, from which changes of mind might naturally arise." p. 323-324.

Anyone who deviates from a syllable of the 'true' word (spoken by the chief) is branded as a traitor or apostate. Treason and apostasy are among the worst crimes to authoritarians. It is group think and group feel with the exception of the guiding 'Superman' who darkens the corridor in which he corrals the clan of followers. A corollary is that the chief can never confess to softness, doubt, or weakness, and never encourage or allow followers to think for themselves.

Reason is not a crime to authoritarians, so long as its use is confined to issues that do not question loyalty or mandated beliefs. Authoritarians

and believers can have great minds and high IQ's – they can be great scientists, great artists, great creators, great inventors, and, of course, great politicians or theologians. But once reason challenges or even questions an authority figure or an official dogma it crosses that line, and becomes anotherm and forbidden to even the most brilliant authoritarian.

The crime of atheists is therefore that they dare to think about and question anything involving official dogma; they dare to question and challenge authority. One irony is that most believers are atheists for all other gods – but this makes them not merely free to question, challenge, and deny all opposition authorities, it compels them to do so.

To many believers, an atheist is the monster or villain in the God fairy tale. Some genial believers profess or, at least, feign sympathy for atheists, whom they consider 'lost souls', but most feel fear and anger in the presence of any announced atheist.

Therefore, if we manage as adolescents or as adults to suspend belief in God and let anyone know about it, we risk the ire of most of the adolescents and adults around us who either claim they believe or who really do believe.

What is it that makes so many believers so uncomfortable or so angry when their fairy tale is challenged by the mere existence of an atheist? Why is that one fairy tale – the God fairy tale – held so tenaciously that it is denied to be a fairy tale? Why the taboo about disbelief? Why are so many people so offended, so angry, and yes, even so ready to kill to protect that belief and a God they insist is omnipotent (and who therefore needs no protection from weak humans)?

To protect their world view and their tribal existence, the faithful look upon the poor atheist as a religious whistleblower. Whistleblowers are always treated as apostate traitors even in the cases that everyone knows they are exposing the truth. That is because the atheist whistleblower maintains not only that 1: The truth comes before the tribe and, 2: The Emperor has no clothes, but also that, 3: There is no Emperor.

Many believers feel offended, threatened and even mortified by the presumed hubris of the atheist. They ask, "How can you be so arrogant, so haughty as to presume to stand on your own without acknowledging something greater than you – some superior external being?" (The Indian atheist, Bhagat Singh felt compelled in his essay, *Why I am an Atheist* (1930) to respond at length to such accusations and insist that vanity had nothing to do with his atheism.) And for young atheists who are unfortunate enough to face censure by their friends and family, the difficulties, and the sense of loneliness and isolation can be greatly magnified, even overwhelming.

But is the atheist really more arrogant than the believer? It's probably a close call. I have never taken a formal survey, but I would bet that whereas the atheist is more likely to feel that the believer is hypocritical, stupid, deluded, and enslaved, the believer is more likely to feel that the atheist is immoral, misguided, damned, and doomed. And, of course, both feel the other to be arrogant.

The difference of the degree of arrogance between Atheists and Believers may be small but there is an enormous difference in the potential consequences. Atheists know that their insights come from within and therefore are relative. Believers, (including devotees of terrestrial religions such as Communism and Fascism), on the other hand, are compelled to feel their insights are absolute and immutable. They then can justify any action no matter how inhumane, brutal, and monstrous. This makes the arrogance of the true Believer infinitely more dangerous and potentially malevolent than the arrogance of the true Atheist.

Because religions have no worse enemy than the Atheist (with the apostate – the defecting traitor – in a near tie), their most urgent mission is to oppose and root out atheism and apostasy as the greatest evils. That is the only cause urgent enough to unite all religions despite all the differences that otherwise keep them at loggerheads – the only unifying cause except, of course, maintaining tax-free status while demanding government support.

Why else is it that religions fear and oppose atheists as the greatest evil? It is for the same reason that humankind needs atheists; atheists offer each human being the greatest chance at terrifying, but real freedom.

Most religions, political parties, societies – secret or open – seek to gain converts or adherents. Most religions proselytize mercilessly and focus particularly on atheists. Atheism, apostasy and blasphemy are all equally punishable by death in 13 Muslim countries – Afghanistan, Iran, Malaysia, Maldives, Mauritania, Nigeria, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, United Arab Emirates and Yemen – where converting an atheist to Islam is considered the greatest triumph. Proselytizing by any religion other than Islam in some of these countries is also punishable by death or expulsion, as was proselytizing by any religion other than Christianity in Christian Europe for well over a millennium.

One main reason that religions proselytize is that the best way to gull ourselves that our belief is valid is to con others into that belief. (In *The True Believer* Eric Hoffer noted, "The proselytizing fanatic strengthens his own faith by converting others." p. 111.) It is a form of the grass being greener (i. e., jealous inferiority). Conversely, if the next person

refuses to embrace or subscribe to your belief, that diminishes or shakes your confidence in its validity. Such a situation can be intolerable to believers. In this vein, if we employ relentless inculcation from infancy to convince and convert our own children to believe, they will in turn reinforce our confidence in our beliefs because children take things so literally. What a powerful and horrendous feedback system! And imagine the moral debauchery of parents who disown their own flesh and blood for their offspring's attempt to think independently and challenge or deny their compulsively clutched communal chimeras.

Is there any good about the loyalty and conformity that religions mandate? Of course! When a group is threatened or is being assailed or some major project must be undertaken, loyalty (or at the minimum, a spirit of cooperation, even altruism) is an essential virtue because then success or survival depends on unity. This is why loyalty is so strongly coded into so many of us.

But when the group is not threatened loyalty is a counterproductive perversion because loyalty demands conformity, the archenemy of creativity and innovation. The demand for loyalty is especially counterproductive if the perception of threat is deluded or illusory. The paranoid perception of threat (magnified but not illusory) from the 'godless' Communists of the Soviet Union ran rampant in America during the decade after World War II. That was when loyalty oaths arose, when blacklists were at their peak, and when God was inserted into the Pledge of Allegiance (1954). And don't forget the perception of threat from northern Abolitionists in the antebellum South, where all culture other than militancy and superficial grace was stifled, and anyone who dared even hint that slavery might not be blessed by God himself (as it indeed is in both Testaments of the Bible and the Quran) was throttled.

With these ugly exceptions, up till now American Democracy has proven to be a saving system. Abraham Lincoln during the Civil War, Franklin Roosevelt during World War II, and to a lesser extent, Woodrow Wilson during World War I helped lead us back toward peace during wars imposed on America. Lyndon Johnson, the egotist, Richard Nixon, the paranoid, and George Bush II, the Preppy posing as a Redneck, were opposite types of American leaders. They thrust us into or kept us in war and only began to withdraw or deescalate begrudgingly after protracted, vehement protests by the American people.

When a group is or feels threatened it tends to turn authoritarian. If it cannot exercise power it turns to God. If it can exercise power it turns to a god on earth. That opens a niche for egotistical leaders because it is precisely at times of stress and threat that the leaders who arise are the ones most likely to exact loyalty. Such leaders are most demagogic.

Highly egotistical, beyond demanding mere fealty, they demand subservience. It is both fitting and ironic that at the times teamwork is most essential the leaders and prophets who arise are most likely to be sociopaths who have retained all the least admirable, but apparently most compelling qualities of three-year olds. "It's my way or the highway!"

So, what are Atheists to do when they simply cannot abide the God fairy tale and are forced to face the fury of the believing masses if they dare confess their disbelief or fail to conform by not participating in the conventional religious practices? Ah, that's a tough one!

The poor atheists may not want to be atheists. They may not even be aware of how the fairy tale vanished in their minds but they know that it vanished. It is a terrible thing to be dis-illusioned, and a heavy burden to be simultaneously criticized and condemned for that loss, which can make life far more terrifying and frightening. Not only is your protector, or if God is presented to you as a punitive overseer at least your authority, gone but you find yourself assailed to boot for being abandoned and put out on your own.

The life of an atheist is not easy. If you live in the conservative countryside, it is better to keep your mouth shut if you are an atheist or any other type of misfit or anomaly. Of course, silence is only a poor, partial solution. But don't get me wrong. Life need not be a vale of tears for the atheist.

The better solution for atheists, or any other nonconformists or misfits is to seek a refuge once they can. There is always a refuge. It is called the city. This anonymous ferment or hotbed of licentiousness, immorality, perversion, anonymity, individuality, and creativity beckons to all whom are castigated, ostracized, shamed, and shunned for being different in small, conformist communities. Rural folk are, on average, more helpful and friendlier, at least at first and so long as you conform. But for the isolatoes it is best to be far from the madding, meddling crowd. In the city so many different peoples are thrust together that some form of tolerance is a necessity. (Even city dogs are less territorial.) Cities may well segregate into distinct neighborhoods, but there is always some mix and you can always find soulmates nearby.

Just go Downtown, and you'll be alright!

There is one grand exception for a particular breed of atheist. If you are an atheist bent on a political career, just be sure to swear how your faith has guided you in life, and end every speech with, "And may God bless the United States of America."

CHAPTER 3

DESCENT TO RELIGION

3.1 RELIGION'S DUAL DOMAIN

Religion has a dual domain on Earth.

First, Religion is a vehicle for dealing with the existential issues of individuals. Religion has the potential to be sublime if it would only confine itself to

- 1: Foster feelings of wonder, reverence and joy for the gift of life.
- 2: Celebrate life's passages birth, puberty, marriage, and death.
- 3: Provide guidance and solace for life's troubles and dilemmas.

But religion can't seem to confine itself to these admirable roles without tacking on and imposing imprisoning ideologies. This it has always done and always will do, because religion is not merely designed to guide the individual. Never forget that religion has a dual domain and must also serve its other master.

For Religion does have another master.

Religion's other master is the tribe. This makes religion a corporation whose foundations and aims conflict with its individual foundations and aims. The corporate foundations and aims are expansionist. Corporations are compelled to aim for power and are therefore neither pure nor innocent. As with any organizing entity bent on power, control, and expansion, religion has magnified both good (e. g., monumental architecture) and evil. When, in addition, religion acquires political power, the good and the evil expand exponentially. When a religion becomes the sole political power – a theocracy – its power is unlimited. In all theocracies I know of the evil far outweighs the good.

Religion, like politics, is designed to bind us into groups (**The word**, **religion derives from the Latin** *religare* – *to bind*) that divide, distinguish, and separate us from others, and create propaganda that magnifies any basis for grouping and exclusion. And it doesn't take much. Henri Tajfel showed that human grouping is so fundamental an aspect of our psychology that he could not reach an issue so trivial that

people would not form some group identity over it, such as dividing people into two groups based on whether they had over- or underestimated the length of a line. Individuals in these arbitrary groups would then (even unconsciously) favor 'teammates' over 'opponents'.

When everyone in a group struts in step you stand out if you don't. And if you stand out, you *are* out. Out alone on our own is dangerous, and was likely lethal, for individually we are vulnerable. But, for the sake of my independence, I feel compelled to take that risk and stand a bit (but not too far) aside. And it is our salvation that religion is no longer the monolith in much of Western Civilization that it once was.

In addition to propaganda to ensure conformity, which is in essence group loyalty, Religion employs the effective techniques of coercion, shaming, shunning, and excommunication. The synergy between these techniques and religion's three basic ingredients, branded with its divine imprimatur, makes religion an institution of insuperable power for suppression of individuality if not vigorously opposed.

Shunning and excommunication by religion represent irrational and nasty extensions of rational behaviors and acts. The rational component of shunning has an instinctual basis – self-preservation. We have instinctual fears of various filth and disease-spreading insects (e. g., roaches and flies), spiders, snakes and vipers, rats, bats, and predatory beasts. During the plague of COVID-19 Virus, people moved away from others. I have felt this strong discomfort of close proximity to strangers. It is hard to tell how much is knowledge and how much is instinct, but I think instinct is a component. When religion 1: creates evil agents or punishing gods and 2: uses shunning as a device to ensure conformity, it carries shunning to excess. But not always!

Let's use tribal lingo. Survival mandated that we belong to a tribe. If anyone leaves a tribe, the tribe is weakened in two ways. First, not only does the tribe have one less member, the deserter or apostate may betray the tribe's secrets and vulnerabilities when he joins an opposing tribe. That is intolerable. Second, anyone who leaves a tribe makes the very idea of leaving a tribe, and therefore, its disintegration a possibility. That too is intolerable. So, the individual defection is seen by all as a most fearsome event and one that must be prevented and forbidden at all costs.

All this makes it exceedingly difficult for religion to carry out its dual role, for "No one can serve two Masters." (Matthew 6:24). Religion always operates with the caveat that while attempting to serve the individual's existential needs its existential priority is to preserve and grow the tribe, the corporation. Of course, the fairy tale, rules, and punishments are essential components of the corporate congelation.

Consider how religion treats sexual relations, which are necessary to populate the tribe. Two people are drawn together by mutual attraction. (Let's leave it at two for the moment.) All other attractions and urges, such as eating, can be done on an individual basis, but with sex the lovers must cooperate, which renders each of them vulnerable. The relation can also have byproducts, known as children. All these complexities add additional layers of difficulty to sexual relations.

What should the role of religion be in sexual relations and what is it? Religion has the potential to provide guidance and, when the participants wish, to celebrate and formalize relationships. Leave it at that and religion is fine. But tack on the notion of sin, which usually includes relations outside marriage, homosexuality, inferior treatment of women and making the sex act itself evil and dirty, and religion burdens the individual it promised to be dedicated to. Religion may do this in the name of group stability, but in so betraying the individual it swears to support, it is criminal.

And it is in the forsaking and betrayal of the individual where religion falls short and becomes intolerable for me and for many atheists.

I acknowledge that religion provides solace, comfort, and a sense of community to Believers, all of which I miss. Surely, I would like to believe, but I simply can't swallow the fairy tale. And I also can't abide the costs, which include intellectual and spiritual sacrifice and mandatory conformity.

Because I do possess a desire for community and a sense of identity, I feel proud of being a Jew, though I would do away with all religions. In like manner, I feel proud of being an American though I would do away with all nations. Well, at least all closed borders. Diversity does make life more interesting and is a key to progress because it provides all the advantages and disadvantages of prodding competition. Diversity and individuality are great, yes, but once in power, each religion does its best to squelch them, for diversity and individuality are challenges to authority, without which organized religion would vanish.

Because I feel that religion should be an individual matter (in which anyone is free to join together or not join) in contrast with government, which concerns everyone, I would limit all prerogatives and public perks of religion. Government should treat religion as it does any private citizen or organization, and not afford it any hallowed status. If a particular church or any philanthropic entity owns land and assets, it should be taxed as any other private citizen or for-profit organization would be taxed. Furthermore, as religion benefits from the protection of

society while its benefits to the society are uncertain, its profits should also be taxed.

Religion should have no earthly power, whereas so long as there are contending governments, each entity must have the power to require life-sacrificing service, but when and only when the people are facing extermination, such as was the case when Germany invaded Russia in 1941. Religion's demesne regarding morality should be restricted to urging restraint for malignant behaviors, such as murder, rape, or robbery, and encouraging a spirit of brotherhood. Government should have the power to restrain and punish malignant behaviors so as to preserve civilization and prevent the war of all against all. But neither religion nor government should restrict thought or its free expression.

3.2 RELIGION: A GIANT AMOEBA

From its beginning, Religion enlisted art, music, and dance in its service for both the living and the dead. Religion became the world's great story teller, teacher, and guide. It became a master architect, building on a grand scale. It allied with and sometimes formed Empire. It learned to manipulate or control the economy. Religion's aim, like that of any corporation, is to behave as a giant amoeba, and engulf all human enterprise.

In many parts of the world, religion got too big for its britches and was curtailed by other powers. Only when under such duress did it allow, encourage, or cease corralling human ingenuity and squelching the yearning for independence. And once compelled to relinquish it grasp, the worlds of music, art, literature, architecture, medicine, science, and technology grew separate limbs and went on to independent triumphs.

But wherever religion has retained a theocratic clutch-hold, progress and freedom have been retarded or halted. Thus, for example in Dar al Islam, where religion retains a stranglehold on society the arts remain enslaved, engulfed, and moribund. And as for the sciences, up to 2020, only three Muslims have won a Nobel Prize in the Sciences. Islam, let your people go!

3.3 HYSTERIA, CHEERLEADERS, CEDARHURST

This section may start out disjoint, But it will make at least one point. The first time I can remember anything about Elvis Presley was September 1956, when I started 7th grade. The girls joined a collective hysteria screaming movement over Elvis and ignored me. I thought such collective hysteria to be ridiculous (it is actually central to revving frenzied passion, hence reproduction), so I was jealous. I was jealous of Elvis and mocked him, privately, of course. I wanted the 7th grade girls to love me though no way was that going to happen. [Later I came to admire Elvis's extraordinary talent, sexuality, and panache, sorrowed when he died so young, and I remember exactly where I was in North Conway, New Hampshire when the news of his death broke.]

Moving on to High School, the Cheerleaders were the inaccessible girls, the top of the female pyramid. They were, of course, designated for the football players, who were at the top of the male pyramid. I remember one sweet, pretty girl, Janet whom I happened to meet outside the high school building one day. Janet bragged to me that some football player had asked her out. I was real dumb in high school but I was not that dumb. I was almost positive that what she was doing was invoking some imaginary football player boyfriend to get me to find her more desirable so that I would ask her out. I did want to ask her out but even after her hint I only chickened out. What did I do instead? I complimented Janet on her triumph. I think I was even more timid, indirect, dishonest, and foolish than she was. As a result, we both lost.

But I am getting distracted again. Even though I salivated when a cheerleader came by, I had a visceral dislike of what I felt was the core concept of cheerleading. Cheerleading is the epitome of hero worship. Cheerleaders put themselves second. They should cheer for themselves. Maybe cheering was the way for girls to stay on the top of their pyramid, but they were putting themselves on the smaller pyramid – they were keeping themselves down.

Hero worship, like any form of worship, is debasement of the self. What I saw and still see in cheerleading was what I saw and still see in religious worship and adulation of prophets and leaders. [It took me decades to recognize cheerleading as a distinct skill, but that is another matter.]

I have long had another visceral reaction, not to the cheerleaders' sexy uniforms, but to the constraining, defining, segregating, and deliberately unsexy uniforms of the Orthodox. Seeing a nun in the habit, a Hasid or Ultra-orthodox Jew in his Black garb with payos hanging from the temples, followed by his Sheitel coiffed, buttoned up wife, or a Muslim woman enshrouded in a black (or even colored) burqa gives me the creeps. To me these rigidly locked people in their mandatory uniforms send the universal, ominous message of all Orthodox.

"Today, I wear this. Tomorrow, you will."

You can decide if I am paranoid. But I am still right. (Just think of the double meaning of the word, uniform.) When I was a kid, the family often went to the shops, restaurants, and movie theater on Central Avenue in Cedarhurst, New York, one of the so-called 'Five Towns', near where I grew up in the Bayswater section of Far Rockaway. Cedarhurst was a largely Jewish town, but secular. In recent decades it has become a Mecca for Ultra-Orthodox Jews. And what did they do to the town once they took it over? They hung a line called an *eruv* to make everyone toe the line. If you're not in you're out. Merchants whose stores remained open for business on Shabbat soon had no business on any day. Live our way or die is the message of all the Orthodox. That's the nature of any orthodox religion when it gets the chance to take over.

Some of my fellow Jews, particularly the religious ones, argue that in contrast with murderous Christianity and Islam, Judaism is by nature a religion of peace. Nonsense! Christianity and Islam have been warlike, alpha male religions for more 1700 and 1300 years respectively. Weak sibling, Judaism has had to cower in the ghettos and beg for peace. But when Judaism had its own power it wasn't so peaceful. Zealot Jews took over Jerusalem in 70 CE as part of their lengthy wars of selfextermination against Rome. The Zealots employed a scorched earth policy on the less zealous members of Jerusalem's Jewry, destroying the food supply to ensure their support but also to hasten total slaughter and the total destruction of the city and the Temple. Now, Orthodox Jewish power is local and limited, but still as mean, selfish, and corrupt as it can get away with. Just try driving through Meah Shearim on Shabbat or, if you are a woman, try walking through it in 'immodest' garb on any day. My wife was spit at for her immodest garb in the Kasbah of Marrakech, Morocco. All the orthodox want everyone else to be as trapped as they are, or they don't want them at all.

That is why I thank God I was not born a Cheerleader or an Ultra-Orthodox Jew or a Fundamentalist Christian or a Muslim. I will admit that I was tempted to be born an Elvis or a Football Player until I found out that they tend to die young. No, I'll stick to being an Atheist.

3.4 A PLAY: SETUP FOR THE INITIATE

"No" is the two-year old's first protest against the restrictions imposed by parents and society – the first steps of individuality. Inculcation eventually gets the upper hand.

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Thank you.

When we impose discipline on our children we must be careful that we don't impose too much more, as in the following scene.

The Family is assembled at the dinner table. Father (F) is about to serve the food that Mother (M) spent hours preparing. Hungry child (C) reaches for it first.

F	Don't reach! Where are your manners? Ask for your food!
	Child is silent.
M	Say, "Please serve me some food"!
C	Please serve me some food.
	Child is served.
F	Show some gratitude! Say, "Thank you"!
C	Thank you.
	Child spills something.
M	You dirty little kid. Why must you always make a mess?
	Apologize! Say, "I'm sorry."
C	I'm sorry.
F	Now say, "Please forgive me"!
C	Please forgive me!
	Child finishes eating long before his parents and gets up to go play.
M	Sit down! We haven't finished eating. Have you asked for
	permission to leave the table?
	A minute passes in silence. Child with face down looks restless.
F	Ask for permission to leave the table!
-	Child is silent.
M	Say, "May I please leave the table?"
C	May I please leave the table?
Č	Child jumps up to go.
M	Don't move! Have I given you permission to leave?
C	No!
C	A long minute passes. Parents are still eating.
F	OK! Say, "Thank you" and then you have permission to leave.
*	or. Saj, Thank you and then you have permission to leave.

What are the lessons the child is taught in this scene?

- 1: "Don't reach!" = Passivity and dependence.
- 2: "Where are your manners?" = Tame your nature
- 3: "Say please! Say Thank you!" = You are Undeserving Obey Follow the script

Exit Child for the hills

4: "You dirty little kid!" = You are repulsive and unlovable.

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5: "Say you're sorry!" = Repent6: "Say forgive me!" = Debase yourself - Sacrifice
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The trained child has now been primed for religion.

3.5 STORYLAND INCULCATION

Why do we immerse our children in religion? Because we, ourselves are immersed in religion! One root of our motivation might be expressed as, "I had to go through this, so you damned well will."

How do we immerse our children in religion? Fairy tales represent a subtle and significant start.

Many adults tell children about Santa Claus and the Tooth Fairy. I assume the adults no longer believe in either. But there is a fundamental difference between the Tooth Fairy and Santa Claus. I have not heard of an adult who got upset if anyone told their child that the Tooth Fairy is not real. But there are plenty of adults who get upset – and may even go ballistic – if their child is told that Santa isn't real and doesn't exist. Firmly ensconced in tradition, stories, poems, songs, and movies, almost every Christian child is compelled to be a believer in Santa despite the appearance of simultaneous Santas in front of every department store.

Even more adults tell children about a personal God. I assume that some of the adults who tell their children about God don't believe in a personal God. Many tell their children with the justification, "Children should be exposed to religion so that they can make a choice." Of course, the only religion that parents expose their children to is their religion, and wherever possible the children are surrounded by people with the same religion and customs, so the possibility of choice is a bit suspect.

A related aspect of religious propaganda imposed on children is to suggest that everyone, except perhaps a few evil people, is a believer. Edward Roderick Davies, father of Mitt Romney's wife, lived and died an avowed atheist. Due to the 'magnanimity' (i. e., duplicity) of the Mormon Church, he was baptized 14 months after he died.

All practitioners of religions and creeds are well aware that 'exposure' at an early age amounts to effective brainwashing, so that the programmed child has no choice at all. Recall the song sung by Lt. Cable about instilling prejudice in Rogers and Hammerstein's (and James Michener's) *South Pacific*.

"You've got to be taught to hate and fear You've got to be taught from year to year It's got to be drummed in your dear little ear You've got to be carefully taught...."

"You've got to be taught before it's too late Before you are six or seven or eight To hate all the people your relatives hate You've got to be carefully taught."

Of course, it is exactly the same for teaching religion and God to kids.

"You've got to be carefully taught." For centuries, if not millennia, separating young children from their environments and immersing them in other cultures, ideologies, and religions has been an effective conversion practice. History is laden with examples. During World War II, many Jewish children were hidden and protected by the Catholic Church, and brought up as Catholics. Some stuck to their new religion even after rediscovering their biologic roots. An ongoing example is Chinese 'reeducation' camps designed to make sure that Uighur children are trained into the Chinese way and forsake or never adapt Islam.

Again, how do we immerse children in religion? To entice them we start with fairy tales – stories. To convince them we add threats and terror. Sometimes threats and terror are inserted into the stories either implicitly or explicitly. The trio of tales, threats, and terror presents the defenseless, unarmed child with an attack from three fronts – a triple whammy.

Such stories can create lifelong false memories *and beliefs*. When child psychologist, Jean Piaget was 15, the woman who was his nanny when he was two years old wrote a letter of apology to Jean's parents. In it she confessed that she had fabricated a story in which she had rescued Jean in his carriage from kidnappers. When Jean heard the confession, he swore that he had a distinct, indelible memory of the fabricated rescue.

Why do stories (like dreams) have such power over us?

We are expected to grow up to be sober citizens who put fantasy behind and govern ourselves using prefrontal cortex 'objective' reality. Yet, often in the attempt to solve problems we could not solve during the day, we dream (monsters included), showing we are lifelong story writers. Dreams and stories, like reasoned lectures, activate the prefrontal cortex, but they do more. They mimic reality by activating the same sections of the brain activated by the real situations. Thus, we are hard wired to suspend disbelief for stories or dreams – hence, our lifelong fascination with them. In some of us this fascination extends to the point that risking our fortunes, yea, even our lives, excites us and may prove irresistible.

Here are two real stories I witnessed about what happens when the story gets scary real.

- 1. A ten-year old girl was scaring a six-year old boy standing at the edge of the pool. The boy began crying and looked terrified. Seeing this, the girl stopped scaring him and retreated into the pool. Instantly, the boy stopped crying and called out to her, saying, "Scare me!" That surprised the hell out of me! He wanted to continue experiencing the enticement and thrill of terror.
- 2. The scary monster story I was telling my four-year old granddaughter, Naomi made her nervous. This prompted her to ask, "Is this *really* real?" "No", I said, "only *story* real." Naomi relaxed and said, "Tell me more!" So, we went back to the scary story, in which she allowed herself to relish being fake scared

Ah, but *really* real is exactly where religious inculcation differs from the ordinary fairy tale. After telling the child the religious tale, the child is told that the tale is *really* real, not just *story* real. With this two-pronged 'reality' attack the child has no chance. The bad, even evil thing about being forced to believe 'really real' fables is that it may render the inculcated child more vulnerable to believing anything later on as an adult, including the preposterous lies of tyrants and demagogues.

How does the mind develop and work? Talk religion to an infant and I assume it will have no effect. At some age religion talk and stories begin to have an impact, but if the religion stories are held off until a much greater age, such as after adolescence, they may once again have no effect.

Teach kids to swim and up to about the age of six it is best to say, "Blow bubbles", or "Kiss the water", or "Wash your face". From about the age of seven, depending on the child, you can say, "If you push the water back you will go forward," and the child will learn more quickly to swim. As the child's abstract facilities develop and begin to congeal, logic takes the place of endearing, simple concrete commands (ala Jean Piaget).

So does skepticism, which appears in the child in nascent form from the age of about three or four and sets in seriously after about the age of seven. Skepticism takes time to develop, but once the young child can distinguish fact from fiction, he or she is content to allow them to reside side-by-side. Of course, at a very young age, say before about two years old, the child does not even have the imagination or conceptual development to understand fictional characters. When my granddaughter was younger than about two, if I spoke through a puppet on my hand, she never looked at the puppet but at me, because I, not the puppet, was speaking (see §8.4). As she grew older, imagination took over and she watched and became engrossed in the puppet, even though she knew I was the one speaking. Perhaps the growth of imagination as civilization took shape is why most of the earliest written accounts describe business transactions, and the literature of fiction took some time in arising.

The lucky child is swaddled and immersed in fairy tales. Fairy tales have great power and most of us crave them. They exercise our imaginations, facilitate learning (by personalizing), enable us to think better, teach us how to live, arouse our sympathies, impart moral lessons, and empower us in the face of harsh reality. As the child grows up fairy tales continue to hold much of their early power, for our imaginations follow us throughout life. But we are expected to suspend belief and compartmentalize fiction as we grow out of childhood. Yes, we are expected to suspend belief in all fairy tales except for the greatest fairy tale of all, which we must at all cost continue to believe – God.

It takes great time and effort to get children to believe in God – the greatest of all fairy tales. But keep drumming it in so that the kid has no exit.

"Four-year-olds, were extremely skeptical of the reality status of both the focal characters and the events in both religious (Godinvolved) and non-religious (no mention of God) versions of the stories. By age 6, children who heard the religious versions were significantly more likely to claim that the events and characters were real. Hence, skepticism decreased with age, as, presumably, children incorporated information from their religious communities." Revisiting the Fantasy-Reality Distinction: Children as Naïve Skeptics: Jacqueline Woolley and M Ghossainy https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3689871/

Do children exhibit the same anger and intolerance and expect the same conformity when another child does not believe a fairy tale as adults do of atheists? Young children seem much more tolerant of another's disbelief than adults. Of course, the child is told the story is a fairy tale, so belief and conformity are not mandatory. But, I repeat, God is the fairy tale that is not allowed to be a fairy tale.

Most children experience a more casual belief in fairy tales than adults do in God. (*Revisiting the Fantasy-Reality Distinction: Children as Naïve Skeptics*) Beliefs ossify as the adult mind hardens. The adult

mind lacks plasticity, thus, the sorry truth of the adage, "You can't teach an old dog new tricks".

Of course, there is much to be said for habit. It speeds slow processes by automating them, leaving time to complete necessary tasks, to learn and do new things, and to make new discoveries. It's time to do the work and get the job done; the time for training has passed.

3.6 LIMITING AND DISPARAGING REASON

Religious founders and believers must deal with the irrational absurdity of and contradictions in the fairy tales. Reason shows the religious fairy tales are impossible, as Luther and Calvin confessed with candor.

"All the articles of our Christian faith, which God has revealed to us in His Word, are in the presence of reason sheerly impossible, absurd, and false."

Here Luther included eating Christ's body and drinking His blood during the Last Supper, that the dead should rise from the grave, and that Christ should be born of a virgin.

The only way out is that in such matters belief must eviscerate reason. Reason is allowed its sphere of influence so long as it stays out of the bailiwick of the advocate's particular belief. Luther was all for reason when reason helped him argue with the Pope. But he disparaged reason in the most vicious terms and dispensed with it the moment it went against his beliefs or doctrines.

"But since the devil's bride, Reason, that pretty whore, comes in and thinks she's wise, and what she says, what she thinks, is from the Holy Spirit, who can help us, then? Not judges, not doctors, no king or emperor, because [reason] is the Devil's greatest whore...Throw dung in her face...Drown her in Baptism." Luther – in Durant, *The Reformation* p. 370.

"Reason is a whore, the greatest enemy that faith has; it never comes to the aid of spiritual things, but more frequently than not struggles against the divine Word, treating with contempt all that emanates from God."

"Reason is not just insufficient; its fallen nature has placed it in perpetual conflict with the will of God."

It might seem that admitting the absurdity of their fairy tales by the very founder of a religion would turn followers into skeptics, but we know that too often the more absurd a belief is the more tenaciously it is held. Luther admitted as much and had the shrewd effrontery to claim that the absurdity adds to the glory and 'truth' of the God fairy tale. Three centuries later, even after all the triumphs of the Age of Reason, Søren Kierkegaard, brought up in a Pietist Lutheran home, claimed the same in *Fear and Trembling* (1843). We are often most insistent on what we are most ignorant of.

Kierkegaard raised uncertainty to a principle and vaunted irrationality over reason, particularly when it came to religion. He saw Socrates as challenging reason, and though Socrates admitted that his inner daemon was the source of his insights, he challenged convention, rationalization, and sophistry rather than reason. Kierkegaard saw scientific knowledge as an obstacle to redemption. I do not think or see evidence that Socrates demeaned the modest scientific knowledge that existed in his day. He praised the skill of artisans and probably would have waxed eloquent about later scientific advances. Kierkegaard claimed that he modeled himself after Socrates, but to me, that is not only presumptuous it is preposterous. Would Socrates ever have said as Kierkegaard did?

"Faith...is the highest of all things. The movement of faith must ever be made by virtue of the absurd."

Since it was clear that Christianity is rife with inconsistencies and contradictions, both Luther and Kierkegaard did not deny them but embraced them, raising them over reason as if they constituted proofs of the transcendence of Christianity.

Baruch Spinoza also recognized reason is removed from faith and the domain of religion, though unlike Luther and Kierkegaard, he was not praising faith.

"What philosophy aims at is truth and nothing else; what faith aims at is obedience and piety and nothing else."

Spinoza thus frees philosophical reasoning from any possibility of impiety since he considers that the two domains (or Magisteria in the words of Stephen Jay Gould) do not overlap – "Thus, faith grants everyone the greatest freedom to philosophize." To Spinoza, theologians sin when they restrict and punish thinking. To too many theologians and religious conservatives, people sin when they think.

3.7 A WORLD OF ALTERNATIVE FACTS

Once you disparage reason it is imperative to select, mangle and/or ignore facts. Now we have 'alternative facts'! Thank you, Kellyanne Conway!

In the past few years, as people's political positions have hardened and become more extreme, it has become obvious that you cannot change anyone's mind about almost anything. One exemplary issue is global warming, a scientific issue that in the United States has become infused with a religious aura. Once religious feelings enter the arena troublesome logic and facts exit. Not only do people feel entitled to their opinions, they feel entitled to their facts.

As a meteorologist, I have accepted the overwhelming mountain of data and evidence that show for the past century the global climate has been warming and at an increasing rate as the result of human activities. But I have intelligent friends who remain committed to the stand that the climate is not warming or if it is that we are not causing it. They are proud to crown themselves skeptics, but do not deserve the crown they place upon their heads because they are committed in advance. Their stand forces them to ignore or dismiss both data and climate model simulations and resort to conspiracy theories, such as that all meteorologists alter the data or design the climate models to make it seem that there is global warming because their funding depends on it. That's not skepticism – its paranoia. And it accuses countless dedicated scientists, many with no vested interests, of being liars.

Religion's appeal is so universal and persistent that until human beings have some other genetic construction, many will continue to believe in the invisible, education notwithstanding. Indeed, if religion were suddenly erased from every single person's mind, we humans would soon recreate it.

Religion attracts both good and bad people; it will inspire good people to do good and bad people to do bad, but it must always deal with a world of alternative facts. I will come back to this later, for religion has had a great impact on human history both for good and bad.

Many of the times that I have argued with or listened to believers I have come away impressed. Believers come armed with an armada of casuistic arguments honed from antiquity by their clergy, and they come armed with conviction, which carries great weight. This makes arguing with them difficult, if not impossible for any inexperienced and nonconfrontational atheist.

As an example, in 1963, a Lutheran friend defended the existence of God arguing by analogy the mantra he had learned in church saying, "Yes, no one has seen God, but no one has seen an atom, yet we know atoms exist." I had no answer for him at that time, yet neither he nor I were aware that his argument was already out of date because 12 years earlier, in 1951, Erwin Müller became the first to view a single atom using an electron microscope. And, after further developments, Müller became able in 1967 to distinguish an atom of one element from another in a crystal.

Not all religious arguments are so neatly neutralized, but all have loopholes or flaws that render them invalid. Chapter 4 is designed to counter or at least to understand the arguments presented by our believing brethren in support of the faith of their fathers, and the charges they level against atheists. For further help, a neat guidebook of responses to arguments for God is Armin Navabi's, *Why There Is No God: Simple Responses to 20 Common Arguments for the Existence of God* (2014).

Then, Chapter 5 is designed to expose the true nature of religion and the believing mind, which I have more than hinted at already.

CHAPTER 4

RELIGION'S CON JOB

4.1 RELIGION AND SELF-CONGRATULATION

Every successful individual or organization sells itself. Religion is forever congratulating itself. The Academy Awards represent a gaudy sales pitch for movies and their creators. It presents a curious contrast with religion. The movie industry sells a product that is real and tells everyone it is imaginary. Religion sells a product that is imaginary and insists that it is real. All that religion has is a sales pitch – it is devoid of substance, for everything that is good within religion could have been done without religion. When Religion is poor and lacks temporal power, it is a parasite that sucks from any productive human endeavor; when religion is rich and is the temporal power, it is an amoeba that engulfs every productive human endeavor.

One primary way religions congratulate themselves is to point to their ancient texts – the Bible, the Quran, the Upanishads, the Vedas, the Sutras, the Dao De Jing, the Mayan Codex, etc. Always be conscious that whenever someone argues, "Ours is the true religion because it says so in our revealed text", what you are hearing is the model of a circular argument. Of course, religious apologists are no simpletons. When you confront them with the fact that their argument is circular, they are ready to prove that outside sources confirm the truth of their sacred texts, and that in some coded way their texts anticipated jet engines, Relativity, and DNA. Such claims always place them on shakier grounds. Even if you can't challenge their presumed evidence on the spot, you can always look it up later and certify that it fails.

Religion also congratulates itself on the magnificent music, art, and architecture that have been created in its name. The Church has certainly been an extraordinary patron of the arts. There are artists, musicians, novelists and poets, whose inspiration as well as opportunity came from the Church. Just think of the miracles of Jan van Eyck, Michelangelo Buonarroti, and Johann Sebastian Bach, to name just three. Would they have created without the inspiration of religion? We will never know. And if they would have created without the Church what would they have created? We will never know. But it is important to point out three things. First, the extraordinary profusion and modernization of the arts coincided with the growth of secular dominated movements such as the

Renaissance, the Enlightenment, and the period of Romanticism that forced the Church to bend. Second, just look at the extraordinary expansion of the arts after religion had retreated somewhat into the background, as Europe's economy produced greater excess capital, and science and technology (e. g., electric lights) created more leisure time.

Third, look at the stagnation and even destruction of the arts when and where Religions maintained their mentally medieval strangleholds. In *Ideas: A History of Thought and Invention, From Fire to Freud* (2005), an intellectual tour de force that includes must-reading on the history of religion and atheism among countless other ideas, Peter Watson details the almost complete destruction of books, libraries, and literacy as the Roman Empire disintegrated and the Church took over with its anti-worldly, anti-intellectual dogmas. Watson stressed that perhaps even more telling than the destruction of *public* libraries was the destruction of *private* libraries by the owners themselves, who feared censure or execution by a religious monolith that condemned reason and worldly knowledge. And I do not wish to skip the various book burnings and censorship imposed by totalitarian states, i. e., terrestrial theocracies.

Islamic geometric and calligraphic art is absolute genius of corralled insane obsession. Islam, furthering the Jewish proscription of the graven image as encouraging the all too human tendency toward idolatry, forbad representational art and destroyed it where they found it, though at the edges of Dar al Islam there were magnificent exceptions such as Chinese led Persian and Indian Mughal illuminated art.

Córdoba (Spain) rose to being one of the world's greatest cities under Islamic rule around the year 1000 CE, but one need only stroll through its enormous Mezquita to recoil from the destructive mindset that mandated defacing images. For a time, Byzantine Christians, perhaps envying Islam's conquests, mimicked the mindless ravages of art during the Iconoclast Periods (730-787 CE and 814-842 CE). But Muslims remain the champions of art destruction. Among the sorry recent examples is the case of the Taliban, who first rose to infamy with their blasting of the giant statues of Buddha in Afghanistan in the months before 9/11. And never forget the brief but destructive realm of ISIS!

4.2 MORAL BEHAVIOR AND RELIGIOUS BELIEF

Here are two charges that believers aim with great frequency and conviction against atheists.

1: If there is no God there are no *absolute* moral standards.

Any atheist must admit that this charge is 100% true. Without God, moral standards can only be relative, functional, and internally coded. Many believers simply cannot abide moral relativism and need a preset system of rules that they must follow blindly without question. Here is their first instruction.

"Every matter which I command you, observe to do it: thou shalt not add thereto nor diminish from it." Deuteronomy 13: 1

But if you must follow blindly, the next command is what you may get.

"If thy brother, the son of thy mother, or thy son, or the wife of thy bosom, or thy friend, who is as thy own soul, entice thee secretly, saying, Let us go and serve other gods....thou shalt surely kill him; thy hand shalt be first upon him to put him to death." Deuteronomy 13: 7, 10

It is not surprising that the first rule in almost every religion is to knuckle under to the God of that religion. But to make you kill everyone you hold dear if they dare proselytize for other Gods could be seen as an absolute standard of *im* morality. This is prioritization of the tribe gone awry.

With a personal God whose nature we cannot know, it is only our behavior and not morality that may be known and be absolute. And, if morality, or at least rules for proper behavior, are imposed on us externally by a God rather than by some internal coding, then divinely imposed punishment for disobedience and for violations of proscriptions become the sole factors in ensuring religiously righteous (i. e., commanded and mandated) behavior. We are then good because we are trained to follow orders and we fear punishment. This makes it hard for a believer to be a responsible adult.

2: Since atheists acknowledge there are no absolute moral standards there is nothing to restrain their behavior and they will be more immoral than believers.

This oft parroted charge *sounds* convincing. Even many atheists assume that religion, by adding the weight of sin and the promise of eternal damnation to the threat of terrestrial punishment, is necessary to keep the mass of people acting moral. (It certainly will keep them terrorized and feeling guilty.) This charge was dramatized by Dostoevsky in *Crime and Punishment* (1866). Raskolnikov, a poor student, trying to convince

himself that he is a superman above the laws of God, murders a nasty, evil money lender, but the same guilt follows him for his act as would follow any believer and ultimately forces his contrition and his return to faith. This, of course, is the tendentious argument of an ardent Russian Orthodox Christian, who incidentally levelled even harsher criticism against the Catholic Church for the Inquisition.

Yes, the charge that atheists are more immoral than believers may *sound* convincing, but the only way to prove it is with data.

And the data is not convincing.

What are the facts regarding the differences of criminal and immoral behavior of believers versus atheists? Where religion dominates the state, as in Islam, democracy is moribund, corruption is endemic, dictatorships, monarchies, and tyrannies prevail, but crime is no lower except when deterred by such extreme earthly punishments as cutting off the hand for stealing a piece of gum.

A 2009 review article by Phil Zuckerman (*Atheism, Secularity and Well-Being*) on the statistics of crime and morality shows either no correlation or positive correlation between religiosity and an entire range of crimes and intolerant behavior. In a 2017 article, *National Religious Affiliation and Integrated Model of Homicide and Suicide*, two of the most statistically significant correlations Don Soo Chon found are,

- 1: Religious heterogeneity is positively correlated with suicides.
- 2: Ethnic heterogeneity is positively correlated with homicides.

For the most part then, atheists commit no more crimes than believers (and at least one study shows that atheists commit fewer crimes). One conclusion is that what restrains us is some internal social programming, plus the likelihood of being punished. Genetic and societal taboos may be more powerful prohibitions than religious proscriptions in preventing most of us from committing acts almost universally regarded as both tempting and sinful, such as murder, rape, incest, and pedophilia. Cameras in the streets around my brother, Robert's school reduced petty student crimes by 97% within sight of the cameras. Two blocks away and out of sight of the cameras the petty crimes never diminished.

Murder rates seem to vary most conspicuously on a continental scale, for which there is a negative correlation between atheism and murder. Latin America and the Caribbean, followed by Africa have by far the highest murder rates while Europe and Asia have the lowest. But Africa and Latin America are the continents with the lowest percentage of

avowed atheists while Europe and East Asia have the highest percentage of atheists.

Anecdote may or may not count. As an atheist, I have led a life of relatively low crime – trust me. Yes, I have stolen extra soap and an occasional roll of toilet paper from motels. I have magnified my expenses on my tax returns in my small writing business and when I owned an apartment. I cheated a couple of times in high school and in one course in college (statistics) where my excuses were, 1: everyone in the class was cheating, and 2: since I was prone to careless errors and the professor took full credit off for arithmetic errors I had a classmate check my work, which I allowed her to correct and copy. I never murdered, embezzled, or burglarized, etc., etc., etc.

My one opportunity to kill with impunity came in Rio de Janeiro, Brazil during a robbery attempt. A teenage boy and girl appeared out of the empty street. The boy wrestled with my brother while the girl tried to grab his video camera. I ran up at full speed and had the chance to hit her under the chin hard enough to injure her seriously and perhaps kill her with one blow. At the last moment I held my hand and merely shoved her away. I didn't decide out of kindness. I wanted to kill. Some internal coding held my hand. It wasn't fear of God, or for that matter, fear of any legal authority. It was either ingrained in me or innate in me and probably both.

How does belief in God relate to some other moral virtues? Many religious organizations are deeply involved in humanitarian aid and charity. They often exact a fee in the form of proselytizing. Just go to a Revival meeting, where they pass the hat.

Let's be cynical for a moment. First, believers are repeatedly told that being charitable is a virtue, so they are more likely to make sure they are seen as or thought of as charitable. Second, it is always to the advantage of religions to advocate charity, for that is how they get their money. It is legitimate to ask what fraction of the charity goes to maintaining the Church, and what fraction is siphoned off for personal gain, such as by Televangelists.

"And thus I preach against the very vice I make my living out of—avarice." Chaucer, *Pardoner's Tale*

The annual budget of religious organizations in the United States, including their sponsorship or ownership in related fields such as health and food services is a mind boggling \$1.2 Trillion! That is close to \$4000 per American! That is power!

Given all these legitimate caveats, let's get to the point. Are believers more charitable than atheists? The answer is a clear, YES! A markedly higher percentage of Americans affiliated with a church contribute to secular as well as religious charities than unaffiliated Americans. Giving charity is, indeed, a mandate written in the scriptures of many religions, and it is not only charity to the Church, but to the needy as well. According to Jonathan Haidt, an atheist social psychologist,

"In the US, religious believers give more money than secular [even] to secular charities, and to their neighbors. They give more of their time, too, and of their blood. Even if you excuse secular liberals from charity because they vote for government welfare programs, it is awfully hard to explain why secular liberals give so little blood." *The Righteous Mind*. (2012).

Score a big one for the faithful. Even if they dole out their charity with proselytizing, it is better for anyone to receive lifesaving charity from a Church than to not receive any charity because it is better to be a live convert than a dead infidel.

What about related virtues such as loyalty and devotion to a cause? It makes sense that believers win on these counts as well. Atheists may be more prone than believers to question any cause and therefore, be less apt than believers to elevate loyalty to a virtue, or to sacrifice their lives for a cause. I have a very high standard for putting my life at risk for the benefit or calling of any cause, quite likely because I was a child of the Vietnam War and not of World War II (and possibly because I am a coward). The cause or war for which I may risk my life must be necessary to my survival or at least my freedom. If required to make the choice of slavery or death, I might accept slavery. Would I sacrifice my life to save my children? That is an excruciating decision that I thank God (even as an atheist) I never had to make, and I am not sure how I would have made it. I think therefore that in commandeering loyalty, Religion errs on the side of sacrifice (see §5.9).

Does religion increase reverence for life and for all that is in the universe? I don't know, but I suspect not. As I mentioned before, some of the most spiritual, inspired people I have met kept themselves outside the arena of religion. Religion does draw attention to reverence but is obliged to deflect some of that attention from what exists to some imagined Creator. It coats a moral gloss on everything, so nothing can be appreciated for what it is. And, it invariably censors or maligns all that it deems morally repugnant.

4.3 THE GOLDEN PRINCIPLE: MORAL MATURITY

Granted that without a God there can be no absolute moral standard, still there *is* an effective moral principle independent of any God. That principle is some form of what is called the Golden Rule, but what should rightly be called the Golden Principle. Its positive form is, "Do unto others as you would have them do unto you!" The negative form was perhaps first stated by Confucius about 500 BCE and later reported with a compilation of his sayings in the *Analects*.

Zi Gong: "Is there any one word that could guide a person throughout life?"

Confucius: "How about 'reciprocity'! Never impose on others what you would not choose for yourself." XV.24

The negative form was stated again by Hillel the Elder a generation before Christ when he was asked to explain the Torah while standing on one leg,

"What is hateful to you, do not do to your fellow: this is the whole Torah; the rest is explanation; go and learn."

It is interesting that both Confucius and Hillel made study a central pillar of their philosophies. And the two stories, with the sage being asked to state the secret of life in a word or a sentence sound suspiciously similar.

The Golden Principle has some more suspect forms such as, "Do unto others as they have done unto you!" George Bernard Shaw had a humorous twist on this form, namely,

"Do not do unto others as you would that they should do unto you. Their tastes may not be the same." *Man and Superman*

The positive form of the Golden Principle is the most difficult to follow. If I want others to give me a million dollars, or their house, or their wife, it means that I should give them mine. The positive form can be corrected or range bound by the Tenth Commandment, the most difficult of all to obey, namely, "You shall not covet anything...that is your neighbor's." Of course, envy is impossible to rule out from the suite of human emotions and although envy may be a prod to great effort and accomplishment it is an admirable moral goal to be free of envy.

Following some form of the Golden Principle may be the definition of moral maturity, or the highest level of Lawrence Kolberg's Moral Scale.

For sure, not all moral decisions are easy, for some involve quandaries such as when helping one person hurts another. Nevertheless, following the Golden Principle is as good as it gets. Of course, for the followers of a religion, that's not good enough without the imprimatur of God.

4.4 SATAN AND EVIL

What about evil? As competing empires proliferated in the centuries after about 800 BCE (see §8.6) religion was enlisted to rein in willful urges and crimes that could upset the order bestowed by Kings. The crimes, in the order presented in Genesis, included rebellion, stealing, sex, lying, irresponsibility, jealousy, rage, and murder. Religion helped to morph crimes into evil, encapsulate and externalize evil in the form of Satan and, damn evildoers to the newly created Hell. Because rebellion was the worst crime against an Emperor, Satan became the arch rebel from God.

The more restrictive a society the greater is its need for an external force or being such as Satan to take blame for the sense of sin that grows out of repression. Thus it is an understandable irony that the revival of law and order beginning in the late Middle Ages, led both to a renewed emphasis on Satan (and witches) and to the Scientific Revolution, and both Science and Satan continue to coexist uncomfortably in America.

Switching to theology, when God is portrayed as the omniscient, omnipotent, benevolent Creator of the Universe, the undeniable persistence of evil creates logical problems. Evil must have arisen from another source, such as Satan, who competes with God for men's souls. But since God created everything God must have created Satan.

Why in the world would God do that? One standard response is that Satan was created good and chose using his free will to rebel. Rebellion means disloyalty, treason to the faithful flock, perhaps the cardinal sin.

But an omniscient God would surely anticipate such treason. Only blind, unquestioning believers could swallow such official, contradictory malarkey about Satan and his rebellion. But the allure of Satan is strong.

Next, even with Satan salivating for sinning souls, it is God who makes the final Judgment as to where the departed depart. And because we presumably have free will, which we used to sin, but would never choose to convict and condemn ourselves, the loving, but implacable God clearly shipped each damned soul to Hell against its will.

A really devilish question to ask those who claim their souls have been saved is, "Are you sure that the blinding light came from God and was not a deception by the master trickster, Satan?" And, of course, there is no sure answer for that.

4.5 RELIGION IS SPOILED BY HUMANS

How do believers deal with the obvious fact that so many evil things have been done by and in the name of religion? One of the fatuous arguments held by many who are tempted but just need a bit more courage to stray from the faith that imprisons them is, "Religion was created pure. It is people who have tainted and perverted religion." This of course assumes that religion was a purely good creation of God, who then left its entrails for humans and Satan to corrupt – another rebellion, this time on our parts, and, of course, more malarkey.

During debates, atheist, Christopher Hitchens has pointed out flaws in the practices of a religion or in its Holy Book. One perplexing response of his opponents was, "That is the human view," which either dispenses entirely with logic and reason, and certainly with responsibility, or is compelled to acknowledge that something went wrong when humans transcribed God's inerrant document.

4.6 ATHEISTS IN THE TRENCHES

Believers would have us believe that there are no atheists in the trenches. Like vultures and crows, priests circle around the dying hoping to notch deathbed conversions. Many atheists steadfastly refuse to see them.

When times get tough it is natural to hope and pray there is anything or anyone, even a god, who will save you, but the atheist still does not believe. Do atheists pray? I will let each atheist answer that question for him or herself. I pray — I do! But I do not pray to someone; I pray for something. When do I pray? I pray when I feel I have no control over what I want or need — when I feel powerless. And if I am scared, I don't merely pray, I grovel and beg.

I would love to believe, but I still do not believe. Every day I hope and pray that my stocks will double but I do not believe that they will (and they don't). Every test I took in school I hoped and prayed that I would get 100% or at least beat everyone else in the class but I knew that I didn't. Every time I competed in anything I hoped and prayed that I would win, but most of the time I knew that I wouldn't and I didn't. I think we all pray in these ways sometimes. During a debate, Christopher Hitchens was asked if he ever prayed. Always ready with a comeback, his facetious response was, "Yes, I once prayed for a hard on." And I would bet he prayed more than once!

One of the reasons believers are so insistent that there are no atheists in the trenches is that if atheists succumb to the strain and show their fears and their 'true' feelings, they will come down off their high horse and 'return' to God. That to the believers would at least validate their belief system and make them feel it constituted tantalizing evidence that God really exists. That, of course, is proof by mirror. It proves nothing.

4.7 ARGUMENTS FOR GOD

The arsenal of theologians' arguments against atheism include the socalled 'proofs' of God's existence. For millennia, no religious figure seemed to need to prove the existence of God even though deliberate atheists have been around ever since the first God was imagined. The Bible's sole response to atheists and skeptics is to curse and damn them.

The need for proof arose when the Greeks invented Philosophy, the attempt to discern the nature of reality through the power of thought – to attain perfect understanding of everything and the wisdom that hopefully goes with that understanding. Perhaps we could prove the existence and properties of God just as geometers proved that the sum of the angles of every triangle equals a straight angle (180°). And so, all of the arguments for God's existence, except for the argument by personal testimony grew out of the alliance that theology formed with philosophy.

Philosophy has been both an ally and a competitor of religion. But all attempts by philosophers to replace religion are futile. Why? There is a sterility in philosophy that science has exposed. Philosophy, although a definite intellectual advance on superstition and religion can, to be a bit facetious, be defined as religion without God, learning without stories, reason without facts, mathematics without equations, science without data, physics without measurements, chemistry without matter, biology without life, and psychology without irrationality, love, or sex. Yes, philosophy is inferior to science because like science, it cannot ease the fear of death, but unlike science it cannot prolong life.

I now briefly review some of the arguments for God's existence. First is the cosmological argument. Either the universe always existed or it had a beginning. A beginning calls for creation or for a creator. The cosmological arguments assert a First Creator, who theologians equate with God. Of course, theologians of a particular religion are sure to assert that God has the specific properties and nature described in their sacred doctrines and texts. The cosmological arguments wind up asserting that it is not possible for an infinite sequence of causes and effects to lead to the Infinite God. How convenient to truncate infinity where you want.

The ontological argument asserts that if we can conceive of God (the most perfect perfection), then God must exist because if the perfect

perfection didn't exist it wouldn't be perfect. Proponents of the ontological argument also assert that since people around the world have independently created Gods the human tendency toward belief proves that God must exist. However....

The only thing that the near universality of belief in God proves is the human psychological tendency toward belief.

There is the argument from design. It asserts that the obvious order or design in the world mandates a designer, and that designer is God. This argument overlooks or minimizes the abundant examples of disorder and incremental design changes, documented by paleontology, genetics, and evolution. Consider the clear evidence of incremental evolution of spinal and pelvic features to accommodate our bipedal stance and the many associated problems such as lower back pain and difficulty in childbirth.

We are constructed to seek and see order and patterns, even where they do not exist. This has been stressed anew in recent decades, but was recognized long ago. In 1620, Francis Bacon wrote in describing the four idols (tribe, cave, marketplace, and theatre) that humans are subject to,

"The human understanding is of its own nature prone to suppose the existence of more order and regularity in the world than it finds." *Novanum Organum*.

William James returned to the point almost 300 years later.

"We look for the regular kind of thing exclusively, and ingeniously discover and preserve it in our memory." *Varieties of Religious Experience*. p. 332.

The most ancient and enduring argument for the existence of God or any spirit is the argument from personal testimony. Innumerable believers testify that they have felt or been contacted by God in some manner, as by revelation or mystical experience possibly during altered states of mind or even seizures. In the vast majority of these cases the God that contacted them was the God they grew up with and sought for years. Such personal testimonies can never constitute proof because by their nature there is no way to validate them. Given that brain studies show the same, distinctive neural pathways operate during all so-called contacts, a skeptic might consider that a *dis*proof of God by design.

Theologians and philosophers may be incisive, compelling, and accurate in their criticisms and analyses of other systems but the moment

they propose their own system they always take a synaptic jump - a discontinuity or non sequitur that is invariably wrong. All proofs for philosophical and theological systems thus amount to rational sounding arguments with assertions based on initial biases. Philosophical and theological systems can be compared to mathematical situations with more unknowns than equation - they are insoluble.

4.8 TWO GREATEST PROOFS OF GOD'S EXISTENCE

There are, however, two proofs of God's existence that no one has ever been able to refute or find a loophole in. They are...

Proof #1: In a town of straw houses a fire consumes all but the stone church. The Reverend preaches to the few survivors, all suffering third degree burns. "It is a miracle bestowed upon us by God that His holy place alone was protected and untouched amidst the conflagration that righteously scorched the dens of sinners."

Proof #2: In a town of low-lying stone houses, the wooden church spire was struck by lightning and burned to the ground while all houses were untouched. The reverend, suffering third degree burns, preaches, "This is God's ultimate test of our faith in Him."

I love the way believers argue. Like the Mikado's Lord High Executioner, they always make the punishment fit the crime.

Variants of these two indisputable proofs include the claims by believers that their cancer, heart attacks, or other troubles were cured by God. Is it cruel to ask who gave them their cancer, heart attacks, or other troubles in the first place, if not the same God who cured them?

These are one-way street arguments or what might be called escapement arguments, after the escapement devices in mechanical watches and clocks that permit movement in only one direction. The escapement is an ingenious device that revolutionized the measurement of time, which was so important in the development of science and technology. In religion, however, it forces believers to ignore, deny, censor, and block any arguments and facts that proceed in the direction opposite from their faith, dogma, and ideology.

Enough of these silly arguments! Others have elaborated on them ad nauseum. Let us now look closely at the essence of religion by distilling its primary ingredients.

CHAPTER 5

RELIGION'S CORE

5.1 FAIRY TALES, RULES, PUNISHMENTS

As I asserted in §1.7, every religion is characterized by three starter ingredients, enforced by coercion.

- 1: The Fairy Tale
- 2: The Rules
- 3: The Punishments

What an intriguing trinity!

Every religion begins with its fairy tales. The fairy tales of the ancient religions provided mythological answers to questions about the nature of nature at a time when scientific reasoning and knowledge were infantile. The fairy tales of newer or revised religions graduated to assert answers about *our* nature and fate. The more impossible and absurd the fairy tale the more tenaciously it is believed. Believing the fairy tale is the admission ticket to the novitiate.

No sooner does the novitiate subscribe to the fairy tale than the religion begins to impose rules of behavior. The rules are often exclusionary and restrictive. This is a good way to reduce contact with outsiders and limit any possible corrupting or competing influences.

Last, but not least, are the punishments for the inevitable failure to follow the impossible and likely contradictory rules. Punishment is one of the main aims of religion. The punishments start at birth and continue as unendurable torture for all eternity in the hereafter.

Even though the JCI religions are riddled with these three ingredients, each can be distinguished by which ingredient it gives primacy to. In Christianity the fairy tale is preeminent, with Virgin Birth (Immaculate Conception) and Resurrection leading the way (which Islam accepted). In Judaism the rules are preeminent – there are 613 of them and many have almost infinite subclauses as enumerated in the Talmud.

In Islam, whose allure includes its relative doctrinal simplicity, the punishments predominate. Allah, "the Beneficent and Merciful", metes out Hell's eternal fires for the nonbeliever in almost every Sura in the Quran.

Just in case you are burning to know, here's a census of infernal or punitive words. *Punish* or *punishment* appears 220 times in the Quran, 92 times in the Old Testament and a mere 9 times in the New Testament. Stronger than mere punishment, damn or damnation appears 15 times in the New Testament, only 3 times in the Quran and, believe it or not, 0 times in the Old Testament. But have no fear that the holy books are going weak on us. The word, curse or cursed appears 194 times in the Old Testament, 24 times in the New, and 41 times in the Quran. And when you are cursed, where do you think you go? That's right! You go straight to Hell without passing Go and without collecting \$200.

Hell appears 31 times in the Old Testament, 23 times in the New and 95 times in the Quran. The word, *fire* appears in the Old Testament about 450 times, mostly for sacrifices, next for burning of cities and people, but never for infernal fires. Infernal fires appear about 20 times in The New Testament, and 'the Fire' of Hell appears 120 times in the Quran. Satan appears 19 times in the Old Testament (14 of these in the Book of Job), 37 times in the New Testament, and 63 times in the Quran.

In ranking these three holy books we must take into account the fact that the Old Testament is between 3 and 4 times as long as the New Testament and the Quran, so that the *concentration* of these frightening words is that much greater in the latter two. All this makes the Old Testament seem benign by comparison. Of course, this does not exonerate the Old Testament of all its Floods, Plagues, and Incinerations, but at least once you die it more or less leaves you alone.

The word, *doubt*, in the sense of uncertainty regarding belief, is not used a single time in the Old Testament. (In the Book of Daniel Belshazzar's doubt concerned his inability to understand the Handwriting on the Wall.) In the Old Testament, the belief switch was either on or off. Either you believed in God or you didn't. Doubt appears 16 times in the New Testament, and in the Quran it appears 39 times. The appearance of religious doubt represents progress in the human condition though it is excoriated by religion. Jennifer Hecht reviews the history of all forms of doubt (and atheism) in *Doubt: A History* (2003), praising doubt as one of the great characteristics of the human mind and demonstrating how the orthodox mind views both doubt and doubters as mortal threats and will do almost anything to exterminate them.

As for the rules, aside from imposing order, they are designed to be impossible to obey perfectly so as to justify and mandate self-abasement and punishment of the followers. The followers are metamorphosed into masochists who must willingly submit to punishments imposed by the sadists who have risen to become leaders – the clergy and the prophets.

Another principal purpose of rules is to separate the followers of a religion from outsiders and the outside world. A unique Holy language, often no longer spoken by most if not all followers, is a starter. Distinctive dress is an obvious separator. Circumcision is less visible in public but more enduring. Dietary laws, some of which may have some basis regarding health, surely separate peoples of different religions, and even people in different sects of the same religion.

When you say, "I cannot eat what you eat", you are often saying, "I cannot eat where and when you eat." And dietary laws are an effective device to categorize people of other faiths as dirty, tainted, or polluted.

A potent device for making people feel tainted and sinful is the Christian doctrine of Original Sin. Formulated by Paul and polished to spit shine perfection by Augustine, it is sustained to this day in endless wrinkles by numerous Christian denominations. Original Sin baked Adam's and Eve's eating of the fruit of the tree of knowledge of good and evil into the ultimate punishment pie for the entire human race – a death sentence for all, accompanied by the verdict that we are all innately sinful. Guilt is rinsed off by Baptism; everyone else is doomed to Hell.

What exactly was the sin of Adam and Eve? Permit me a secular rendition and interpretation. Eve was tempted by the subtle serpent, who stood erect. Dare we think the serpent is a phallic symbol? When Eve and Adam ate of the fruit of the Tree of Knowledge of good and evil, they gained knowledge that they were naked. They lost their innocence, became ashamed and covered themselves. This sounds much like adolescence, where we not only become aware of our sexuality, we become aware of and assert our growing independence. Adam and Eve risked their lives by trying something new, by exploring, by experimenting, by challenging, and by disobeying. Adam and Eve thought and acted for themselves.

Independence of thought is precisely what religion is least able to tolerate. By this interpretation, Original Sin is our genetic code that propels us to think and to create, which is linked to sexuality. The punishment for the sin of growing up and leaving childhood behind is the realization that life is hard and finite. Christ expiated that sin for us, but only if we place complete faith in Him, meaning that we give up the right to think for ourselves and, for much of Christian theology, regress to childhood and give up the right to sex or the right to enjoy it.

No wonder that the three virtues of religious sainthood are, 1: Obedience, 2: Poverty, 3: Chastity. We must obey like children; we have no need for wealth or property, since the adult world will care for us; and we must simultaneously relinquish the commands and pleasures of sex. No way is worldly knowledge or wisdom included among the virtues of

sainthood. Thus, Saints must be like perfect children, free of jealousy, greed and sex urge, but having reached puberty, this is next to impossible and contrary to nature. Saints are either desexed or perverted. And religion is far more apt to bestow sainthood on reformed sinners because their conversion constitutes proof of the 'truth' and adds to its lustre.

5.2 EXTERNALIZING AND PSYCHOLOGY

One great driver to belief in God is the feeling that our strengths and talents are not innate in us but are gifts from outside. But the only external sources of our internal founts are the food we ingest, the air we inhale, the seeds the man implants in the woman, and what we learn from others.

Religions require us to renounce the recognition of our own strengths by externalizing them, and then formalize that renunciation as a doctrine. John Calvin made perhaps the clearest (and sickest) statement of this assumption.

"Man being at first created upright, but afterwards being not partially but totally ruined, finds his entire salvation out of himself in Christ.... The endowments which we possess cannot possibly be from ourselves; nay, that our very being is nothing else than subsistence in God alone." *The Institutes of the Christian Religion* (1559).

Religion depends mightily on our penchant to externalize. Cut that umbilical cord to nowhere and religions will drain, deflate, and evaporate like the phantasms of the night they are.

What are the sources of our tendency to externalize? They include,

- 1: Missing, broken, or feeble connections between our conscious intelligence and our subconscious wisdom.
- 2: Lack of confidence

The deeper the source of our inspirations and revelations in our own subconscious minds, the more likely we are to attribute them to some external agent. Thus, our feeling of certainty of the external nature increases as the internal source deepens, because our subconscious is hidden from detection by our conscious minds.

One of the subconscious avenues of externalizing is traversed in dreams. In dreams we seem to enter external worlds and we are such ingenious playwrights it is hard to accept that they are purely creations of our minds. In our dreams, each of us is more than a Shakespeare of the night because we write the scripts from scratch without using some ancient story line or history. We design the sets, determine the characters, direct their actions, and compose their words. We have them deliver soliloquies or engage in conversation; we have them take action. We can rejuvenate the aged and revive the dead. We can create monsters to terrorize us or, in lucky cases, to overcome. We can travel and sometimes even fly. [I got to the Moon in one dream back in 1969 only to find discarded beer cans.] We can create vivid Technicolor scenes. We accept nonsensical elements of the dream as if they were perfectly normal, even if we recognize as we are dreaming that they are bizarre.

Everything in our dreams is the creation of our mind. Prompting may come from the travails of the previous day or days, or various bodily discomforts. External factors such as electrical shocks or the need to relieve ourselves may prompt dreams but the dreams are creations of our minds and thus there is nothing external about the dream itself.

Waking visions, trances, out of body experiences, or seizures are similar to dreams. A mind impregnated with visions and stories of God from infancy has the script ready-made and can easily ascribe an external source to such internal mental and psychic phenomena, but it is nothing more than another tempting illusion we are designed to be gulled by. How horrid it is that we have allowed illusions emanating from such seizures as Paul's, likely to be temporal lobe epilepsy, to change and corral the course of human history.

So, when we wake, sweating and shaking from the crises of the night or the trances, swoons, and seizures of the day, we would all swear that those dreams, trances, or seizures are part of the real external world. These are just three of the many phenomena that our minds are designed to accept verbatim, yet which depart from objective reality.

Another example of the enormous power of the unconscious mind is a condition called *conversion disorder*. This is some disability, such as paralysis or blindness that has no normal neurological source, but is quite real. Neurological studies using devices such as functional magnetic resonance imaging (fMRI) are beginning to find and map altered circuitry in the brain during this condition. Thus, "increased coupling between the insula and the amygdala, a structure key to emotional processing, correlated with improved response to treatment of functional neurological disorder." (Study at Mass General Hospital, led by David Perez and Jorge Sepulchre.) In crudest terms, the amygdala is the brain's

fear sensor, which activates aggression. The insula is the brain's seat of many feelings including moral disgust (See §5.7).

On a more mundane level, our brains are designed to fall prey to various so-called optical illusions (see §8.3) because our visual assessment system operates by relative comparisons rather than by absolute measurements. Thus, we can't stop from seeing things wrong even if we know they are illusions.

Another cause or source of our tendency to externalize involves the diffident assessment of our abilities. From where do they come? Either I can do or see something that the next person can't or that person can do or see something that I can't. It is a great mystery that is out of our control. So, it is natural to posit an external source for our talents.

Social pressures arising during adolescence as our biopsychology develops along with our bodies propel many of us to insist on an external cause for abilities. When children are asked a question in school they practically jump out of their seats, and wave their hands wildly to be called upon. But when puberty strikes the hands no longer rise. Instead, they are used to dissemble, to cover our abilities, perhaps even to cover the genitalia, with all their new abilities, urges, and drives.

Few of us want to stand out after puberty. We want more than ever to join or be accepted by the group. We, like Adam and Eve, need to find partners in crime. If we stand out alone we may be expelled. No answer must come from within us as soloists. It must come from outside.

The rise in externalizing coincides with reaching psychic adolescence. It is only when people cease externalizing that they can continue on to become psychic adults. Thus, a good part of the resentment and hostility that believers aim at atheists is the hostility that adolescents aim at adults. It is not easy to be a psychic adult. Psychic responsibility can be a heavy mantle. This is one reason that some atheists revert to religion.

Becoming a psychic adult in no way blocks childlike enthusiasm, curiosity, and inventiveness. More likely, it may open grand and new possibilities.

Externalizing does come prepackaged with its set of conveniences. I am not responsible if power resides outside of me. No one can deny that believers have acted responsibly in the practical world. So much of what humankind has accomplished, built, and created has been done by believers who were organized and motivated by religion. Having the feeling your behaviors are taken care of for you may free you to great accomplishment, especially in the case of classical Calvinists and Pietists with their Protestant work and uncertain salvation ethics, namely, that

while doing good works is no guarantee of salvation, it might just be an indicator (ala Max Weber's 1930 book, *Protestant Ethic and the Spirit of Capitalism*). In other words, get to work, and when you are done, pray that what you have accomplished or accumulated raises the probability that you might be saved.

In short, the nature of the believer's irresponsibility does not include functional or practical matters; it is psychic, moral, and ethical. The behavior of believers is guided by rules handed down to them by God. They have their infallible guidebook. This is why believers cry for absolute (externally imposed) standards in morals.

5.3 EXTERNALIZING AND RATIONALIZATION

William James points out that certain people who have sudden conversions explain what they experience as God entering their souls. This is a very powerful form of externalizing. James compared this mental state to people who, after emerging from hypnosis, do certain silly things they have been commanded to while under hypnosis and then when asked for an explanation, always find a reason, no matter how absurd, to justify their action (see §10.7). In this case, everyone can see that their modus operandi is to find some rationalization for what they were compelled to do.

Anselm made a principle of rationalization with his saying, "Credo ut intelligam" – I believe so that I may understand. This places belief above and before understanding, authority above and before reason, and the conclusion above and before the evidence, i. e., it puts the cart before the horse. It is a horrible priority and credo but one that many if not most people operate by. In other words, let's try to find facts and reasons for what we already feel sure of or need to feel sure of.

It would be good for us to acknowledge that so many of our so-called reasoned opinions are the result of rationalized conclusions force-fed into us from infancy that we have at best subliminal awareness of and most likely no consciousness or memory of at all. Brain mapping may be the best way to provide some form of a rationalization detector test.

5.4 REVELATIONS AND MYSTICAL EXPERIENCES

Sometimes, sustained effort in trying to solve a problem or recall something fails to yield immediate results. When the effort is followed by time off – a period of relaxation – the critical idea, solution, or

memory may suddenly arise from the subconscious mind in the form of a revelation, a brainstorm, or a mystical experience.

It often does this after sleep, hence the expression, "Sleep on it."

It's a good expression! When I go to bed with unresolved problems or issues, I almost always wake up happier and more resolved. The problems can take any form – personal, social, financial, or political. They can be creative, artistic, intellectual, scientific and even mathematical. No matter the problem, the night seems to resolve them.

Are the problems resolved in dreams? I can't answer that. I almost never remember a dream that solved any of my problems or resolved any of the issues; it is the troublesome dreams that wake me up. My waking solutions appear to come out of the blue. They come as revelations accompanied with a simple sense of great clarity and certainty, but, at least in my case, hardly ever with great emotion or wonder.

So, if you ever catch me napping, please don't wake me. I may be solving a great problem.

Except for my first revelation that religion is baseless, none of my other brainstorms ever assumed religious garb. All my later revelations or brainstorms have concerned creative, scientific, intellectual, personal, or emotional issues. Here are three examples. The first is personal. In 1996, my brother, Robert told me that his field of medical sales was dying. At the same time that CEO's were downsizing and extorting commissions from salesmen, hospitals were banding together in huge purchasing consortia that made the individual salesman irrelevant.

Robert's job continued until just before 9-11. Prospects in the field were dim. Because of this and because Robert is marvelous at lecturing and explaining and is highly sympathetic, I began to urge him to switch to teaching as a profession. It was a tough sale because the starting salary for teachers was so much lower than what he was used to and because of the even greater loss of professional esteem. I was relentless but even though Robert was unemployed he was immobile.

One morning I awoke with the solution. I should put my money where my mouth was. I would pay for his education credits. It was as clear as day and it worked. It got Robert over the hump of his resistance and changed his life. It was one of the best things I have ever done.

On 06 March 2013, I woke with the solution about how to end my book, *Calculus: Your Royal Road to Genius*. I had decided to end it with a problem in probability and statistics – the normal distribution with its bell-shaped curve. But I couldn't see how to present it. The grand revelation came in all its complex glory. It included the way to treat the

topic, how to justify its place as the grand conclusion of the book and how to inspire the readers on the significance of their great accomplishment of mastering the Calculus.

One final brainstorm was that after over six months of sustained, frustrated effort with failed ideas about properly simulating ice crystal halos that includes skylight I woke up with the solution. The problem was that the skylight appeared spotty. The spottiness was reduced by a process called smoothing, which unfortunately, broadened and distorted the halos. The solution was amazingly simple; store sunbeams that produce the halos in a separate file from sunbeams that produce the background skylight and smooth only the latter. After that is done, combine the two files. With that, the simulations mimic photographs.

Mystical experiences may be more intense than brainstorms. They often impart the feeling of unity with nature. Perhaps they represent an earlier dominant human mental state that has been largely covered over by deliberate, analytical consciousness. The religious associations with this state of mind can then seem irrefutable. Also, so much of the brain is devoted to processing visual images that it is not surprising that 'visions' are correlated with religion.

When a problem is religious, it can involve emotional agony, as when someone fails to find salvation during a period of intense seeking. Then, at some unexpected later time, perhaps when the person has deliberately relinquished the active search and placed himself at the mercy of God, the illumination finally comes in all its glory, without apparently being asked for. An example William James quotes is,

"I simply said: 'Lord, I have done all I can; I leave the whole matter with Thee,' and immediately there came to me a great peace." p. 159.

Other examples replace Lord with Jesus. Indeed, the idea of surrendering your will to Jesus is fundamental to many Christian sects. The sense of salvation is often experienced as a loss of selfishness and ego. Several of the people quoted by William James remarked that in their previous, useless conscious prayers they had focused on themselves only but that when salvation and joy finally came, they realized they were praying unselfishly for others.

Like brainstorms, mystical experiences may well be related to the creative moment. The religious mystic of one Age might well be the composer, the artist, the poet, or even the scientist or engineer of another Age, who after great study, thought, and concentration suddenly comes upon a new way of hearing, seeing, expressing, or formulating things.

And while great effort attends all the preliminaries, the creative moment is effortless, natural, and inevitable.

That creative moment may be the moment of successful subconscious integration with the person's conscious problems, anxieties, or issues. This integration or alignment of subconscious feeling with conscious knowledge and thought may well be what gives people who experience the revelation or mystical experience the sense of certainty that they are right. At last we are consistent; it all makes sense and feels wonderful.

All brainstorms, revelations, and mystical experiences come with a sense of certainty. I have always felt certain that my revelations were right. Of course, a sense of certainty or conviction is no guarantee of truth, but the solutions of my scientific brainstorms invariably worked. My emotional or personal brainstorms have also been verified. All were consistent with my waking thoughts, and likely spurred by them.

Mystical experiences and revelations also carry great long-lasting conviction, as has my religious revelation, which clarified my view once and for all, so that I have not needed another such revelation.

"The vision [of a living, caring universe guaranteeing a sort of immortality] lasted a few seconds and was gone; but the memory of it and the sense of the reality of what it taught have remained during the quarter of a century which has since elapsed. I knew that what the vision showed was true...." *Varieties of Religious Experience*. p. 303.

As to the source of brainstorms and mystical experiences, they come from within. I have never had any doubt that my brainstorms have come from within me. But in part because of their ineffable quality buried deep in the subconscious, it is likely for the person to feel that they have an external source. It is especially the case with believers, who have been trained in a religion and its dogma from infancy, to posit that God has communed with them, so the mystical experience carries a conviction of the existence and perhaps presence of God.

Thus, the believer who has an experience with a message of redemption or salvation will often interpret it as coming from God or Jesus, in other words, from an external source. This is an irony, because while the believer is externalizing, the real source of inspiration or salvation is even deeper within. But then again, when we are dealing with a subconscious intuition or insight, by definition we can have no conscious feeling of where it came from.

One thought on clairvoyants. All of us have rapid subconscious insights and intuitions (see e. g., *Blink* (2005) by Malcolm Gladwell or

Thinking Fast or Slow (2011) by Daniel Kahneman) but clairvoyants seem to have some conduit from the subconscious to the conscious mind. Thus, while we may have tenuous and vague first impressions, clairvoyants recognize and feel them with great clarity.

5.5 REPETITION, HYPNOTISM, MEDITATION

When you do something repeatedly, it eventually becomes part of you. Repetition can produce neural pathways in the brain (primarily the Hippocampus). Repetition makes itself permanent.

The repetition we encounter in prayers and rituals is also a standard device in poems, songs, political speeches, and mantras. Rhyming and meter in poetry are examples of repetition. Recent analyses demonstrate what we all feel, namely that popular songs have become more repetitive. Colin Morris performed computer compression of songs and found that repetition increased from the late 1960's to the 2010's by 10% to 15%. And the top 10 popular songs of each year were on average more repetitive than the top 100. We like repetition. We crave repetition.

When we have a problem we cannot solve, we tend to repeat it endlessly, as if the repetition alone will somehow lead to a solution, or a way out. Repetition shows that the person is stuck, like an old phonograph record with a faulty groove. You repeat until you resolve the situation. Think of the guilt-ridden Ancient Mariner. Indeed, repetition of a mantra can lead to a solution or an altered mind state; the repetition in prayers can do the same and is certainly aimed at the same goal. Thus, the quote, "Insanity is doing the same thing over and over again and expecting different results," wrongly attributed to Albert Einstein, is not always right. Nevertheless, in obsessive compulsive disorder complex or some forms of insanity the person does repeat endlessly with no way out. Such repetition imparts a feeling of safety as it deepens the groove.

Repetition of the familiar may help us absorb what is new by making us feel smarter and hence more receptive to the new. That is why the best speeches contain some 95% of what we already know and only 5% of something new. And it will make that new 5% sound more convincing.

Repetition can also convince us that we are right. Quite simply, we like repetition; we crave repetition.

But repetition can also dull the critical mind and make us more susceptible to anything, good or bad. Lies gain credence by repetition. Repetition can be used to hypnotize and brainwash us. Hypnosis relaxes you, reduces stress and anxiety, and makes you more open and receptive to suggestion. In this way, repetition helps religions win converts.

As we have seen, repetition of and concentration on problems, followed by relaxation or surrender can lead their solution; in the case of religion, surrendering to God or Jesus does lead to resolution or perhaps peace. Without the repetition there would be no relaxation or surrender and no solution.

Rituals are formalized repetitive acts. The ritual is supposed to impart holiness or sacredness in some manner and its legitimacy is reinforced by the power of repetition. We bond with the familiar.

Residing alongside the domain of religion, purveyors of self-help stress the importance and efficacy of repeating positive thoughts and sentiments for purging or at least moderating negative behaviors and attitudes. Political commentators too often do the opposite, repeating the negative ad nauseum. They know it will stick if they do it often enough.

5.6 IT'S HARD TO CHANGE

Can we really change? My friend and colleague, Ward came to City College of New York from out West. In NYC he gradually grew more liberal in his politics and science. One day, after he had been at CCNY for several years, free flu shots were announced on a poster outside the Infirmary. I got the shot and told Ward about the announcement when I returned to my office. Ward exploded, yelling at me that he never took a flu shot. I couldn't understand his outburst but let it go. The next day without my asking, he apologized, confessing that his late mother had been an ardent member of the John Birch Society and had taught him as a child that inoculations were Communist Conspiracies. Despite his liberal turn, he couldn't get over his early childhood conservative inculcation. It was interesting that as a patriot and good person, Ward often gave blood, which procedure could have at the same time, without his knowledge, injected poison into his veins.

Here I am, so glib in picking on Ward, so supercilious, when I cannot let myself off the hook. In 1995, my tenure came under fire at the perfect time of male menopause. I felt desperate and helpless – riddled with anxiety. I normally slept quite well but would wake up night after night after two or three hours with my head spinning non-solutions to the prospect of being fired with no job prospects but with family obligations I could not meet. I felt out of control and suffered. This anxiety lasted throughout the extended crisis for about a year and a half. Gradually the crisis eased; I kept my job and my confidence returned slowly.

A few years passed and I congratulated myself that I had changed in a fundamental way. Then some minor crisis arose (I forget what it was). I

was surprised to find that my identical modus operandi or, shall I say, anxiety returned. It was clear that I had changed very little, if at all. That was a downer. Fortunately, this second crisis passed quickly – sheer luck for me. [This revelatory memory came to me after sleep.]

I have other prejudices that I have long recognized but have not been able to purge. If I walk down a street alone and several black men approach from the opposite direction, I feel a degree of fear that I wouldn't if the men had been white. And seeing lesbian and homosexual couples cuddling, etc., make me feel weird. I am committed to a live and let live philosophy, but my prejudices do not go away or diminish.

On Friday 26 July 2019, I attended a book talk by Tom Baker, author of *The Hawk and the Dove*. At 19, Tom, son of a career soldier, and a self-acknowledged unquestioning, uninformed patriot, went off to serve in Vietnam, where he saw a series of horrors, including the death of his best friend. Then, when he came home, he was greeted by a group of Vietnam War protestors who spit and flung dung at the returning soldiers. The unappreciated, reviled Tom was shaken and suffered from PTSD. Years later he married a Dove, began to study history, and gradually changed his views. His book shows the horrors of war but also that soldiers are human and not violent brutes. Tom sees the Vietnam War as a mistake and the Iraq War of Bush 43 as a mistake. Yet, he said that if he were called again, he would serve.

That shocked me, even though it shouldn't have given my own apparently indelible prejudices. Tom has educated himself and taught himself to question within bounds, but is still unable to ask and answer the big questions, namely, "Aren't I as smart and perhaps more correct than some of the political leaders?" and, "Isn't it possible that leaders are driven to their decisions by the same infantile inculcation, irrational motives, and cupidity as the rest of us?" From what I could see, Tom is a kind-hearted man, a good old boy, but he is still a believer, an authoritarian, and only secondarily a patriot of good causes. He has not been able to make the fundamental break from his roots of, "Yes, Sir!"

All such fundamental or ingrained attitudes are almost impossible to eradicate. Education as an adult may cover our genetic tendencies and the imprinted lessons of early childhood but can't erase them.

5.7 FREE WILL AND BIOPSYCHOLOGY

Do we have free will or is all that we do, feel, and think determined? Most of us go about our lives as if we have free will, and religions tend to insist on it. I will soon explain why. Indeed, whether we have free will

or whether our feelings, actions, and thoughts are determined are questions that plague religion. Predestination is injected into the inconceivable mix, for it is difficult to see how an omnipotent, omniscient God would relinquish control of anything. That doesn't leave much room for the vaunted free will God presumably gave us. As a result, religions spout a host of casuistic arguments in their vain attempt to render the contradictory concoction consistent.

We must acknowledge clear limitations to conscious, deliberate control over our minds and bodies. Begin with the brain's interconnected triune design, with its reptilian, mammalian, and cortical sections. At the base, the reptilian brain houses the autonomic nervous system and the hormone factory, which act together to govern and regulate involuntary and unconscious biochemical and biophysical processes, actions, and responses to stimuli of our organs. In the center, the mammalian brain or limbic system is control central for our emotions. Atop the brain, the cortex is the seat of conscious thoughts. But that is only the gross outline because the three sections are wired together and biochemically linked. Thus, there are innumerable interactions, feedbacks, and synergies between our thinking, feeling, and robotic natures.

Any claim that we have complete conscious control over our feelings, thoughts, and decisions must face an armada of evidence to the contrary. Consider the chemical evidence starting with the immense pharmacopeia of mind- and mood-altering drugs we inhale, ingest, or inject. Most of us have experienced, or at least know of the effects on the mind and senses of caffeine, alcohol, marijuana, cocaine, opium, heroin, and LSD. Continue to the suite of pain killers, sedatives, narcotics, stimulants, hallucinogens, anesthetics, etc., etc., all of which can completely overwhelm the mind and body. And let us not ignore the subtler but undeniable impacts of the hormones we produce that affect our moods and thoughts, such as serotonin, testosterone, adrenaline, cortisol, estrogen, progesterone, oxytocin, and dopamine, among others.

Information passed by our electrochemical wires, the nerves, can be distorted, altered, or disrupted to impact on our thoughts and feelings in ways that can overload our circuits. Pinpoint transcranial magnetic stimulation, which has helped map the brain and its circuitry, can produce an incredible suite of involuntary motions, ghost feelings and sensations including pain, pleasure, aggression, depression, and out of body experiences. Deep brain stimulation has also helped to alleviate symptoms of conditions such as Parkinson's disease and schizophrenia. If nothing else, epilepsy, characterized by abnormal electrical activity in the cortex that overwhelms conscious thought, proves that we can be slaves to our brain's circuitry. [For an eye-opening overview of the

biopsychology and neurobiology of many of our thoughts, feelings, behaviors, and actions, I highly recommend Robert Sapolsky's course on Human Biopsychology and his lecture at the San Francisco JCC, both on YouTube and his book, *Behave: The Biology of Humans at Our Best and Worst* (2017).]

Given all these chemical and electrical influences and controls on our minds, we must restrict the issue of free will to such critical decisions as 1: which color crayons to choose in a drawing or, 2: whether to eat a brownie or cherry pie, or neither or both, or, 3: whether or not to murder someone who upset you. As a result, I glibly encapsulate my take on free will (see *Descartes' Error* (1994) by António Damásio) as,

"I think – therefore I have free will. I feel – therefore I don't."

Here is a simple fact from neuroscience that casts doubt on our vaunted free will. To be totally rational creatures, masters of our decisions, thoughts, and actions, we must will them with complete consciousness. But we don't! Neuropsychologists have measured the brain's response time to stimulations and the time it takes us to react with the conscious mind. Using electroencephalography (invented in 1924 by Hans Berger) they have found that electric voltages build in our brain for at least 0.2 seconds and sometimes up to 2 or more seconds before we are conscious that we are reacting to some situation. The brain responds electrically with an event-related potential to stimuli within about 70 milliseconds (ms), but most conscious reactions do not occur until about 300 ms, called the P300. Specific response times include visual = 150 ms, comparison = 190 ms, movement = 330 ms, and error correction = 470 ms. (Michael Posner, 2005: *Timing the Brain*.) This knowledge has opened a whole world of testing our subliminal (gut) reactions.

I am sure these are easy facts for practiced theologians to sidestep when dealing with their issue of free will. So, let's sidestep all the biophysics and biochemistry and get to the psychological part, which, of course, is also biochemical or biophysical when you get down to it, and which I now illustrate with a story provoked by a mundane incident.

Robert prepared dinner for a large group. The group had already been staying at our summer home for three days and everyone's contributions to cooking and cleaning had already been observed and registered by all. Several people had not contributed an iota. Pissed off by the shirkers, I, as host named the shirkers and insisted that they and they alone were assigned to clean up after dinner. But the instant dinner was over Robert forgot that he, as one of the chief workers, had been ordered not to clean. He raced to the sink before anyone else rose from the dinner table and

began cleaning, with alacrity apparent to all. Robert's action allowed the lazy shirkers to sit and do nothing, while his apparent alacrity provided them with one of their oft repeated rationalizations for doing nothing.

The first question is, did Robert decide to clean of his own free will? It is strange that Robert always does far more than his share of cleaning when in large groups given that he allows mail and other papers to pile up at home. And, Robert says that two of the times he was happiest were 1: in the days after his heart attack in the hospital and, 2: when he was unexpectedly upgraded to first class on a flight. Robert explained #1 – "I have been trained to be a servant by my parents from age 0. So, in the hospital for the first time in my life, I felt people were serving me, and I loved it." So, Robert loves being served, but he gets some sense of approval by serving, and before he even knows it, he is cleaning for the crowd after he cooked for the crowd. That makes his free will suspect.

What about the shirkers? They will always find some excuse to sit on their lazy, do nothing asses while the drones do the work. At first glance, the shirkers' repeated decision seems entirely rational and therefore made of their own free wills, particularly if they find the work to be unpleasant or less pleasant than sitting and talking with their comrades and relatives. But their decision is also made in an instant, so rapidly that there is no conscious thought. They too have been designed and trained to recognize that they are rewarded for being lazy and having others work for them, since they are rarely called to task. And that puts doubt that they have made the decision by exercising free will.

What about my attitudes? My visceral dislike of shirkers, my paranoia about finding them at every turn, and my feeling that I am being cheated or duped, sounds more like programming than free will.

Fortunately, we are not complete slaves to our natural tendencies and nurture. It is always possible for a person to reflect and ask, "Why am I feeling or doing this?" The person can then reason more or less as I have reasoned above. The worker can say to himself, "I need not do more than my fair share – that is not right." The worker can withhold the goods from the shirkers or demand that they get up and contribute. This will motivate or embarrass some shirkers into action. The shirker can also reflect, "I really am no better than anyone else, and it is about time that I do at least some portion of my share of the work," and then stand up, insist that the worker sit, and take over the work. (Dream on, Stan!) And perhaps the worker would then sit down and allow him- or herself to have fun. And maybe I can learn to relax and be more trusting.

In any event, whether or not these simple examples prove or cast doubt on free will, the crux of the issue of free will for religion hinges on the main *consequence* it attaches to the free will it insists we have.

If we have free will, we are responsible for our sins, all temptations of Satan notwithstanding. If we are responsible for our sins then we merit the punishment our religious leaders have not only the right but the sacred obligation to create and mete out.

Thus, we have arrived at the heart of the issue, namely, that religion's insistence on free will is one of its ingenious devices and rationalizations to keep us in line and punish us when we deviate from any of its rules and restrictions. Free will gives religion free reign to punish – now and for all eternity. Judging motives by repeated effects leads us to accuse religion of insisting on free will precisely because it wants to punish. "Wherefore by their fruits ye shall know them." Matthew 16:20

What joy, what power, if we have not only the right but the obligation to punish our peers! For, then, we are superior and safe.

5.8 ON TRIAL – JUDGMENT DAY

Have you ever imagined yourself on trial? I have! Ugh!

Assume you are driving over the speed limit. You imagine a traffic cop or state trooper will pull you over. You prepare to defend yourself even if you have not seen a cop. And from this simple case the mind can wander further afield to obsess over more serious infractions by your actions, desires, or thoughts. So, in both dreams and daydreams you may be arrested, as was Joseph K in *The Trial* (1914) by Franz Kafka. You may attempt to argue yourself out of the accusation even if you feel guilty, which you may, given that the dream or daydream is your own internal construct. You may even surrender and confess your guilt.

Combine this too common tendency to daydream or dream yourself on trial with a belief in God and this play-act of internal worry can transform to a belief in Judgment Day from the most implacable and knowledgeable judge of all, one from whom you have no chance of hiding your guilt – God. [Always remember, Satan may want you in Hell, but it is God who sends you there.] And your imaginary surrender to this inflexible God can transform to self-sacrifice.

5.9 SACRIFICE AND IMMOLATION

No treatment of religion (and totalitarianism) can avoid the nasty subject of sacrifice. Religions were swaddled in sacrifice, ranging from conspicuous destruction of wealth (e.g., potlatches) to the taking of human life. Virginal Aztec priests performed human sacrifice on a grand scale. Defeated warriors and members of subservient tribes had their beating hearts plucked out by the hundreds or even thousands. Their limbs were then severed and shipped to meat markets. Perhaps there would have been much less wholesale sacrifice among Aztecs and other Pre-Columbian Empires if there had been abundant animal sources for protein, but the practice was widespread without the accompanying cannibalism. One motive was to placate rain gods. Children, because of their weakness, perfect bodies, and tears (raindrops) were the typical victims.

Was animal sacrifice a substitute for human sacrifice? One generous take on the Sacrifice of Isaac is that Abraham was the first to defy tradition by substituting an animal for his son. Christianity restored human sacrifice, with the ultimate sacrifice, Jesus, who was not merely human but one part of God himself. The height of absurdity is that an allgood, all powerful God would have anything to do with self-sacrifice.

What could possibly induce anyone to sacrifice their own life? At the individual level, self-sacrifice seems incomprehensible unless physical or psychic pain is unbearable, for life is all there is, and we are designed to preserve and propagate it at all costs.

But we are social animals. We need the group or tribe to survive and in that dichotomy lies the fatal flaw that may demand sacrifice. It is also why so many praise self-sacrifice and why the Christian teaching that Jesus sacrificed himself to save others resonates with so many. Indeed, Christian theology is brilliant. It proposed the ultimate sacrifice to save all of us from Adam and Eve's Original Sin, which cursed and doomed us all. It was one of the devices that freed us from a guilt that compels us to human sacrifice.

Undue attachment to a cause or a group is essential for self-sacrifice. Studies of martyrs have shown they have strong feelings of devotion to causes, idealism, and, of course, attachment to some group, a sense of community. Dictatorial leaders of groups, communities, or religions seek out such martyrs as useful pawns for their purposes, which usually involve domination and destruction. And once they sucker someone into volunteering, they do not let the sucker back out.

Eric Hoffer stressed the difference between the isolated individual and the social human and devoted almost half of *The True Believer* to the linked subjects of united action and self-sacrifice.

"To ripen a person for self-sacrifice he must be stripped of his individual identity and distinctiveness....To a man utterly without a sense of belonging, mere life is all that matters." p. 62.

Hoffer saw a natural tendency toward immersion in a group and self-sacrifice among people whom he labelled as the 'poignantly frustrated'.

"In the poignantly frustrated the penchant for united action and self-sacrifice arise spontaneously.... What ails the frustrated? It is the consciousness of an irremediably blemished self.... The revulsion from an unwanted self, and the impulse to forget it, mask it, slough it off and lose it, produce both a readiness to sacrifice the self and the willingness to dissolve it by losing one's individual distinctness in a compact collective whole." p. 59

This penchant lies dormant until a society or tribe experiences hard times or feels threatened. Then, autocrats sense their opportunity and come to the fore using time-honored techniques to amplify perceived grievances and transform the frustrated into faithful followers. They create scenarios of make believe, casting themselves as prophets to lead the faithful from the dismal present to a glorious future. They provide mass spectacles, often with marches and processions, to evoke a state of awe and an atmosphere of unreality to separate "the individual from his flesh-and-blood self". They use rituals and dogma laced with slogans to shield people from seeing reality. They keep everyone off balance and erase reason by enflaming passions, fanaticism and, hatred of diabolic enemies (invariably cast as foreigners). And they add terror through coercion and force, complemented by secret police, to ensure compliance by all. In the process they turn everyone against anyone who dares step out of line.

The true believers are then reborn as cogs in an immortal corporate entity, free of personal responsibility and partly blinded to their personal mortality. This gives them the courage they lacked as distinct individuals to achieve miracles, but also frees them to commit the vilest acts with no remorse. And as mere cogs they will sacrifice themselves on command.

Early Christianity lauded its martyrs, luring them to self-sacrifice with promises of (a sometimes licentious) heaven. Muslim martyrs are promised 72 virgins in their heaven. All that is taking delayed gratification a wee bit too far!

For those not possessed by such lunacy, motives for sacrifice and martyrdom may be easier to understand by examining their more moderate forms. Self-abasement is an essential part of the repertoire of many social animal species. There is logic to it. In order to survive the wrath of the alpha male or female, the others abase themselves or grovel, even allowing their young to be killed (as in the case of lions). It is more important for survival to remain in the group. Self-abasement operates on

the hope that if I punish myself the alpha male or female, who may be the parent, may be appeased and not punish me or punish me less severely. Humans, with our higher intelligence, have taken abasement to new depths, which extend to sacrifice.

The most selfless acts of sacrifice are perversions and corruptions of acts with selfish origins. One origin of Sacrifice might well be encapsulated by the Latin expression, 'do ut des' – I give so that you might give (or quid pro quo). How many times do we see children playing that game! By engaging in such a social act, children are aiming to benefit from the help and cooperation of their peers. But the ultimate corruption of the idea is martyrdom, which Richard Dawkins argues in *The Selfish Gene* (1976) can be at the genetic level a selfish act, to help survival of the group or the species, in other words, the gene itself.

A linked motive for sacrifice is that it bestows bragging rights. He who sacrifices what is most precious to him has the right to laud it over others as a proof of his noble or strong character (hence potlatches). "I can take more pain, suffering, deprivation, and loss than you can!" Of course, there is nothing to stop a person from claiming he has sacrificed more than anyone else. "If I hadn't given everyone a head start, I surely would have won the race." So, whether of nor Abraham went to sacrifice Isaac, the Bible made blind willingness to sacrifice a point of honor, and elevated Abraham to patriarch status.

We are a sly species. How many toadies are just hidden opportunists, waiting for their chances to reveal their true nature? Humor, the weapon and revenge of the weak, is often another form of self-abasement. Wow, does this open another field. But, as I will stress in the next chapter, humor, other than ridicule, is purged from religion which, acting as the alpha male, must never be caught appearing ridiculous.

Some religions still practice self-flagellation, as is common among Shiite Muslims on the Day of Ashura, when Hussein was killed in battle. Christians (including Martin Luther) have practiced self-flagellation to suppress sexual urges. Luther eventually rejected the practice and sacrificed his virginity instead. Wise decision!

It is no surprise that immolation is often sexual. Circumcision is an ancient and painful right, whose origins were very likely linked to religion, in some cases as a blood sacrifice, but whose continued practice was certainly sanctified and/or mandated by religion. Its continued practice outside religion, now on the hopefully forgetting infant, has embroiled the medical profession, for evidence of any impact on penile or cervical cancer seems to be lacking.

Female circumcision, now termed genital mutilation because there is not a shred of presumed medical benefit to justify the known bad effects,

is largely restricted to certain sects of Islam, although it was in 2007 disavowed by some Islamic authorities. The motive for this cruel, insane practice other than custom is to restrict the woman's pleasure in sex and thereby ensure her chastity or modesty. A good question is whether it was originated by men afraid of losing control of their women or losing their women to other men, or by older women, jealous of losing their old men to younger women, or likely by both.

One form of sacrifice, particularly strong with Christians, is the abandoning of worldly pleasures upon finding God. William James notes, "The complete abolition of an ancient appetite as one of the conversion's fruits." Of course, there is the famous plea of Augustine (like Emperor Constantine, an incestuous convert of a pious Christian mother) from Book 8 of his *Confessions* (397-400 CE), "Oh, Master, make me chaste and celibate – but not yet!"

Most religions practice self-abnegation, or personal abasement, another modified form of sacrifice. All religions have us bow at least the head – eye contact can be an aggressive challenge. Islam leads the pack with its prone position and elevated buttocks during prayer.

Confession, repentance and abasement are gentler forms of sacrifice. Confession followed by pardon allows people to briefly shed their inner feelings of rottenness, worthlessness, and guilt lest they be caught and punished. Repentance and abasement allow people to punish themselves in order to prevent greater punishment from Father God. Religions, seeing the opportunity of this psychological trait of self-abasement, have used it to keep their followers in line. And it works!

I once observed a niece who at the age of one year, lay on the kitchen floor banging her head until she banged it just hard enough to cry. (What a scientific approach!) At that point her parents, who had been ignoring her, picked her up and her crying stopped instantly. In that little play-act I realized I was witnessing the birth of masochism.

Prayer, sublimated hope, is the mildest form of sacrifice. It is the sacrifice of self-reliance. Real as opposed to routine prayer is the cry of a person in need of help. Atheists may well pray, but know that, "God helps those who help themselves." Of course, sometimes it is not possible to help yourself. Even so, that would not stop atheist farmers from praying for rain during times of drought or for rain to stop during flood times, or for killing frost to hold off until the harvest is over. Faith in the efficacy of prayer has the same benefits as a placebo; it comforts and gives confidence or solace to the person in need.

The ultimate and worst type of sacrifice built into many religions is sacrifice on the grandest scale –the preoccupation, even the desire, for the end of the world. This is the sacrifice of all. Most of us treat leaders

and followers of Doomsday Cults as lunatics, at the same time we wink at Doomsday scenarios built into our religions.

Never forget that universal sacrifice is a central pillar of Christianity (and was adopted by Islam). It is awfully suspicious that Jesus seemed to need, indeed, and even be eager for his mission to require first his own death and then the Last Judgment, the death of all. Although it is a symbolic wish, the fact that it is central to the core of Christianity is worse than the worst nightmare. It is the consummating cry of nihilism – the all too common feeling that, "I have failed so I want everyone else and everything else to fail."

Perhaps Jesus' expiring cry on the cross, "My God, my God, why has thou forsaken me?" (from Psalm 22) was his recognition that he had failed and was dying alone. And perhaps worst of all, is that the allure of such nihilism is so widespread.

5.10 SEX

Speaking of sacrifice, let's consider a bit more of how religions treat sex. Dare I tread here? But how can I avoid it? And just about every atheist and every critic of religion excoriates how religion treats matters of sex (e. g., Christopher Hitchens – see §11.6).

Sex, with all its manifestations and consequences, is unimaginably complex, but its root, the sex urge starts simple. The sex urge is the sole guarantor of the continuation of life. Two immediate, interlaced consequences stand out.

- 1. Consensual sex is fun.
- 2. The product of sex is work.

As a result of these opposing facts religion mated with sex and the two remain as intertwined as mother and apple pie. But religion has made sex no piece of cake. It is obliged to corral sex, at the least by restricting it to marriage and condemning it as immoral or sinful outside marriage.¹

¹ Religions (or fascistic states) use sex as a carrot as well as a stick in their vast arsenal of techniques to increase tribal coherence and loyalty. They portray the tribe's perceived enemies (such as Jews or Blacks) as filthy sexual marauders, who would take their pure (but easily tempted) women and pollute the race. This increases group identity by enraging at least their male followers.

Some early religions had plenty of sex, even celebrating or venerating it. Many of the gods partook of it and did so heartily, with practices such as sacred prostitution. That was during sparsely populated times. Marco Polo encountered among a certain remote and isolated tribe the practice of men giving their wives to their guests. This extreme concept of hospitality had the effect of offsetting problems of inbreeding in limited and isolated populations, though it may also have been a way to avoid rape of the women and murder of the men.

But as the world became well populated sex had to be controlled. The gods of Judaism, Christianity, and Islam became sexless gods and expected from their followers more sexless behavior and thoughts than are inhumanly possible. Some religions not only made sex dirty, repugnant, and evil, they repressed, limited, and belittled women and represented women as malevolent and fiendish temptresses or witches.

Religions that treat sex as sinful are in a bind because they need adherents. The two ways to increase the fold are by 1: conversion, which is difficult without military conquest and, 2: procreation. This means religions must encourage motherhood at the same time they excoriate sex and demonize temptresses. Christianity went beyond the absurd by plagiarizing and embellishing from pagan religions the only logically consistent sexless solution – virgin birth.

Of course, no one figured out how to arrange virgin birth until quite recently, and then only for the rich. So, most of the flock was compelled to do it the old-fashioned way and religions did their best to ensure that it be done under the auspices of wed-lock. Virginity as a guarantee that Zeus had not impregnated some young maiden took on a special status and with that, women were sequestered and men were horny. So the religions that do a better job of enforcing mass premarital virginity are compelled to arrange marriages at an early age, especially for women.

For those compelled to forego sex altogether there is another horrid consequence. Undue restriction of any natural urge leads to perversion. People must have some outlet. Religious proscriptions of sex inevitably lead to sex popping out in unnatural ways. Examples are so abundant (and with the current spate of exposés will become more abundant) that there is no need to list them.

Increasing the flock is an essential goal of all religions, and the more orthodox the religion or sect, the greater its devotion to this task as well as the greater its proscriptions against sex for pleasure. Thus, birthrates correlate positively with religiosity, and negatively with attitudes toward sex, and wealth. Below are some statistics on births per woman compiled by a Pew Research survey in 2015. For reference, the neutral replacement value of births per woman is 2.1.

Ultra-Orthodox Jews who have a fierce dedication to repopulating their largely depleted, post-Holocaust flock have some of the highest births per woman, namely, 7.1 in Israel and 5.4 in the United States! Secular Jews are not diminishing in number as much as their low birthrate (1.6) would suggest because they are repopulated by escapees from the ultra-Orthodox shtetls. Most of Africa and Dar al-Islam, which are both poor and religious, average over 4. In the United States Mormons have 3.4 births per woman, while the number for most other American religions ranges between 2.0 and 2.5. Most of wealthier, more secular Europe and Eastern Asia average about 1.6

Atheists are portrayed by many religiously orthodox sects as lascivious sex demons, for atheistic thought places no such opprobrium on sex or pleasure as many religions do. Yet judging by births per woman, atheists are more modest than the religious, for they have the second lowest births per woman (1.6) to agnostics, who have the lowest rate (1.3), probably because agnostics are indecisive. (Abortions constitute roughly $\frac{1}{3}$ of pregnancies worldwide, though more among the world's poor, so therefore do not dramatically change these statistics.)

Reliable predictions can be made based on these birthrates and on the increasing longevity in the poorer sections of the world. Africa's and Islam's shares of world population are growing rapidly. Unless their offspring wise up and shed their inculcation, humankind will grow more religious and more Islamic. This does not bode well for world peace or freedom of thought.

Another notable statistic is that among most religions, women are more religious and observant than men. In the United States, 64% of women but only 47% of men say they pray daily while 40% of women and only 32% of men attend church weekly. Women in the workplace tend to be less religious than homemaking women, as might be expected.

The causes for this difference are complex. My take is that there are at least three vital components, 1: women's economic dependence, 2: women's lesser exposure than men to the ferment of ideas outside the home and closed community and, 3: older women who use the auspices and authority of religion in the hope of keeping their men from wandering to younger beauties. Evidence for #3 would be if more women than men turn to religion after about the age of 30 to 40.

There are two religions where men outnumber women in the practice of their faith – Islam (outside the United States) and Orthodox Judaism. These are the two religions where prayer is designed and almost compulsory for men, where everyone is carefully watched to maintain good family relations, and where men and women pray in separate areas of the Mosque or Synagogue. In orthodox synagogues, the men pray on

the first floor and only men are called to read from the Torah. Women must climb to the second-floor balcony, where they are privileged to observe passively and make sure not to distract the men from their sacred duties, rites, and prerogatives. In many mosques women pray behind partitions, and they are excluded from some mosques.

5.11 CLIMATES FOR FAITH

Religions did not form in an environmental vacuum. The environment, in particular exposure to the climate, impacts our morals, our attitudes, our thinking, and our approach to life. Some terrestrial climates are more conducive to thinking. Some are more conducive to religion.

People of the countryside have always tended to be more conservative than city dwellers because their lives depend more directly on the vagaries of weather and climate and make them feel the need for a spiritual anchor. Their conservatism accounts for the etymology of the disparaging term, pagan (rustic), for rural folks who held onto their old-time religion when the more modern Christianity was advancing in the urban centers of Rome.

Climate helped mold the character of religion when people stayed in the same region for generations. In unforgiving environments, such as frigid climates that can quickly freeze exposed skin and extremities, and desert climates that would sandblast the skin and alternately burn it to a crisp by day and freeze it at night, the body has to be covered. Hiding the body makes it and sex mysterious, alluring, and then, possibly evil. By contrast, in warm, genial or sultry climates it is natural to expose more of the body for comfort's sake, and then the body and sex begin to appear more natural. Of course, in all climates, clothing and cosmetics are designed to amplify and exaggerate physical differences in sex.

Sex aside, life is most unforgiving in deserts and Polar Regions. So, religions and gods that were conceived in desert and frigid regions or other harsh climates tend to be puritanical, harsh, and unforgiving. By contrast, religions and gods conceived in warm, pleasant regions are more lascivious, gentler and more forgiving. Tropical climates, with the competitive fecundity of all the diseases that shorten and enervate life, prevented civilization and thereby fostered primitive superstition of multiple spirits.

Over the past 50 or so years in the United States a new and different link between climate and religion has arisen. Petroleum moguls have promulgated climate change denial propaganda that has been embraced by religious fundamentalists and the political right wing. It is a link that

can only survive and proliferate in the anti-science Petri dish that fundamentalists feed. Here are the particular steps.

- 1: Scientists documented that greenhouse gases such as CO₂ and CH₄ (and H₂O vapor) are increasing in the atmosphere.
- 2: Scientists warned that these gases would warm the atmosphere and oceans and start to melt ice caps.
- 3: Nervous left-winger liberals began to advocate conservation, warning of imminent planetary doom.
- 4: Paranoid leaders of fossil fuel industries launched propaganda campaigns warning of economic collapse if petroleum use was limited and denying any human-caused climate impact.
- 5: Right-wing (often fundamentalist Christian) conservatives took up the conspiracy theory, climate-warming denial bandwagon.

Thus, through this serendipitous string of events and connections climate warming was transformed in minds of many Americans from a scientific to a religious issue, joining evolution as a target for demonization. At that point, facts went out the window.

Believers refuse to accept what all can see When facts and truth confute their ideology.

Yes, faith and facts mix like oil and water.

5.12 COMMUNISM, RELIGION, AND GOD

No logical imperative makes Communism atheistic. Communism even shares a common heavenly vision with Christianity, namely that the withering away of the state will lead to an ideal society somewhat akin to the Second Coming of Christ (except that none will die).

Modern Communism is atheistic because it was founded by atheists Karl Marx, Friedrich Engels, Vladimir Lenin, etc. who resented and opposed the power of the Churches and their alliances with the established powers.

Despite Christianity's recent animus toward Communism, the nascent, struggling Christian community had a Communist orientation as evidenced by the story of Ananias and Sapphira in Acts 5.

1. Now a man named Ananias, together with his wife Sapphira, also sold a piece of property.

- 2. With his wife's full knowledge he kept back part of the money.
- 3. Then Peter said, "Ananias, how is it that Satan has so filled your heart that you have lied to the Holy Spirit and have kept for yourself some of the money you received for the land? 5. When Ananias heard this, he fell down and died.
- 7. About three hours later his wife came in, not knowing what had happened.
- 8. Peter asked her, "Tell me, is this the price you and Ananias got for the land?" "Yes," she said, "that is the price."
- 9. Peter said to her, "How could you conspire to test the Spirit of the Lord? Listen! The feet of the men who buried your husband are at the door, and they will carry you out also."
- 10. At that moment she fell down at his feet and died."

No sooner did the Church grow rich and powerful than it forsook its early Communist tendencies and ideals. In modern times the Catholic Church took up arms against the godless Soviets.

America's advocacy of religion strengthened as the result of conflict with atheistic Soviet Communism. Thus, the words, "under God" were added to the Pledge of Allegiance in 1954, when the Soviet Communist threat loomed large. It is interesting that the Pledge was written in 1892 by Francis Bellamy, a Socialist Minister who was a firm believer but also a staunch supporter of the complete separation of Church and State. We humans subscribe to an infinite number of combinations of ideologies.

5.13 FUNDAMENTALISTS VS MODERATES

Fundamentalist Christians believe that the Bible is the literal word of God. In order to be consistent, they are forced to believe that God created the Universe and all that is in it in six days and then rested on the seventh. The Quran insists that God did not need a rest after six ages of creation, which makes more sense for an infinitely powerful creator. Biblical chronology further mandates that the world is just about 6000 years old. Consistency with science has to be sacrificed. Evolution is out and only time, science, and rockets have mollified the view that Joshua commanded the Sun to stand still, since most fundamentalists have quietly acquiesced to the view that the Earth orbits the Sun.

Less ardent believers, who give an allegorical interpretation of the Bible, may have views that are more consistent with the findings of science but are inconsistent with the original tenets of their religion. Reformed believers are believers of convenience. They had me

perplexed. For the longest time, I could not answer the following question – "Why would anyone stick to their religion when they disbelieve so many of its tenets?" The response that religion is a living, breathing thing has never satisfied me as more than a rationalization.

I was recently taught at least one partial answer to this question. In September 2019, my wife, Bernice and I went to Raleigh-Durham-Chapel Hill, NC to attend the double birthday party of two cousins, one 80 and the other 90. Friday's dinner was served after a few blessings and brief speeches at the home of the hosts, two of the brilliant cousins. The main social event the next morning was held in the synagogue after the Shabbat Service. I came after the service was over and when the host asked me why I missed the service, I said proudly, and with a sense of glib superiority, "I am an Atheist and Services bore me." I was taken aback by his casual response, "Many of us are atheists."

So why then congregate around the theme of religious services? At least, where Jews are a distinct minority, the Synagogue is the place that defines the community and the sense of identity and belonging.² And the community is defined for us from infancy. The vast time then spent accumulating the knowledge of the Hebrew Prayers by people who for the most part do not speak the language, is seen as an obligatory but ultimately embraced concomitant price of group coherence.

But that raises a darker side of religious moderates, a focus of Sam Harris's criticism of religion in *The End of Faith* (2004). Moderates give religion in all its extremes a free pass. It is as if the moderates are carriers of a disease. While it is the orthodox of any religion that keep it going from their deep singular convictions, entrenched beliefs (and high birth rates), moderates also keep religion and religion's groups and all their excesses sacrosanct. Moderates wink at, but in essence treat as taboo all discourse on, religion's immoral roots and characteristics and thereby suspend moral judgment where it should be imperative.

When can religious moderates be roused to express moral outrage and indignation? When their territory is threatened! The June 2020 crass presidential bible touting photo-op in front of the church across Lafayette Square from the White House finally had religious moderates at least momentarily incensed (i. e., not moderate) at the misuse of 'sacred ground'.

² The synagogue or church is also an important place for making business contacts. This makes religious association less important for academics and civil servants than for business people.

CHAPTER 6

PUTTING RELIGION IN ITS PLACE

6.1 HUMOR – PAINFUL TRUTH

Religion comes up way short in one incisive arena of truth. That arena is humor, perhaps the greatest enemy of religion. Humor and religion are largely antithetical. Religion is forced to deal in absolutes and ultimates. Solemnity, humility, and reverence are central to religion. When someone is sick or injured or abused or has died, solemnity is a natural emotion and humor is inappropriate. And for religion, except perhaps for a few prescribed festival days each year, someone is always dying.

Humor, the weapon of the weak, deals in frivolity and irreverence. Humor exposes weaknesses, vulnerabilities, and hypocrisies, characteristics no religion can risk admitting to.

Here are two ironies. 1: The greater the effort to appear mature about an issue, the more infantile the underlying source of feelings about that issue is apt to be. Freud might agree with that. 2: Solemnity can be a mask for uncertainty; humor is often based on well-founded conviction.

How about laughter? The Quran and the Bible refer to laughing mainly as derision or scorn, and those who *laugh to scorn* at God are duly rebuked or punished for it. As for a hearty laugh of enjoyment, Solomon laughs once on hearing a worried ant speak in the Quran; the downtrodden laugh once in the Old Testament when they are vindicated and the meek laugh once in Heaven of the New Testament and twice in the Paradise of the Ouran.

There is one more incident of laughter told in the Old Testament and recounted in the Quran. Yitzchak (Isaac) in Hebrew means He Will Laugh. Both Abraham and Sarah laughed when God told Abraham that 90-year old Sarah would give birth after being sterile so long. There is no record of Yitzchak laughing; indeed, Yitzchak was more like to cry on his way to being sacrificed. There is no record of Moses or Jesus either laughing or *smiling*. The word, smile never appears in the Old or New Testaments and only once, in the tale of Solomon and the Ant, in the Quran. Of Muhammad, the only certified historical figure, it was said that he never laughed – only smiled.

There is an irony here. Religion is supposed to be uplifting, and it can lead to a state of ecstasy in the faithful. But religion is serious so it operates by gravity, whereas it is humor that operates by levity. Yet in

one key way, religion and humor are identical. Both act to separate people and to mock or belittle the other.

Satire, mockery, and ridicule are the forms of humor most odious and intolerable to religion, so long as it is on the receiving end. Religion then treats them as blasphemy. But satire, ridicule, and mockery are the sole forms of humor that religion not only utilizes but embraces when *it* metes them out. Religion aims them at anyone who does not bow down to it with a somber face, and certainly anyone who dares make fun of it or treat it lightly or expose any of its inconsistencies, pettinesses, and pomposities.

Religion uses mockery and ridicule after it has cursed and damned the nonbelievers, offenders and mockers. Yes, religion is far better at cursing and damning, and relishes mockery once it has succeeded in injuring, deforming, infecting or exterminating those who dared to mock or ignore it. So, while atheists mock the stupidity of religion and offend its followers, the believers mock the offending atheists or infidels to whom it has meted out pain and punishment. And if the offender belongs to a group, religion targets the entire group for revenge for the sin of the one.

At present Islam is the clear winner in Religions' Intolerance Olympiad, having become more strictured than its founder might have imagined. (Most religions seem to need a few centuries for their initial ferment to harden into implacable ideology.) A significant component of Islam's current rigidity is prompted by its indignant sense of inferiority due to the 200-year cavalcade of abuses poured on the Muslim world by the technologically, scientifically, and militarily more advanced Christian Europe and USA.

Islam has not been able to resolve its dilemma of craving the advances brought about by science and technology while fearing the loss of its identity and control. A similar reactionary attitude toward science characterizes Fundamentalist Christian rural America, which has felt abused, maligned, and left behind by the urban coastal liberal elite.

Gentle-born Christianity needed a few centuries to acquire its armies but Islam was aggressively intolerant from the moment of its birth as a military entity. A few cynics dared to mock Muhammad during his lifetime. The prophet of Allah was content to wink as his faithful soldiers decapitated them. That set the model for Islamic intolerance that has bubbled periodically and revived in the current time with a vengeance.

Radical Muslims (the ones with the megaphones) now have Western Europe and the United States, and likely much of Dar al-Islam trembling with their fatwas and executions. Yearning to be mocked, burning to see someone burn a Quran, Islam always manages to find some offended lunatic to do its barbaric bidding and then smile or cry crocodile tears.

And, woe to all capitulating cowards who greet Islamic intolerance and violence with politically correct deference. We are and will continue to pay dearly for it. The tepid response and even Apologia in the West to the fatwa against Salman Rushdie did inspire Ibn Warruq (who remained anonymous for over a decade) to write *Why I Am Not a Muslim* (1995) and several later anti-Islamic polemics.

Being targets of satire, mockery, and ridicule are equally intolerable to autocrats and fanatical followers of the terrestrial religions – the totalitarian tyrannies, where dictators, führers, cult leaders, etc. are adulated by their followers as gods who can do no wrong.

On the other hand, satire, mockery, and ridicule do not offend atheists. Anyway, it is more difficult to ridicule atheism than religion. Typical jokes about atheists, though laced with murderous intent, always seem tepid. They often involve atheists who make last minute prayers and/or conversions to the true faith when threatened with death, as by a wild beast. In such jokes God finally appears in person to the atheists, only to allow them to die. What delicious irony given that God never makes such a personal appearance, even in jokes, to any believer!

Devout followers of religion may dispute me about humor. They can point to numerous jokes told during sermons or services. Indeed, some of them are very funny, but they are always tame. The typical joke told by a religious figure deals with the excessive length or boring quality of the service and sermon, or some innocent misinterpretation or infraction of the rules or practices. Here are a few examples. A doctor and preacher became friends. Each recommended people to see the other for help. The preacher was delighted when a new congregant attended services for four consecutive Sundays. Then he found out that the doctor had prescribed his sermons as a cure for the congregant's insomnia.

Switching to the synagogue, after the Bar Mitzvah boy's father gave him a prayer book and the grandfather gave him a tallit (prayer shawl), everyone tried to shuttle *Great* Grandpa off the stage when he gave the Bar Mitzvah boy an umbrella. But Great Grandpa protested that the umbrella was the only gift the boy would ever use.

An Orthodox, a Conservative, and a Reform rabbi are each asked whether one is supposed to say a berakha (blessing) over a lobster. (All seafood is nonkosher.) The cloistered Orthodox rabbi asks, "What's a lobster?" The hypocritical Conservative rabbi tries to appear liberal, so he abstains. The ultraliberal Reform rabbi says, "What's a berakha?"

All jokes told by religions' standard bearers are carefully circumscribed not to impinge on any of the tenets of the religion. Just try making a joke about any one of its practices or about its God and see where you land. Thus, the joke - Q: How does every Islamic joke start?

A: By looking over your shoulder – which could be applied to any other religion (or tyranny). The religion itself must remain sacrosanct even if frail humans deviate and cannot fulfill its requirements to the letter of the law.

Some formal, jocular release from strictured existence is allowed by Catholicism during Carnival and Mardi Gras, and by Judaism during Purim. Islam (perhaps the least humorous of all religions) does have Eid al_Fitr, the festival after the month of daily fasts of Ramadan, but no sanctioned revelry that I know of. Neither do the fundamentalist Protestant sects, which rival Islam in humorlessness. Of course, the restraint and sacrifice of Lent follows the revelry of Carnival and the deprivation during Passover follows the tame revelry of Purim.

6.2 LIFE – THE BRIGHT SIDE

Have I been too tough on Religion? That's not the right question. The right question is, "Is religion too tough on life?" Religion should embellish our lives. Religion should be the servant. It is life that is primary and should be the master.

And what is life that religion should serve it? Our incredible biological repertoire includes founts of yearning, craving, desire, and pleasure, magnified by restraint, passion and pain. Each of our seven senses – sight, hearing, touch, taste, smell, and now, vestibular (bodily movement), and proprioception (bodily knowledge) – is a source of joy.

The infant is ravenous to suck at the breast. We never lose the joy of satisfying hunger and slaking thirst. How delicious our food when we are famished! How intoxicating our drink when we are dehydrated! How savory the aroma, and how delectable the fragrance! Our sight reveals endless worlds of beauty and awe. Music enchants and transports us and forces us to dance. How extraordinary it feels to touch and hold a lover or scratch an itch! Even our excretions make us feel good. And then there's the orgasm – the electric culmination of the sex act that demands and leads to the continuation of life and that can grace love.

We revel in our accomplishments and abilities. The child yearns to stand up and walk, and soon, can't help but run. Feeling the wind rush by as we run or the water swirl around us as we swim brings a sense of exhilaration. And then we exercise our brains. Where most of the animal kingdom spends most of its time idle, we humans have been compelled by our growing brains to compulsory activity that is largely mental. [Indeed, a history of human progress and evolution may be tied to a history of the use of decreasing idle time.] Every wrinkle in the world is

a source of wonder – we can hardly satisfy our endless curiosity, and solving a problem always feels rewarding. Boundlessly rewarding is the act of artistic creation or scientific discovery. And when we have exhausted ourselves, rest and sleep are so alluring and irresistible.

Complementing all these physical and mental ecstasies and rounding them out is love. Diagnose love if you must, as Greta Garbo did in the 1939 film, *Ninotchka*, the transformation and true understanding of love comes only when you experience it. And once you have had it you can never forget the experience, even if it does not linger, and you would be foolish to attempt to reason it away.

Considering our marvelous biological repertoire, why do we have so many problems? First, not everything works perfectly. We are designed to exist and thrive for a finite time. We get stomach aches; we get cancer; our arteries get clogged; our bones ossify. We have potent enemies such as parasites, bacteria and viruses, so we get sick. Resources are limited; famines used to be more common but still occur. And for love and sex, we need the cooperation of someone else and must deal with devastating rejection.

Second, we may not like being so driven and enslaved by our passions. We want free will and this may manifest itself in resisting those passions. Some restraint of the passions is necessary and elevates them; wanton overindulgence can lead to decadence. For example, unrestrained eating leads to morbid obesity. Yielding to a passion is not just a reward, it is an imperative. Try holding your breath like a rebellious toddler. You can't. Resisting passions heightens them but if we shut them down the result is perversity for if you close one door another will open. Just look at the sexual perversions rampant among the Catholic clergy.

Third, the components of our biologic repertoire do not always act in harmony. Sometimes they declare outright war. Throughout the cycle of life, we undergo unbalancing passages. When my oldest granddaughter went through puberty she became aware, like Adam and Eve, that she can be naked and was sure to cover herself where not long before she didn't care or even showed off. The need to be alluring is stressful. She could be temperamental. She didn't ask for these changes; she had no control of them; and she may not have wanted them. They have mastery over all of us.

How to keep the feeling of some semblance of mastery of our lives amid the various passages our biology dictates is a problem we all face. One solution is to focus on those aspects of life we feel we have some control over and look away from and attempt to ignore or deny what is imposed on us. So, my granddaughter fled the room during a nude love

scene in the film, *The Thomas Crown Affair*. Is that the life that is being thrust on her?

I thought of my feelings when I went through puberty and adolescence. I hid my physical and emotional changes as best I could. I didn't want to grow up. I began to get serious crushes on girls. Each girl in order was the most beautiful girl in the world. That was good. But I never told any of them. Looked at rationally, I gave up any chance at romantic happiness. But the fear of rejection, the possibility of humiliation, and the complete ignorance of what to do if I weren't rejected were barriers too high for me to confront and face. My emotional misfortunes are all too common.

My knowledge was less than scanty but knowledge was not what I sought. I sought and demanded ignorance. I wanted to go back to my childhood Garden of Eden (which was no Paradise). This was what I saw in my granddaughter. Partly as a result of that, she will have to go through some of the same suffering I and so many people went through. Why is it necessary? When our bodies and minds go through changes, such as puberty – changes that we didn't ask for, that we have no control over, and that we may not want, we have an elevated need for a feeling of control. This is a cause for looking away, for ignoring what is happening.

This helped me understand a vital aspect of religion. Religion not only allows us to look away from some of life's difficulties, it aids and abets and makes it more inviting for us to do so. Religion provides useful invisible fantasies we crave so that we can avoid facing the visible realities we feel we cannot deal with and that terrorize us. Religion provides the blinders we feel we need. It provides facile answers that too often take the form of rules that mandate obedience and not only discourage, but prevent questioning, i. e., challenging. But it does make life easier by giving a respite. So long as religion does not mandate blinders and make them permanent (which it is prone to do when it has the power), how it uses them tips its value in the scales of our lives.

To the extent that Religion allies itself to, encourages, and aids life it is good. To the extent Religion opposes itself to, discourages, and represses life, it is bad. That's it in a nutshell, whether or not there is any celestial foundation to Religion.

And with this grand overview, let us go back to the beginning.

CHAPTER 7

RELIGIOUS TIME AND GEOLOGIC TIME

7.1 IN THE BEGINNING

Religion has assigned itself two great starter questions.

- 1: Why are we (and everything else) here?
- 2: How did we (and everything else) get here?

How about the answers that religions give?

Religious tales and their morals have made no progress whatsoever trying to answer the first question, beyond facile assertions, such as, "We are here to serve God," for all is still in conflict regarding purpose and meaning in life. We know only what senses, abilities, urges, and aversions we have been equipped with. They (including pain) surely relate to survival. For the rest, the universe is silent.

As for Religion's answers to the second question – How did we and everything get here – they're all stories. Many are beautiful stories. Many are ingenious stories. Many are alluring stories. Many are thought-provoking stories designed with moral lessons. But stories they remain.

How do these stories relate to the truth? That is another story.

One thing for sure is that science and knowledge have wrecked all the creation stories.

According to Iroquois legends there came a time when Ha-wen-ni-yu, the Ruler, convened a meeting with the other gods under the apple tree in a celestial Garden of Eden and decided that a new world down below the sky needed to be created to house new people. After failed attempts by several animals to dredge up some mud from the sea floor, muskrat succeeded and placed the heavy Earth on the back of Turtle, who agreed to bear the burden. So, from that time the Earth rests upon the shell of the Turtle. When the Turtle moves waves form on the sea and earthquakes rattle the solid earth.

We may think such gods, such a garden, and such a meeting to be no more than a child's tale but provided they are invisible and unknowable we can neither prove nor disprove them. But we certainly can disprove the story that the Earth rests upon the shell of a turtle, unless, of course, the cop-out artists (i. e., the theologians) proclaim the turtle to be invisible, undetectable, and unknowable.

Any religious creation story you don't believe you would call a myth or a superstition. Any religious creation story you do believe — it's hard to believe more than one since each is different and most are contradictory — you would call gospel or true religion. And though science may have wrecked a religious creation story, its believers still choose to live in the wreckage.

What are the prevailing features and characteristics of the creation stories? Everything can either be created from nothing, or from separating the elements of chaos (whatever they are), or from dredging up muck from a primordial sea, or by giving birth. In most religions the universe started off dark and light had to be created. Most religions had multiple gods or spirits, each of whom had a particular fiefdom. Thus, there were sky gods, sea gods, and land gods. Animals frequently played a role in helping the gods in their acts of creation. In many religions there were mortal fights among the immortal gods and the blood or body of the dead god was the fertilizer or raw material that gave birth to humans and various celestial bodies, including the Sun and Moon.

In some versions of Chinese mythology, the God Pangu emerged from an egg that was created and ripened over 18,000 years from a formless, undifferentiated primordial universe. Pangu then separated earth (Yin) and sky (Yang), allowing each to grow for the next 18,000 years. At that point Pangu was convinced that Yin and Yang would remain separate and so, he sacrificed himself and his body gave birth to all else that exists in the universe – his breath became wind, mist, and clouds, his hair became the stars, his eyes, the sun and moon. His blood or sinews became rivers, his muscles, dry land, his tears the rain. His bones became minerals, his fur became trees, and his fleas became animals. Humans may have arisen from his soul.

7.2 MORTALITY, FLOODS, MAKEOVERS

In many religions, humans were created last, at the terrestrial pinnacle of the Great Chain of Being (in decreasing order, God – Angels – Humans – Animals – Plants – Minerals, with various subdivisions) in order that everything was already put in place and prepared for our benefit. Given that humans are indeed latecomers to the astronomical, geological, and biological scenes, there is an odd and perhaps insightful accuracy to some of these mythological sequences. [Note that Genesis has two

creation stories. In the second, animals were created after Adam. By logic, at least one must be wrong.]

In many religions, humans were created immortal, mingling and interacting freely with the gods. Then, either some trick was played or the humans did something wrong. As a result, they were punished with mortality, which was then gratuitously bestowed on all of us, their blameless descendants. Following the curse of mortality, the gods became remote to all humans except for a few prophets or chosen ones, beloved by the gods, a most odious, ungodly, and suspect parental favoritism. The loss of immortality and removal from the presence of the gods (i. e., parents) is always the fate of leaving childhood behind and entering the adult world.

After some time passed the gods looked down and saw that the progeny of their creations had become corrupted. They then decided to rid the earth of the troublesome humans. How best to do it? A global flood was the most common device. Multiple cultures and religions describe such floods. But some mating pair at the least had to be saved, because after all, the religions cannot deny that we exist. (That preposterous proposal was gobbled up by philosophers.) In many cases at least one of the gods, often an outcast rebel deity, revealed to one chosen man that a flood was coming and that he had better prepare by building a boat or an ark.

Once any great flood subsides, people must clean up the mess it produces and rebuild everything. Invert real-flood actions into myths and we phrase the issue as one in which the floods cleaned the mess the gods made in creating us. This is one more way we have reverse engineered the gods upon ourselves.

The story of Noah's flood is the most famous flood to members of the JCI trio. But the tale of Noah's Flood was preceded by and at least partly based on the Epic of Gilgamesh, which itself grew out of even earlier accounts. In the Epic of Gilgamesh the gods found humans too noisy; in the myth of Decaulian, who was saved by Prometheus, the gods found humans too warlike. The Hebrew God added a moral note; humans had become not merely bad or troublesome but wicked.

In Hopi legends the 3rd world was destroyed by a flood because people were sexually licentious and warlike. The good people, who now occupy the 4th world, were saved and placed in reed boats by the spider grandmother. All these chosen, good men gave all of God's creatures another chance.

In the flood story of the Mapuche Indians of Chile and Argentina two spirits were converted to snakes that fought with each other. Caicai was snake of the waters and Trentren, snake of the land. There came a time when Caicai got angry because men were not grateful for all they received from the sea, so he struck his tail on the waters, which flooded much of the land. Trentren saved all the humans he could by raising the Andes Mountains. Later, Trentren was angered by men and punished them with earthquakes and volcanoes. Caicai continues to punish them on occasion with tsunamis and floods.

According to the Igorot of the Philippines, the world was originally flat. Two sons of the Great Spirit felt they would improve their hunting success if they flooded the world. They did so, killing all the people except for a brother and sister, who were saved by the Great Spirit. When the flood receded mountains had formed.

The Bukidnon people of Mindanao told of a giant crab that dove in the sea and flooded the land. In this case humankind was saved by a wise man who had warned a number of people to build a raft to save themselves and their animals. Everyone else drowned.

The use by such widely spaced religions of a flood sent by the gods that required starting all over speaks to a universal theme based on common experiences because it is unlikely in the extreme that all the remotely located peoples could have plagiarized it.

7.3 PLAGIARISM

The best, most cogent and compelling stories and sayings take time and teamwork to perfect. The Serenity Prayer is a notable modern example with ancient predecessors.

Religions contain many stories, myths, practices and rituals that were plagiarized and modified. As peoples moved and interacted or as religions expanded their domain, they learned other mythologies, rituals, and practices. They stole what they liked, modified them to suit their taste and ideology, and merged with or absorbed them. Any such plagiarism may enrich a religion but may also change the message of the original version and disguise its origins, such as with the flood myths.

Any plagiarism of a myth, ritual, practice, or theology by a religion destroys its claim for exclusive divine origin and places that religion on shaky moral grounds. This puts religions at pains to deny or mask their 'borrowings'. Plagiarism (from Latin for kidnapping) is copying from others without giving credit and sometimes even covering it up. Standards regarding plagiarism were laxer when information was transmitted orally or written anonymously (like the Bible) and remained lax until some time after the printing press. Even so, Plagiarism is stealing plus lying, albeit often in mild forms.

Most religions have a commandment against stealing. Two of the Ten Commandments deal directly with plagiarism. "Thou shalt not steal," and "Thou shalt not bear false witness against thy neighbor". But all the modern religions are built on the edifice of the plagiarisms they deny.

One major reason that religions plagiarize is that it is a good, even necessary recruitment technique to accept customs that the converts cherish. If you can't beat them, rob them. So, even if the conquering religion does not specifically incorporate a cherished custom of the conquered people, it winks at it and allows it to be entrained and diffuse in, somewhat like eukaryotic cells incorporated mitochondria, and our bodies incorporate bacteria. There were no Santa Clauses, no reindeer, and no sleighs in the ancient, almost snow-free Judea of Jesus, and the Trinity itself was a Jehoshua-come-lately concatenated troika.

Consider a few of the astronomical and meteorological plagiarisms by even modern religions. The winter solstice is the shortest day of the year with the lowest noon Sun. It is also the day the life-giving Sun starts its annual return, without which there would be death by starvation and freezing outside the tropics. It is understandable that early religions would use this day to invoke the return of the Sun, for winter began a period of hunger and starvation, and if the Sun failed to return, all bets were off.

It was therefore natural for early religions to assign and celebrate the winter solstice as the birthday of their sun gods. In the North Hemisphere, the winter solstice occurs on December 21, give or take a day or two. Thus, for example December 25 was the official birthday of the Roman sun god, Sol Invictus, and December 17 was the start of the week-long Roman holiday of Saturnalia. And lo, when the Christians finally decided on the birthday of Jesus more than a century after he died, they happened to choose December 25, an obvious plagiarism. It then took until about 400 CE for the Church to lock it in as the official Christmas holiday.

Some religious monuments are oriented parallel to the latitude dependent directions of the rising or setting sun on the solstices. The primary axis of England's Stonehenge (built between about 3100 and 2000 BCE) is parallel to the direction of the setting sun on the winter solstice. The primary axis of even older Newgrange in Ireland (built about 3200 BCE) is parallel to the direction of the rising sun on the winter solstice and the opening above the door lets light of the rising Sun flood in on that precise day, Indiana Jones style.

Many other religious monuments and holidays were locked to the spring equinox, invoking the return of life. Numerous monuments including the Egyptian pyramids are oriented exactly east-west, the direction of the astronomical rising and setting sun on the equinoxes.

The Jewish holiday of Pesach or Passover likely began as a combination of two ancient rites — a Canaanite holiday celebrating the spring harvesting of the ancient grain of barley in and around Israel and an apotropaic (evil averting) rite to protect a family or clan from evil by daubing lamb's blood around the doorposts. The Exodus story was tacked on to this later and attained storybook precedence in the Book of Exodus. We will skip the question of why the all-knowing God needed to see the lamb's blood on the lintels to know which houses to pass over. Christianity appended Passover to Easter, as Jesus was crucified on the day following the Last Supper or Passover Seder.

Resurrection was another ancient belief, which Christians plagiarized and grafted onto Easter. In the annual cycle of the seasons and of birth and death, the miraculous and mysterious reappearance of plants in the spring and the birth of many animal species produced myths all over the world, for if plants can rise from the seemingly barren earth and begin life anew, why not us pitifully mortal humans?

Persephone is a haunting resurrection myth. Persephone, the beautiful, naive daughter of Demeter, goddess of the harvest, was abducted by Hades while picking flowers and dragged down into the underworld. When Demeter pleaded to Zeus for her return a compromise was worked out. Persephone would spend the fall and winter half of the year in Hades and the spring and summer half above ground.

Many other gods and goddesses underwent similar annual resurrections, some of which were more violent. Egyptian God, Osiris was chopped into pieces before being reassembled by Isis so that *he* could give birth. This was celebrated at the end of the season of flooding of the Nile, after which plants began to grow from the reemerging land.

Judaism plagiarized the concept of resurrection and altered it to make it punitive and final. This was done by, 1: transforming it from an annual cyclic event to a single terminal event, and 2: injecting the concept of good and evil.

Why *not* make resurrection a final event? After all, the Israelites and Judeans faced destruction numerous times, with reprieves that were brief at best and certainly not cyclic. Ancient Israel formed after about 1180 BCE, during the chaotic period known as the Late Bronze Age Collapse, emerging from the desert during that time of chaos, and constantly skirmishing and intermingling with Canaanites and Philistines, etc. But after about 930 BCE the split kingdom of Israel and Judea found itself surrounded by new major, contending and conquering empires. In turn, Egyptians, Assyrians, Babylonians, Persians, Greeks, and Romans

dominated Israel/Judea and subjugated, slaughtered, or exiled its inhabitants. All this gave birth to messianic hopes and eschatological pessimism. The focus of Jews at the time of Christ seems to have been on the messianic hope, with much less preoccupation on resurrection by most Jews and outright denial of resurrection by the Sadducees.

Christianity's version of resurrection magnified its importance, its finality, and the role of good vs. evil. Ever since Paul, the resurrection of Jesus has been seen as the central doctrine of Christianity and that without it the entire mission of Jesus would be invalidated. The first act of Christianity was to renovate and expand Heaven and Hell in preparation for the end of time. Jesus and the early Christians conceived of the world in eschatological terms, namely that it would come to an end very soon. (As time went on this date had to be repeatedly postponed.)

Some modern fundamentalist Christian sects phrase the end of time happenings as the *Rapture*. As the End nears, souls of the departed will be restored to their bodies. Then there will be a Last Judgment for all, the dead and the living, the latter who will undergo a period of tribulation. We will either go to Heaven for eternal rejoicing or be sent down to Hell for eternal torment. Life on Earth will then disappear. To this horrendous terminal prospect, was added the odious, terrifying doctrine that no one, no matter how well they behaved while alive, could be sure of salvation.

Despite differences in the fine print among the sects, Christianity perfected the myths of Resurrection and the Last Judgment. Islam latched onto them, embellishing only the heat of the Fire (of Hell).

The Virgin Birth of Jesus is another plagiarism adopted and modified by Christianity, and accepted by Islam with Muhammad's caveat that Jesus was not divine. In many ancient religions various gods and goddesses had divine children, with parricide or infanticide not uncommon. To this the Greeks added the semi-divine origin of many of their heroes including Heracles. Zeus, Apollo, and Ares looked down from their perches on Olympus and desired various maidens. Each then came down to Earth in some disguised form and impregnated the desired girl. Add to this the myths that Alexander the Great and Augustus Caesar were the products of virgin births to enhance their semi divine status.

The Islamic Hajj, and veneration and circling of the Black Stone in the Kaaba in Mecca continued from earlier Arab practices and beliefs. The Quran is a concretion that openly includes and modifies material from various Biblical and likely, Talmudic sources. One example is the saying from Chapter 4 of the Mishna (which was redacted by 217 CE).

"Therefore, Adam [from whom all humanity descended] was created singly, to teach us that whoever destroys a single life [?in

Israel?] is considered by Scripture to have destroyed the whole world, and whoever saves a single life is considered by Scripture to have saved the whole world",

The bracketed words [?in Israel?] may be a later addition. In any case, the quote is the likely source of the passage in the Quran (Sura 5:32),

"Because of that [Cain's murder of Abel] We ordained for the Children of Israel: that whoever kills a person—unless it is for murder or corruption on earth—it is as if he killed the whole of mankind; and whoever saves it, it is as if he saved the whole of mankind."

So, Muhammad was a plagiarist. But that was not his point. His point was first to demonstrate, even magnify a continuity of culture and revealed religion by providing Islam with an ancient imprimatur and, by so doing give Islam the final word. Adam, Abraham, Moses and the Old Testament Jewish prophets, in short, Judaism received the first word of God. This led to Jesus and Christianity, who received the second word of God. And of course, this in turn led to Muhammad and Islam, the third and final word of God – Allah. Not only all Arabs, but all Jews and all Christians must see his final truth and convert to Islam.

And what is this final word of Allah as related by Muhammad? All that is good, all that has value, all that is beautiful, all that is sacred was created by and proceeds from Allah. All that is bad and evil is the result of straying from or denying Allah. Eternal reward awaits the faithful and eternal torture and punishment await the infidel.

Islam's distinctive character can be illustrated by the difference in story telling between the Bible and the Quran. Many Biblical stories contain the subtle message that everyone has some character defect, which is used to humble and instruct us, as Leon Kass points out in *The Beginning of Wisdom: Reading Genesis* (2003). Consider Jacob and Rachel. Jacob is the master trickster. With his mother's help, Jacob dupes his blind father, Isaac into giving him his older twin brother, Esau's birthright. Jacob flees from the likely wrath of Esau and comes to stay with his uncle, Laban. But in turn Laban dupes this master trickster on his wedding night. Jacob, who courted beautiful, beloved Rachel for seven years, couldn't even recognize that it was weak-eyed Leah and not ravishing Rachel in his bed. And Rachel, the beloved, whose womb long remained empty, while Leah conceived

sons again and again, demanded of God, "Give me children or else I die." And lo, Rachel died in childbirth of Benjamin, her second son.

What irony drips from the Genesis tales! But you must extract the morals of the stories, for though they are right in front of you, they are subtle. (I missed them for many years.)

The Quran is different. Its lesson is stark and simple. No time is wasted for it to diffuse into you – it is stuffed into you. Muhammad could not tell a story without rushing to tell you the moral and warn you of the consequence. But then again, Muhammad was not so much a story teller as a moralizer. And what is the lesson or the moral? It is the same in every story. Submit to Allah and you will be rewarded in the hereafter. Disobey or deny Allah and you will be punished eternally in the Fire (Hell).

Little wonder that the Arabic word Islam means Submission.

7.4 CREATION TIME AND GEOLOGIC TIME

Most religions dreamed up, locked in, and then dictated to all followers the times of creation of the universe, the Earth, and humans. Many of these times were based on some form of numerology in which significance was assigned to numbers in the same arbitrary, groundless way that astrologers assign moral significance to celestial bodies and constellations. Some side-benefits have come of these errors; the belief in cosmological numerology has been so strong that it provided many peoples the impetus to study astronomy and mathematics, in the effort to validate their ignorance. It was largely for religious reasons that the Mayans brought their calendars to such a high degree of accuracy that continues to amaze or at least impress us moderns.

All the time spans for the dates of creation asserted by religions are wrong, most being gross underestimates, unless their latter-day proponents squirm their way out by insisting that the ancient texts or legends are phrased in an evasive, indeterminate manner such as days equaling 4000 years, etc. By chance a few, such as one of the Hindu time scales, managed to land on the correct order of magnitude. Hindu mythology assigns the maximum age of the universe as one Brahma day or 4,320,000,000 years. By complete coincidence, this is close to the age of the Earth (4.56 billion years as of this writing) though not the universe. But then Hindu mythology goes on to propound specific rules of universe cycles (which may have some general validity). A Brahma day is followed by a Brahma night of equal length, which is a resting

period for the universe. Then a new cycle will start. The total number of 100 Brahma universe cycles is 311 trillion earth years.

Take the erroneous dates of all the creation myths plus the various predicted times of the end of the world that have already passed without incident plus the predicted arrival times of a Messiah, all of which have failed to verify, and they sum to a series of gaudy failures that should have presented towering barriers to continued belief even by the most credulous. Towering barriers to belief though they be, they are barriers that the credulous faithful always manage to surmount.

Several timeless techniques sustain belief in the face of facts. First is censoring the facts. This is done by living in closed or isolated communities or families with no schooling, 'guided' home schooling, or fundamentalist religious schooling. Given that few of us lead completely isolated existences, the next technique is to ignore or defy the facts. What never ceases to amaze me is how so many people living in an informed society can continue to believe the absolute time scales asserted by their religions when multiple scientific techniques have proven them wrong. Why anyone who is aware of how human minds work should be amazed at the stubbornness of human credulity is itself amazing. Be that as it may, let me review some of the scientific findings that have dismantled Biblical chronology even though no fundamentalist will look at it.

First though, consider that biblical chronology is itself a can of worms, with internal inconsistencies and uncertainties that do not belong in any book of presumed infallibility. The chronology of the Hebrew Kings has flaws that still confound biblical scholars and theologians. But the errors only amount to a maximum of a few hundred years, so it isn't a bad approximation to put the creation at around 4000 BCE and the age of the Earth as 6000 years.

Biblical dates may represent severe overestimates due to a possible accounting error. Isn't it curious that the Antediluvian Patriarchs had lifespans up to 969 years, which is an order of magnitude longer than the current maximum documented lifespan of about 120 years? But if you use the lunar cycle of 29.52 days as the standard, common among the ancients, and divide 969 by 12.37 (the number of lunar cycles per year), then Methuselah lived to the respectable but not impossible age of 78.5 years. Using the same formula, most of the Antediluvian Patriarchs became fathers in their teens, which again is quite reasonable for an epoch with no graduate schools, although by this scale a few became fathers as young as 5 or 6. This either makes the idea of a lunar calendar inconsistent with human biology or imposes an earlier age for puberty of our Antediluvian ancestors. But Noah, who was the most responsible of

the entire lot - after all he was the one who built the Ark - put off fatherhood until the responsible age of 40.

Switching from the infallible Biblical chronology to the fallible scientific chronologies (with their acknowledged error bars), it is good to start with tree rings because they constitute the most explicit and accurate scientific dating technique. I was amazed to read that Leonardo da Vinci was the first (in his *Treatise on Painting*) to note that 1: tree rings are annual and, 2: at least in Italy where rainfall is the main limiting factor to growth, wetter years have wider rings than drier years.

Each tree ring is a compound layer – a couplet. Lighter-colored, less dense wood represents faster growth in the spring. Darker, denser wood represents slower growth later in the growing season. Each successive light-dark ring grows radially outside the previous ring, so that the tree contains its autobiography.

The oldest living single tree, a bristlecone pine tree growing in the White Mountains of California had 5062 rings when first measured in 2014. That tree by itself does not invalidate the Biblical Chronology. But lying nearby are dead bristlecone pine trees that have been dead for a long time. By comparing the sequences of ring widths in dead and living trees, there are overlapping records that extend tree ring records back to about 13,000 years. If fundamentalists continue to dismiss such overlaps, they may have a harder time ignoring wood taken from the pyramids that confirm the scientific work. In addition to the individual trees and their overlaps, there are tree colonies that are much older than 10,000 years.

Another fact that might trouble fundamentalists for a moment or two is petrified wood, much of which has retained rings and microscopic structures. How do fundamentalists squirm out of that one? They point out that wood that has fallen into hot springs can petrify in a few decades. Not only do they need a hell of a lot of hot springs, they don't bother to look at the sequences of ring widths from petrified trees and forests around the world, which never match any of the sequences of living or recently living trees.

Nature provides several other ways to count years. Until very recently only snow fell on the top of the Greenland and Antarctic Ice Sheets without ever melting, so the pile has built up year after year as this year's snows fall on top of last year's. Annual layers form somewhat like tree rings because summer snows are wetter, with different crystal sizes and shapes and larger trapped air bubbles than winter snows. As pressure accumulates on the older, deeper snow layers, they get compressed to ice. [Note: On 14 Aug 2021, rain was recorded for the first time at Greenland Summit Camp, where there have been a few unprecedented recent brief melting episodes, all thanks to man-made global warming.]

Researchers have drilled ice cores to the base of the ice some 2 to 4 km below the surface using the same techniques that are used to drill for oil. Ice flow or creep has distorted the lower layers and made them unidentifiable, but at Vostok Station, high on Antarctica, where the highest recorded temperature has been -14°C, at least 55,000 annual layers have been counted, once again far exceeding and thereby disproving the Bible's chronology.

From tree rings and ice cores with annual ice layers we pass next to varves. Varves (from the Swedish word for layer or vary) are annual sediment layers that accumulate at the bottom of glacial lakes. Ice and snow melt every spring, sending torrents of meltwater full of mixed sediments consisting of sand and clay into the lakes. The sand particles, which are large, settle rapidly to the bottom while the fine clay particles remain suspended in the turbulent waters. With the onset of winter the surfaces of lakes freeze and the waters below become quiet. Then the fine, darker clay particles settle on top of the coarser sand particles. This process is repeated year after year. Thus, varves, like tree rings, are annual couplets. In one lake in Sweden 54,000 varves have been counted.

In short, if you are a Christian fundamentalist who holds fast to the idea that the Earth and the universe are only about 6,000 years old you must discount counting.

If you insist on discounting counting do not even bother reading the history of the next and most widely used dating technique, radiometric dating. But if your mind is open enough to transmute your thinking, read on. The principle of radiometric dating was discovered by Ernest Rutherford. The history of this and other discoveries about the age of the earth make for the following interesting story.

First, note that each branch of science has come under fire from religion in one epoch or another for attacking ideas that religion has held sacrosanct. In each case religion had the force of arms and of irrationality on its side; science had only the facts and the power of reason. As for the basis of the attacks, Astronomy was assailed for displacing us from the center of the universe. Biology was attacked for demonstrating that we are not unique in the animal kingdom. Geology received religion's double ire by adding to the evidence of biology (via paleontology) and then turning the clock back – way, way back – on any possible time or event of creation.

Leonardo da Vinci was the first to prove that fossils were the remains of ancient animals and plants and not just geological "sports of nature," though at least the Ancient Greeks acknowledged the true origin of fossils. Leonardo noted the boreholes in fossilized shells that current day predators make. But Leonardo kept these writings secret so they had no immediate impact. A century and a half later, Nicolas Steno exhumed the fossil issue when he noted the close resemblance between the fossils that had been called "tongue stones" and shark's teeth.

Steno's main discovery involved the fundamental geologic laws of superposition, namely, that newer sediments pile on top of older and that intrusions into the rock matrix, such as of once molten rock, had to be younger than the rock matrix they penetrated. As a corollary, he noted that sediment layers were horizontal when first lain down as more or less fluid layers and only later, after they hardened, could be tilted at any angle in the vertical. This principle, coupled with the fact that biological material and sediments required considerable (but seldom specific) time to be converted to stone, added to the impression that the age of the world given by the Bible is a gross underestimate. It should be noted that there are seldom specific time intervals for the formation of sedimentary layers and this, of course resulted in great uncertainty regarding determination of geologic ages.

Steno was bitten by the bug of religion. Later in life, he converted from Lutheranism to Catholicism and tried to have the works of Spinoza (whom he knew personally) banned. But his geologic discoveries helped to open a can of worms that later paleontologists and geologists would advance on to discredit Biblical chronology.

The next major geological jump was taken by James Hutton, a founding member of Edinburgh's Oyster Club along with Economist Adam Smith and Chemist, Joseph Black. Hutton was a Deist, believing that the Creator set up the universe and then left it to run on its own for all eternity. Hutton may have been converted to Deism by one of the Oyster Club's famous guests, the philosopher, David Hume. Hutton was converted to geology by digging into the Earth as a farmer and being fascinated by structure that was exposed and revealed. He then made geology the main study of his adult life.

In the years around the American Revolution Hutton noted that the ratio of the total geologic change to the rate of geologic processes, revealed in the rock record by phenomena such as the deposition of sediments in river deltas and lake bottoms, mandated an enormous span of time had elapsed since any possible date of creation of the Earth. There were so called Catastrophists who asserted that the changes could be explained by Noah's flood. These Hutton easily dismissed by pointing out the almost countless lamina in almost numberless, thick sedimentary rock layers, which never could have been produced by a single flood, no matter how large. As a result of his observations Hutton commented in a

famous quote regarding the lifespan of the Earth that, "we find no vestige of a beginning, no prospect of an end."

One famous example of Earth's antiquity was a rock complex subsequently named Hutton's Great Unconformity. A sedimentary rock layer in order, 1: formed from the slow accumulation of sediments over ancient eons, 2: was buried and hardened to stone 3: tilted from horizontal to vertical by some geologic processes, 4: lifted to the surface, exposed, and eroded down as by a plane until its surface was flat, 5: sank back into the sea, 6: was covered by new sediments that were deposited on top of it, 7: buried until the newer sediments hardened into rock, 8: reemerged from the sea and finally, 9: was itself eroded so that little now remains of it, but what does stands nobly in plain sight.

Hutton's ideas and findings spanned the depth of geology. He realized that the interior of the Earth was hot enough to melt rocks buried deeply enough. He then showed that granite resulted from a melt that crystallized when it cooled. Hutton also realized that many sedimentary layers contained a large fraction of organic material. He was an early advocate of evolution although he restricted his comments to changes within species. In particular, he noted that competitive advantages (recall that he knew Adam Smith) provided a mechanism that would cause animals to evolve and he gave as an example the fact that faster dogs would be more likely to survive and breed and that this would lead over time to faster dogs. Hutton realized that all of these geologic and biologic processes and changes took time – deep time – and that the time laid out in the Bible was miniscule in comparison to the time needed to account for such changes.

In the generation after Hutton's landmark work, *Theory of the Earth* (read in 1785 and published a decade later), first John Playfair in 1802 (a minister) and then Sir Charles Lyell popularized and advanced Hutton's theories. Lyell and his *Principles of Geology* (1830-33) proved to be a major source of information, ideas, and inspirations for Charles Darwin and many other scientists.

Surveyor William Smith did not wait for these popularizations of geology. In 1799 he constructed a local geologic map by coordinating the data based on cuts into the rocks made during construction of canals and digging of mines. By 1815, he was able to publish the first geologic map of Great Britain (or of any nation). In 1817 he produced a vertical cross section of the rock layers along a line crossing Britain. This was the first block diagram showing 3-dimensional geologic structure.

Smith showed that each sedimentary rock layer contained different fossils. Thus, he demonstrated that the history of life on earth was

marked by many extinctions and changes of life forms, and not merely a single Biblical Flood.

Geologists extrapolated from the increasing geologic and paleontological knowledge to venture tentative but reasonable guesses as to the age of the Earth, raising it from the 6000 of the Bible into the millions at first and then to the hundreds of millions by the time Darwin indicated the vast time scales needed for evolution to occur by natural selection. We will, of course return to Darwin because his works were and continue to be a thorn in the heart of religion.

Lord Kelvin put something of a damper on the geologists' larger estimates of deep time though he in no way returned to the teeny Biblical number for the Earth's age. Kelvin made several distinct calculations. First, if the Sun had burned the energy it obtained from its gravitational contraction from a nebula, it could only have been burning for the last 20 million years. Second, if the Earth began as a molten planet, Kelvin initially calculated it would take up to 100 million years to cool to its current vertical temperature profile. He later revised his calculations down as low as 20 million years.

For forty years, Kelvin's mathematical calculations and imperious persona cowed most geologists, who could present only qualitative arguments that the Earth had to be much, much older than 20 million years. Only a few such as Thomas Huxley, nicknamed Darwin's Bulldog for his eloquent defenses of Darwin's Theory of Evolution by Natural Selection (and the man who coined the term, agnostic), countered Kelvin by questioning his assumptions. But since neither Huxley nor anyone else could provide any viable alternative energy sources, Kelvin held the day. Then, the revolutionary discoveries in physics in the years around the opening of the 20th century provided the key to determining the age of the Earth and all its geological epochs and proving that Kelvin's age calculations represented gross underestimates.

Here is how it happened. On 8 November 1895, Wilhelm Röntgen noticed something unexpected with his experiments involving vacuum tubes that produced cathode rays (streams of electrons). He had covered the tubes to make the room dark, but a cardboard screen painted with barium platinocyanide shone in the dark like fluorescent minerals. He was struck by the unexpected phenomenon and attributed it to unseen rays emanating from the vacuum tube. He named these unknown rays X-rays, and over the next six weeks performed a number of groundbreaking experiments with these penetrating rays. In one experiment he used the X-rays to photograph the bones in his wife's hand, for the X-rays penetrated the skin and flesh of her hands but were stopped to reveal the bones beneath. (This made her comment that she had seen her own

death.) The announcement of his discoveries rocked the world. Röntgen had at one step started two revolutions – in physics and in medicine.

Physicists excited by Röntgen's discovery included Henri Becquerel, who had for years been studying phosphorescence of various salts of uranium. Becquerel's intention was to expose the salts to sunlight and then photograph any resulting phosphorescence. By the greatest of luck, his plans were delayed by four days of cloudy weather.

"Since the sun did not come out in the following days, I developed the photographic plates on the 1st of March [1896], expecting to find the images very weak. Instead the silhouettes appeared with great intensity."

The identical effect had been observed back in 1857 by the photographic inventor, Abel Niépce de Saint-Victor (following his cousin, Nicéphore Niépce), who realized by 1861 that the phenomenon involved some type of invisible radiation. Saint-Victor published his results and Becquerel's father, also a scientist, reprinted them, but the idea lay fallow.

Henri Becquerel took his finding one critical step further. After about two months of experiments following the initial discovery, he realized that the uranium salts contained some previously unknown source of energy because they became hot. Thus, radioactivity was discovered.

No sooner did Becquerel announce the discovery of radioactivity than several other scientists including Pierre Curie and Marie Skłodowska-Curie and Ernest Rutherford began working feverishly [pun intended] on the subject.

In 1899, Rutherford and Robert Owens discovered the radioactive element, radon, as a decay product of thorium. Air in the basements of homes and buildings is tested for radon gas because of the danger it poses if too concentrated. Because radon decays so rapidly, in 1900, Rutherford and Frederick Soddy were able to document that it decays at a fixed rate. Within three years they found that other radioactive elements also decay at fixed rates. From this they introduced the idea of the half-life – the time it takes for *half* of any given amount of a radioactive element to decay.

By 1903, Rutherford realized that constant rate of radioactive decay provided geologists with a clock to determine the age of rocks and ultimately of the earth. In 1904, Rutherford lectured on the topic of a geological clock and trembled lest the venerable, old Lord Kelvin, sitting in the audience, humiliate him. Rutherford recalled the moment of truth.

"I came into the room, which was half dark, and presently spotted Lord Kelvin in the audience and realized that I was in trouble at the last part of my speech dealing with the age of the earth, where my views conflicted with his. To my relief, Kelvin fell fast asleep, but as I came to the important point, I saw the old bird sit up, open an eye, and cock a baleful glance at me! Then a sudden inspiration came, and I said, 'Lord Kelvin had limited the age of the earth, provided no new source was discovered. That prophetic utterance refers to what we are now considering tonight, radium!' Behold! the old boy beamed upon me.

Bertram Boltwood attended one of Rutherford's lectures at this time and set about trying to determine the age of some rocks. Despite some experimental errors that would take years to eliminate, Boltwood arrived at ages of rocks up to 570 million years. After Boltwood went on to other studies, Arthur Holmes carried the mantle for another 20 years before he was finally able to convince conservative geologists that radioactive decay provides unassailable techniques for determining the age of many geological events, and that the Earth is at least 3 billion years old. (Current calculations date the birth of the Earth to about 4.56 billion years.) Scientists had given the Earth a new birth of...antiquity.

Given all these and other findings demonstrating the great antiquity of the Earth, while it is possible to continue believing in a God or a Creator, anyone who sticks to a fundamentalist belief that the Earth is roughly 6000 years old has to be utterly ignorant or incredibly stubborn, or both.

CHAPTER 8

THE NATURAL HISTORY OF RELIGION

8.1 THE SETUP FOR BELIEF

Yes, belief in God remains possible, but is difficult to swallow once you accept the following scientific findings.

- 1: The Earth (one of billions of planets) is 4.56 billion years old.
- 2: Life originated on Earth at least 3.5 billion years ago.
- 3: Life proliferated and evolved stepwise with many gradations and extinctions ever since its origin.
- 4: Humans evolved from apes, with growing brain size and mentality.
- 5: Human brain volume neared modern values ≈300,000 years ago while brain shape has continued to evolve.

Religious fundamentalists of the JCI trio are likely to reject these findings because they 1: invalidate the stories and the clock of the Bible, and 2: make it more likely to conclude that religion itself originated and evolved as human mentality and group psychology developed, and was not implanted by God. And if religion had its roots in human genetics and history, then prior to the time it originated all humans were atheists because they simply had unadorned fear with no, or at most inchoate, feelings, thoughts, and concepts of spirits or of the 'beyond'.

If indeed religion and belief in God had their roots and evolved in human history, it is likely that in some distant future epoch, belief in God will be extinct and looked back upon as a stage in the evolution and development of our species. For we will forsake such belief once it proves as advantageous to do so as it once upon a time proved advantageous to our ancestors to create, adopt, and embrace, and to our contemporaries to continue to sustain and prop up.

It may well be that we are already far along on the incredible 100,000+ year journey from a naïve atheism, through an interlude of religion, to a new, informed, self-aware pure atheism. And although we probably still have a long way to go – perhaps a few mutations and another 100,000+ years – we may at last be approaching that next great leap of our spiritual journey.

That possible spiritual leap of human evolution will involve the ability and psychological freedom to properly detach our natural senses of wonder, awe, curiosity, and fear about our mortality and about the world around us from any belief that they point to anything external to ourselves and anything supernatural. If we can do that, we will dispense with the ideas that, 1: everything good was created and is directed by some benevolent, but punitive parental celestial god and, 2: everything bad was created or at least aided and abetted by some infernal, malevolent devil. If we can do that, we may at last be truly grown up. Perhaps we will at that point all become versions of Friedrich Nietzsche's Superman, a concept that Germans distorted and perverted to revive God, relocate him to Earth and lycanthropize him into der führer.

In order to understand how we came to religion, how we persist in it and insist on it, and how we may eventually discard it, we must understand how the human mind works and how it developed. There are at least two different ways to do this. First would be to have a running record of human thoughts, insights, and feelings through the Ages, which we don't have. Second is to look into the brain, to map its structures and circuitry, which scientists are now in the process of doing. Brain mapping was first done using patients who had injured or destroyed sections of the brain to see what mental functions were lost. Mapping is now done using techniques including functional magnetic resonance imaging (fMRI), which links various mental activities and states (e. g., vision, language, problem solving, meditation or hypnosis) to increased blood flow in various sections of the brain. As one example, schizophrenics show less activity in the prefrontal cortex and poorer connectivity with other parts of the brain than normal people.

Although we have measured the electrical signals transported along the nerve cells and jumping the synapses and are actively mapping and unravelling the brain's neural circuits, we still have no idea how they translate into thoughts and feelings. And while we know that the brains of Homo sapiens have been enlarged, especially with increased space for the frontal cortex, we only know tidbits about how the networks of connections between the neurons have evolved (for example, by noting inefficient wiring). This is not only improving our knowledge of how the brain works, it has begun to provide information about the evolution and development of human mentality. But we are still at the beginning.

So, for the moment I focus on presenting some of the theories that link the development of abstract mentality and of social psychology to the origin and development of religion, and then turn to see how the woefully inadequate record of human history illustrates and corroborates the theories.

8.2 MENTAL GROWTH AND RELIGION'S ORIGINS

How, when, and why did religions arise and evolve? These are exceeding difficult questions to answer and conjectures far outnumber established findings. It is ironic that we have much less data about the origins of religion than about the far more ancient origin of species, preserved in the convincing but incomplete rock record. When modern multicellular life arose, in or shortly before the Cambrian Period, some 541 million years ago, we have abundant evidence of at least its sequence from deposits such as the Burgess Shale, eloquently described by Stephen Jay Gould in *Wonderful Life* (1989). And what the rock record has told us is that once the existing animal phyla were set in place, most in the Cambrian (when several phyla went extinct) and a few stragglers not long afterwards, no new animal phyla have left a record. The available niches were apparently filled. And if with religion, as with the animal phyla, we cannot hope to see another origin replicated because the niches may have been filled, we have lost an invaluable source of information.

If we could trace religion to its origins we would understand it better. But the ancient origins are lost in time, and all we have are some scanty, indirect shreds of evidence and a host of conjectures and theories. The theories take two major forms, both of which involve the development of the human mind and mentality. The first involves the ways that growing mentality would predispose and orient us toward a sense of spirituality. The second involves the ways growing social psychology increases the probability of the survival and success of human groups by fostering feelings and thoughts of community via organized religion. In the attempt to understand how religion evolved we may find that to some degree it is replicated by the development of thinking and socialization of the individual from infancy, which would be another application of the concept in biology that 'ontogeny recapitulates phylogeny'.

Five intertwined human thought processes, outlined in 1883 by Max Nordau in the social critique, *The Conventional Lies of our Civilization*, combined to create and sustain a sense of spirituality. They are our,

- 1: Wonder at the mystery of life and death.
- 2: Penchant to personify (anthropomorphize) actions and events.
- 3: Exaggerated tendency to see patterns and predict sequences.
- 4: Understanding of cause and effect.
- 5: Acquiescence by the conscious mind to the unconscious mind.

1: To begin, it is the realization that life and any aspect of it are miracles. Then, how can such vibrancy be so evanescent and simply end? The

return of spring with plants shooting up from the ground and flowers and leaves bursting forth, birth, the onset of puberty, have all been seen as magical or divine properties and we still feel their power.

And as for death, to this day it is not viewed as an end in many religions but as a transition to heaven or hell, or as part of an endless cycle, as with the seasons. Such views make death an apparent stage rather than an end, help overcome uncomfortable feelings of uncertainty and loss, and soften mourning. Such views of death are more than wishful thinking, for it is natural to question how life can be there one moment and gone the next. How could it possibly just end? There must be a soul that continues – though, in the JCI trio, only for humans, atop the terrestrial part of the Great Chain of Being, and not for animals.

2: Our minds are designed to personify events. We feel certain that everything that happens is caused by actions generated by the motives or wishes of visible or invisible agents. Richard Dawkins' illustrative example of this tendency is that primitive man sees or hears the grass rustling. For the sake of survival, he had better assume that a lion rustled the grass because if he wrongly assumes the wind caused it, he is dead meat. We have not outgrown this: many of us harbor such suspicions, as when on a hike on an isolated trail in the wilds. Any noise might be a lion, tiger, or bear (or the Wicked Witch of the West). And this mode of thinking is linked to why so many find conspiracy theories, with invisible enemies or malevolent beings seeking to harm us, to be so irresistible.

The tendency to personify makes us prone to invest any motion with life – animism again. In Hebrew the word for wind is ruach, which also means spirit, the breath of life from the nostrils of the Lord. Likewise, in Greek the word for wind is anemos, which also means spirit and the breath of life. Never mind that the wind is not alive but is simply moving air produced by differences in air temperature from one place to another. That discovery required millennia, and even knowing it, when we hear a storm wind whistling, it does seem alive.

We, like our ancestors, tend to anthropomorphize animals. This tendency is strongest in children but persists into adulthood. The tiger is valiant, the pig, gluttonous, the sloth, lazy, the goat, incontinent and perhaps gullible. It is but a small step to animism, the belief that spirits inhabit not only animals but inanimate objects, for example, Mother Earth.

We officially discarded animism and animal gods once we recognized that we were smarter and held dominion over animals. That transition took time; it was still not complete in the classical civilizations. Thus, when Zeus wanted to impregnate an unwilling virgin, he disguised himself variously as a bull and a swan. What a convenient, atavistic remnant of a once animal god, who needed time to shed his animal past (and give a poor unwed and likely abandoned girl an excuse to claim she was not responsible for getting pregnant).

We even anthropomorphized the heavens. All the gods of religions of the early civilizations were vested with powers over astronomical geological and meteorological events and processes, and phenomena for which there was no scientific understanding. Thus, there were sun and moon gods, and gods of planets and stars. There were gods of volcanoes (e. g., Vulcan), earthquakes and tsunamis (e. g., Poseidon). There were gods of wind, rain, thunder and lightning, and rainbows.

3: The life-saving ability to see patterns, which we possess in far greater degree than animals, gives predictability to events. It makes sense of the world and enables us to act immediately by habit rather than to waste time thinking. But we also are designed to use suggestive partial evidence see patterns that do not exist and sequences, which are patterns that evolve in time, that never transpire.

Seeing patterns and sequences led to and assisted in the birth of science but, given our tendency to personalize, also made it irresistible to attribute spiritual significance to predictions. Astrology was thus a natural outgrowth of astronomy, for no sooner could we predict the motions of the heavenly bodies than we arrogated to them influence over and predictability of human affairs. Despite its absurdity, belief in astrology and in horoscopes persists and is deeply rooted, even with people who acknowledge it is nonsense. Add to this our confirmation bias; we well remember and believe the horoscopes that seem true while we much more readily forget the ones that are false!

Our tendency to personalize made it natural to ask who was there to guarantee that the Sun would return every morning as expected, or that it would, after fleeing south and growing weaker throughout Autumn return and strengthen once again, as it always had? Only a sun god!

- 4: The discovery of cause and effect, which underlay the birth of science, might also be phrased as the knowledge of good and evil as well as of carnal knowledge. For from the moment of that discovery, dawned our consciousness of the inevitability of death and the search for consolation. It cannot be phrased any better than in Genesis, Chapter 2.
 - 16. And the Lord God commanded the man, saying, of every tree of the garden thou mayest freely eat:
 - 17. But of the tree of the knowledge of good and evil, thou shalt not eat of it: for in the day that thou eatest thereof thou shalt surely die.

One allegorical interpretation of the tale would be to insert the three words, *thou shalt REALIZE* before "thou shalt surely die." Thus, the knowledge of cause and effect replaced the childish *feeling* of *im*mortality with the adult *knowledge* of the inevitability of mortality.

In the Bible awareness of God precedes Adam and Eve's discovery that they will surely die, just as it has God create Adam before Eve. But the order of both events should be reversed. It is precisely at the point that Eve and Adam ate the fruit of the tree of the knowledge of good and evil that God first became both necessary and remote, in other words, that God first became God. After all, you don't need belief in God until you feel mortal and have doubts. And an all-powerful, overseeing, but of course invisible God is the almost perfect doubt assuager. Furthermore, the belief that you are taken care of even after death gives people more freedom to act before death. It gives soldiers the willingness to risk their lives, and is probably why men in the most warlike societies submit to the costliest rituals.

Recognizing patterns allows us to move from a personified view of the universe to a philosophical view. When, in addition we recognize cause and effect it leads ultimately to a scientific view. Wherever scientific thinking took over, the gods of our minds ceased using their powers to direct natural phenomena, at least for routine events.

We certainly have made great progress. Though we still tremble at the power of awesome natural phenomena, once the storms are over and we reemerge from our hiding places, most of us recognize that the divine or infernal attributes are symbolic. The advances of reason and science enabled us to divest natural phenomena from the divine attributes once grafted to them. As a result, religion has largely retreated from matters of natural science.

But the terror we feel during a storm makes us acknowledge that our grip on rationality is tenuous and weak and that we should not feel too arrogant. Terror, a close relative of awe, can resuscitate the God of Heavens or the Earth and start us praying again the moment we hear a deafening thunderbolt crash nearby, or see a blinding flash of lightning and observe someone electrocuted sitting against a tree as if still alive yet stone dead, or when we feel the earth shake beneath us, or witness a major volcanic eruption blacken the sky and bury cities, or see a meteor crash down to earth, or see a forest fire, a flood, a tsunami, or any occasional terrifying natural event. (Praying, yes, but not believing some God caused it, if you are a true atheist.)

That is why thunder, lightning, whistling wind and other scary phenomena are put in horror movies to such great effect. Whenever any uncertainties of life grow, as in hard economic times, people more readily return to religion and faith, and demagogues.

5: The subconscious plays a powerful role in spirituality. Even when the conscious mind is actively at work in search of solutions, revelations ultimately spring from the subconscious, often in moments of relaxation. We give greater credence to the subconscious mind, and hence to our revelations because our revelations, like our automatic responses to emergencies proceed from the primitive brain, which developed much earlier in time and in the evolutionary scale than the rational, conscious brain and mind. In short, we are designed to automatically prioritize any decision of the primitive brain because it is necessary to survival.

The conscious mind serves the additional purpose via rationalization, etc. of masking the feelings, actions, indeed, the very existence of the subconscious. In this way it gives the subconscious free reign to act unimpeded without harmful dilemmas or delays.

By the nature of our minds, we can understand, test, and diagnose but cannot feel or sense the link between the more primitive or subconscious and conscious activities. This disconnect raises the probability of our survival by enabling an immediate, automatic, nonreflective response to emergencies, but also renders us prone to ascribe to outside sources any subconscious upwelling such as occurs in trance-like states and dreams.

It is likely that dreams about the dead inspired and motivated spiritual thoughts and feelings from the dawn of human spirituality.

Dreams predate our human origins. My dog had dreams. He would growl in his sleep and if awakened at one of those moments, would go wild until he was fully conscious. Recently, neuropsychologists have not only documented dreams in mice, but linked their dreams to specific cells in the brain that were activated by the previous day's experience.

Combine the five thought processes and we have all the elements of spirituality – individual religion. For, from our dreams it enough to invest the dead with an immortal, invisible soul and from the lion it is a step to assume that a wind god made the wind rustle the grass.

Thus, we are enabled and programmed to see invisible, secret agents, including our departed ancestors, around every corner responsible for incomprehensible events we cannot explain – powerful secret agents who can protect and console us if they are good or happy and we behave well, but who can also threaten and harm us if they are evil or unhappy and we behave badly. Thus too, arise or amplify our penchants for contrition, self-abasement, sacrifice, and again, belief in conspiracy theories.

Thus science, despite all its advances, has not and will never be able to answer all our questions and assuage our inner uncertainties. We still insist on feeling that the natures of the universe and of our lives are laden with significance and spirit. It is as if we prefer a miserable but meaningful existence to a happy but meaningless existence. We are not yet adult enough to abide a spiritual vacuum. So, having extracted spirituality from inanimate objects we refuse to toss it out but transplant it into an invisible God. And, woe to us, it is precisely those people who are least able to tolerate meaninglessness who have been and who continue to be our religious founders and leaders.

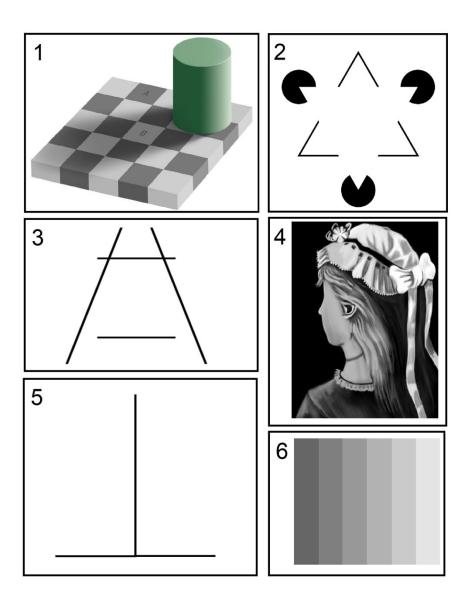
8.3 MENTAL DESIGN FLAWS: OPTICAL ILLUSIONS

Our minds treat art much as they treat stories. All our ideas about the religious content of prehistoric art are hypotheses. We simply do not know the content and scope of early religions, or for that matter, if the art was religious at all, though much of it probably was. When we paint or draw, we have the feeling we are creating our own imaginary worlds. Children draw and paint with this creative motive and artists continue the practice and feelings into adulthood.

Art exerts a powerful impact on our imaginations. When we look at realistic paintings, even if they portray fantastic creatures or scenes, one part of us suspends disbelief and attributes a level of reality to them, as it does with stories. Two dimensions appear to become three. Animation adds to the conviction of reality. A few cartoons demonstrate the lifelike illusion of the animation technique. They begin by flipping successive frames at a slow enough rate so that we see them as a sequence of still images. As the rate of flipping increases, the still images appear to come to life, because the human brain needs at least about a tenth of a second to process an image, and when successive images that differ slightly appear in rapid succession, the brain fills in the missing spaces. Animated motions in cartoons and movies are thus optical illusions.

Our brains are designed so that we fall victim to a myriad of optical illusions of which there are three general categories – physical, physiological, and cognitive. Physical illusions include mirages, which result when light waves are refracted or bent as they pass through air of changing density or from air to water. Light arrives from a different direction than the actual location of the object. The light rays may also invert and magnify the object. Physical illusions have nothing to do with mental processing.

Physiological illusions include seeing colors incorrectly due to fatigue. For example, after staring at a red square for 10 seconds we will see a green square in its place when the red square is quickly covered by a white surface. Such fatigue derives from disproportionate discharge of one type of chemical receptor in the cones and is short-lived.



Cognitive illusions are due to faulty mental processing. A partial list (illustrated above) includes,

- 1. Simultaneous Contrast Illusion objects in dark backgrounds seem lighter.
- 2. Kanizsa's Triangle we complete the suggested but absent pattern.
- 3. Ponzo Illusion we enlarge seemingly distant objects in drawings.
- 4. Reversible Figure or Figure-ground Illusion we see one at a time.
- 5. Vertical-Horizontal Illusion we exaggerate vertical lengths.
- 6. Mach Bands we exaggerate adjacent contrasts.

In the simultaneous contrast illusion, we see checkerboard square, B, shaded by the cylinder, as lighter than the illuminated square, A, even though we know and can verify that the two squares are an identical shade of gray. In Kanizsa's triangle, we mentally complete the pattern that is only partly there. In the Ponzo illusion (perspective drawing of railroad tracks) we see the upper broad horizontal line, which appears more distant, as longer than the lower broad horizontal line even though the two have the identical length.

With the reversible figure illusion we can see either the old crone or the young beauty but cannot see both at the same time. In the verticalhorizontal illusion, we see the vertical line as longer than the horizontal line of the same length. With the Mach bands, we exaggerate the differences in shades at the borders of differently shaded adjacent gray rectangles.

No matter how well we know, understand, and are aware of these cognitive illusions, we cannot help falling sucker to all of them, and at the same time remaining convinced that our incorrect judgments are right. No amount of evidence can make us *feel* that we see things incorrectly and are being tricked.

With symbolic thinking, which is as natural to us as apple pie, we fall into the same trap as with optical illusions. Symbolic thinking may be artistic and poetic and convincing, but when it attaches spirit to inanimate objects, it is no more real, and perhaps even more deceptive than the host of optical illusions our brains are subject to. Symbolic thought may help us look inward, but is sterile in that it is incapable of leading to a functional understanding of the world around us.

Symbolic thinking attaches magical powers to words and invests real objects with meaning and significance. How do magicians work their magic? A wand, some magic powder and an incantation of some secret, magic words "Abracadabra, Hocus Pocus, Shazam". And the New Testament Book of John carries the imagined magical power of the word

(even in its broader sense of Logos stolen from Philo and the Greeks) to the point where the word becomes simultaneously divine and corporal.

"In the beginning was the Word, and the Word was with God, and the Word was God." 1:1

"And the Word was made flesh." 1:14

Symbols carry various levels of strength and significance. Relatively few of us any longer attach the intensity of medieval symbolic lexicon to objects such as flowers, for example, that the lily symbolizes purity, the rose, love and passion. But the symbolizing tendency persists; some people still attach magical healing powers to various rocks and minerals.

Then there are the symbolic and magical meanings we attach to numbers. We are all synesthetic to some degree regarding numbers, in that we are prone to give them great symbolic significance. Three as a lucky, holy, and cosmic number occurs in several religions and predates the Trinity of Christianity. And when children won't listen to the commands of their parents, one powerful and often successful technique is the threat to count to three.

Numerology is vacuous and sterile, but oh, so alluring and tempting. In Hebrew, the word for life is Chai, which consists of the two letters, Chet and Yud, the 8th and 10th letters in the Hebrew alphabet. So, the number 18 is taken to signify life. In China, four is an unlucky number because in Mandarin, the word for '4' sounds like the word for death (sī, pronounced somewhat like the American southern dialect of sir, as in yes suh).

All of these are regarded as fringe beliefs, but they do indicate our natural penchant to think symbolically. We must acknowledge the great power many of us still accord to symbols such as the flag, the swastika, the crescent, and the cross. And some of us grant outright reality to symbols such as in the Eucharist, in which the wafer is proclaimed as actually Christ's body and the wine, actually his blood.

It is not easy to detach ourselves from the symbolic mode of thought. But, perhaps ironically, in a New Testament dripping with signs and portents, Jesus urged us to put away signs (the ones he didn't foretell).

- "1. The Pharisees also with the Sadducees came, and tempting desired him that he would show them a sign from heaven.
- 2. He answered and said unto them, When it is evening, ye say, It will be fair weather: for the sky is red.

- 3. And in the morning, It will be foul weather today: for the sky is red and lowering. O ye hypocrites, ye can discern the face of the sky; but can ye not discern the signs of the times?
- 4. A wicked and adulterous generation seeketh after a sign; and there shall no sign be given unto it, but the sign of the prophet Jonah. And he left them, and departed." Matthew 16

Even people who were models of imparting rationality to the human scene, such as Isaac Newton, retained major elements of symbolic thinking. All the more credit therefore goes to those explorers who had the courage to think and say, "count me out" when it comes to vesting numbers with any mystical significance, or ascribing magical powers and properties to words, or psychic powers to stars, planets, and constellations, or symbolic reality to objects, and finally to the very existence of any of our invisible, unknowable Gods.

8.4 SOCIAL GROWTH AND RELIGION'S ORIGINS

Organized religion, by contrast with individual spirituality, has grown out of the increasing sophistication and complexity of human social psychology. This is the practical side to religion and belief. Religion must, in its beginnings, provide some evolutionary advantage, or (less likely) at the least be neutral regarding natural selection, to ensure its survival and growth. Organized religion is designed and intended to foster and cement a sense of coherence and cooperation within the group at the same time that it exaggerates perceived differences and even enmity between groups to rouse the fighting spirit that may be needed at any moment. Judging from the outcome it doesn't matter if religion evolved to sew communities together or if it emerged after the communities were already sewn, to glue them ever tighter, and allow and aid their growth.

The economic prerequisite for organized religion, with its gratuitous costs including professional shamans, witch doctors, and priests, time-consuming rituals, sacrifices, and enormous expenditure of time and labor to construct huge edifices or monuments, is a society that produces an excess above mere survival and subsistence.

Survival for humans, and for many animal species including the apes we evolved from, has always been a group effort, requiring similar behavior and a similar mindset to maximize success of the group. Thus, though even the most primitive human communities were much more complex and involved more specialization than animal communities, it can be difficult to distinguish many aspects of human and animal social psychology (except for degree), particularly regarding dominance and subordination, alliance formation, and decision-making. (Smith, et. al., DOI:https://doi.org/10.1016/j.tree.2015.09.013)

Thus, in hierarchical group behavior for many animal species, such as elephants, as well as for humans, those who become accepted leaders are distinguished by their strength or wisdom. Any animal in a hierarchical group recognizes its relative position and strength in the group. Leaders often arrogate to themselves special privileges including the rights to confiscate, appropriate, punish, and reward. Most group members are forced to accept being followers though they may sneak or steal to obtain privileges (sexual included) that would normally be denied them. Consequently...

Ingenuity, sophistication, deception, and humor are almost exclusively the creations and weapons of the weak.

An important social sense that links to organized religion is the concept of the other. Children have very limited concepts of the other until about the age of four or five, when they begin to attain some consciousness of how other people feel and think. It is at this age that they can first pass the 'Sally-Anne Test', which, by the way, chimps, bonobos, and orangutans pass, but which most autistic children fail! Incidentally, the part of the brain active in facial recognition, the fusiform gyrus, remains equally moribund in autistic people, whether they see their mother, a stranger, or a statue.

In the Sally-Anne Test the subject gets to watch a room. Sally enters the room and puts a coin in her basket. Sally then leaves the room. Anne enters the room, takes the coin from Sally's basket and puts it in her own basket. Anne then leaves the room and Sally returns to retrieve her coin.

Where do you think Sally will look? A typical child younger than about four will think that Sally will look in Anne's basket because that is where the coin is, while an older child will realize that Sally never saw the transfer and will look in her own basket.

This knowledge is called Theory of Mind. I might add a sad comment that despite such knowledge, too many of us are gullible and are prone to fall for the repeated lies of salespeople, demagogues, con artists, and sociopaths, who have attained theory of mind but not empathy for their fellow humans.

Another odd benefit of organized religion derives from the duties and obligations that the believer accepts. Religion is thus a motivator

regarding work. That makes it advantageous not only for the individual or family but for the group as well.

Organized religion is like a magnet that holds large groups of insiders together by attraction, but separates and distinguishes them from large groups of outsiders, which it repels. When people developed agriculture not only were they able to live in larger groups, it became advantageous to do so.

But once group size exceeds Dunbar's Number (about 150 for humans – less for animals) people can no longer recognize all their compatriots. It is at this point that the extra magnetic force of belonging to the same religion or nation with its distinct language, rituals, and beliefs helps mightily to unite and segregate each group.

It is also at the point that Dunbar's Number is exceeded that the individual is no longer recognized by all his compatriots. This is where feelings of anonymity, alienation, insignificance, and conflict between individual identity and group identity either appear or take on new significance. As these troubling feelings grow so too do the needs to feel important, to find an identity and purpose. And it is at this precise point where individuals begin to need the consolation and affirmation that religion can provide that religion forsakes them in deference to maintaining group coherence. That is one of the great human tragedies.

8.5 ARCHAEOLOGICAL EVIDENCE

Human intelligence is quite ancient. For 3.3 million years at least, humans have possessed enough intelligence to construct stone tools. Tool creation shows abstract thinking, namely the ability to visualize and foresee the shape that the tool will have after it has been fashioned from raw material, and how it will be used, for example, how to hunt and kill.

Many animal species possess some measure of abstract thinking. A large number of species including chimpanzees and corvids (ravens and crows) fashion and use tools. Animals also play. Watch their games. Birds soar in the sky and surf just above wave crests. It would not take too much of a cognitive leap to sublimate these feelings into some form of religion. But we have no hint of any spiritual thoughts or feelings in the animal kingdom, although chimps that have been observed watching and apparently enjoying pretty sunsets.

The earliest *direct* evidence we have of our spiritual thoughts came after the invention of writing some 5000 BP (years Before Present), when our thoughts and feelings could at last be recorded. Writing was

first used to record finances; stories or myths came next. Recording religion's tales led to more attention given to doctrine.

Long before the invention of writing, there is indirect but suggestive evidence of the origin or at least existence of some form of religion, which concerns attitudes or practices involving death. The oldest hint we have of early humans' religious or spiritual thoughts are the remains of elaborate burials, beginning about 100,000 BP. Homo sapiens had already been on the scene for about 100,000 years before that, without apparently making any (yet discovered) distinct mark of spirituality. But around 100,000 BP, at Qafzeh, Israel (less than 10 miles from Megiddo) of all places given that it is the nexus of Judaism, Christianity, and Islam, two skeletons, presumably a mother and child, were buried with bones deliberately colored with and surrounded by red ochre. Red ochre is a pigment the color of burnt sienna that is produced by crushing or powdering the iron oxide mineral, hematite. (Yellow ochre, another pigment is derived from iron hydroxide, and both red and yellow are so widespread they were readily available to ancient peoples for paint.)

Since the time of the Qafzeh burial, Homo sapiens increasingly used red ochre in burials. All of these sites, before 50,000 BP, have been found in Africa. After about 40,000 BP burials with increasing artistic focus and effort occurred in Europe. By about 25,000 BP buried skeletons were found decorated with up to 5000 ivory beads, indicating about 5000 hours of labor. Clearly, the spiritual and aesthetic senses that something decorative should attend death, and the awareness and fear that death is inevitable were established in our species. Some multiple burials are suggestive of sacrifice, a custom whose origin is obscure.

With the knowledge, fear, and dedication of time to death, humans had taken a giant step beyond the practical. Language also expanded and may have begun in something resembling modern form during the epoch between about 150,000 - 50,000 BP. Language is another achievement whose origin and time line we can only surmise because, as with the origin and development of religion, there is no direct evidence for it, just some statistical extrapolations. The origin of language was so short on direct evidence that in 1866, the Société de Linguistique de Paris banned all debate about it. This created a hiatus of nearly a century. The study of the origin and development of language has resumed with a vengeance, but remains largely hypothetical because direct evidence is still absent.

Here is an irony – language advanced human communication, making it possible to form larger groups, but by replacing personal grooming, it made contact less intimate and more subject to deception and disguise, as almost every other advance of communication has. Thus, by allowing people to talk at a distance, the telephone eliminated face to face contact

(until recently). Texting, the latest rage, is an even more remote form of communication, for it eliminates all the inflections and emotions of the human voice and replaces them with emojis and emoticons. Talk of alienation! But congratulations to us – we now have video calling.

Was it language, new tool designs, a newfound ability to create fire from scratch, or climate or population pressure, or a sense of adventure that enabled Homo sapiens to make their first enduring forays out of Africa and into Europe, Asia, and Australia by around 60,000 BP? We don't know. What we do know was that at some time after the migration out of Africa, Homo sapiens began the next major advances in human inventiveness and symbolic thought – music and art. Handprints may be the oldest of all, and may have also been done by Neanderthals. Then came animals. A painting of a warty pig in Leang Tedongnge Cave on South Sulawesi in 2021 was just dated (in 2021) to 45,500 BP, which predates the earliest known European Ice Age cave paintings, as in the Chauvet Cave, by some 10,000 years. The first certified flutes and sculptures (as of so-called Venus figures) date to shortly after 40,000 BP.

It is likely that music, dance, and art were present at the birth of religion, and they continue to be used today to embellish and support most religions. Religious rituals, such as dance, music, or intoxication can exist without language and may have predated language and art, but language and art are effective tools to communicate and preserve these.

With art, it was almost always the animals although there were some oft and widely repeated symbols such as dots in grids, lines, squares, triangles, circles, and spirals. Many of the Ice Age paintings portrayed animals with an astonishing sense of realism.

Why the fixation on animals in cave art? It makes sense in several ways. Children are entranced by animals. Children looking at the Environmental Groupings in the American Museum of Natural History rarely notice the attention lavished on the soil and rocks, or the vegetation, or the landscape, or the sky. They see only the animals.

Because children are so fascinated with animals it makes sense that early humans were too. But the cave painters were almost certainly adults or at least adolescents and their attention to animals involved survival as well as admiration, ego, and imagination. Our ancestors knew the habits and appearance of the animals intimately because they had to hunt and kill them, primarily for food, materiel, and protection, and possibly for trophies and glory.

Although our ancestor artists killed the large animals, they remained entranced and preoccupied by them. What reverence did they feel when they took the life of a powerful beast such as a mammoth? It must have been profound. Much later, after the introduction of agriculture and the

establishment of civilization and kingdoms, artists depicted humans more frequently and the ancient religions made gods evolve from animals to some hybrid of animal and human. It took millennia to turn gods human and transplant them to the skies.

Early art is often assumed to have religious content or motivation. Precisely what the content and motivation were, if indeed the art was religious, we can only surmise. The Venus figurines likely celebrated the enduring mystery of the fertility of women and the creation of life. Painted animals suggest invocations of hunting success, and this idea is supported by spears painted in their sides and by chips in the rock walls where real spears were thrown at the paintings. Hybrid human-animal statuettes suggest shamans or medicine men and thus that some animistic view of the universe had been fabricated and accepted.

Shamans who could enter the trance state, even if they needed the help of drugs, would have furthered belief in spirits. The shamans would have been recognized as having some abnormal or elevated power suggestive of an external source.

Monumental evidence for religion is also ancient. A large circle of Mammoth bones 41 feet in diameter was uncovered in 2020 at Kostenki 11 (about 300 miles SSE of Moscow) that dates to 25,000 BP. The structure's exposed location and large size means that it was probably not covered and not used for living. It is quite possible that it was a religious structure.

Large scale religious devotion already existed by 12,000 BP (as far as we know, shortly before the practice of agriculture began), where a large temple was constructed at Göbekli Tepe (Potbelly Hill) in Anatolia. T-shaped stone monoliths, possibly representing people and decorated with carvings of mostly carnivorous animals, sometimes subduing prey, were arranged in a circle. This was of such a large scale that it was most likely built as a cooperative effort by several tribes or groups. The site was rebuilt several times over a few centuries and ultimately filled in. About two thousand years later – when agriculture had been established in a few locales – between 9500 and 7700 BP, almost every home in Çatalhöyük might be considered a sanctuary with rooms decorated with murals, figurines, and bas reliefs of animals and usually headless women. Religion had become organized.

8.6 THE CAMBRIAN EXPLOSION AND RELIGION

The evolution of religion mimicked the evolution of life on Earth! After more than a billion years of tentative trials, many of the existing phyla of multicellular animal life (metazoans) formed during or in the geologic period just before the Cambrian Explosion that began some 540 million BP. This was likely the time when oxygen and ozone in the atmosphere and the sea finally attained high enough levels to open new niches for cellular colonies with shells and bones. Since that time, there has been a profusion of life, but no profusion of new animal phyla.

In like manner, there have been several historical periods of religious explosions, preceded by long, indistinct tendrils. These epochs were marked by conditions that allowed or encouraged the opening of new niches, but were followed too often by the regulated closing of minds.

Certainly, organized religion attended the birth of Civilization of order 6000-5000 BP. There were families of deities but kings and pharaohs were also magnified and deified. And in Egypt at the least, priests controlled access to the granaries.

From about the 8th to 3rd centuries BCE (a time period Karl Jaspers dubbed the Axial Age), following the recovery from the Late Bronze Age Collapse of civilization, there seems to have occurred a religious metamorphosis with a global profusion of religions that are still alive and thriving today – Buddhism, Zoroastrianism, Confucianism, Taoism, Hinduism, Jainism, and Judaism. It was a time of greatly increased Empire, urbanization, literacy, trade of goods and ideas. It was the time of the births of philosophy, science, formal mathematics, and almost overt atheism, as expressed in the Hindu Rig Veda 10:129, "Who then knows whence it [the universe] has arisen?"

The new Axial religions gradually grew less sky and more Earth oriented, even if some of the gods resided in the sky, less animal and more people oriented, less external and more inward looking. Miracles were confined to a more local scale. God became content to restrict his extracurricular activities to impregnating maidens and enlightening prophets instead of turning rivers red, covering the land in darkness, and destroying armies. The religions also became more monopolistic – oops, more monotheistic, and after a few centuries of experiment and efflorescence, more mature, powerful, intolerant, and ossified.

Confucius (c. 500 BCE) did not so much found a religion as a philosophy although Confucianism accreted many characteristics of any orthodoxy. Confucius propounded standards of ethics independent of any god or spirit, and as we have seen, stated a negative form of the Golden Principle along with study as central to his philosophy.

The Buddha, Siddhartha Gautama (c. 500 - 400 BCE) followed upon Hindu cosmology to take the critical step beyond monotheism. He dispensed with all existential questions about the ultimate nature of the universe and God, telling the parable of the poison arrow. A man struck

by a poison arrow refused to have it removed until he knew everything about the archer and the arrow. The poison killed the man, who died as he lived without the knowledge. So it is with knowledge of God.

All other religions have left the poison arrow in and to this day writhe about, remaining equally ignorant about God despite all their pompous pretensions and proclamations.

But the Buddha did help to embellish religion with a greatly improved ingredient – pain. To avoid the pain of reincarnation in the style of the film, *Groundhog Day* (1993), you must relinquish desire. Hinduism also viewed desire and intellect as barriers to finding inner truth.

Why do religions always squirm their way into belittling life as it is? Yes, all is vanity and passion does fade, but passion is one of the great gifts and guarantors of life. Take it and run with it while you can, as Andrew Marvel, likely prodded by an outbreak of the Plague, suggested *To His Coy Mistress*, (written c. 1652, published posthumously in 1681).

Let us roll all our strength and all Our sweetness up into one ball, And tear our pleasures with rough strife Through the iron gates of life: Thus, though we cannot make our sun Stand still, yet we will make him run.

The Axial Age was also an epoch of monumental brutality. Absolute Monarchs led or amassed huge armies to expand empires, but it seemed to be a time of at least moderate religious tolerance. A number of slaughterer kings who waged wars of conquest including Cyrus the Great (c. 600 - 530 BCE), Alexander the Great (356 - 323 BCE) and Ashoka (c. 300 - 232 BCE) turned more peaceful either while or after they established their empires and adapted or accepted other religions. All this testifies to and facilitated extensive contacts across Asia, Europe, and Africa (likely far more extensive than documented) that promoted a ferment of ideas, both religious and secular, during this time.

Some of the tolerance exhibited by the conquerors was practical. Allowing the religious adherents of a conquered territory to retain their superstitions will go a long distance to mollifying them so you can go on to conquer the next territory. The ceramic Cyrus Cylinder (539 BCE) promised freedom of religion in the Persian Achaemenid Empire. Cyrus even offered to fund the return of displaced peoples such as the Jews to their ancestral homelands, though relatively few Jews took his offer. Alexander followed Cyrus's model of religious tolerance, although his followers went on to adopt the Egyptian practice of deifying themselves.

Ashoka sent emissaries of Buddhism from India to both the East and the West. Indeed, this may be one source of inspiration for the Tale of the Wise Men from the East who brought gifts for the infant Jesus, although a more immediate inspiration for the Tale seems to have come from Zoroastrian missionaries of the Parthian Empire.

The concept of Hell or some dismal underworld for the dead has multiple roots but Zoroastrians started furnishing it as a chamber for eternal punishment. Eschatological Jews and especially Christians improved on the design, and Muhammad made sure to heat Hell for all infidels. Hell is a beautiful device to scare the wits out of kids and keep them terrified as adults.

The promotion of Hell as Punishment Paradise is a testimony to the advancing sophistication of civilization. Early Judaism taught that God punished evildoers in this life. Experience showed that was patently false. How then could religion continue to intimidate? Simple – delay guaranteed divine punishment until after death. Then you could punish for all eternity. Hell fit the bill to a tee.

Hell was a central pillar of the next religious revolution, which began with the birth and early history of Christianity. Judaism tried to turn kinder with a few accepting Hellenistic influences and some kindly rabbis like Hillel the Elder but the dominant strain remained intolerant, inflexible, harsh, and combative. Judaism gave ground to a Jewish offshoot that sympathized with the downtrodden initiated by Jesus but sustained and tainted by Paul, who eliminated the two main Jewish barriers to conversion, 1: circumcision and, 2: restrictive dietary laws. No matter that Christianity instituted eternal punishment for crimes that included violating the impossible sexual restrictions they imposed during life. [Perhaps the Jews gave Jesus to the Christians provided they also take the puritanical and likely homophobic gay, Paul.]

Another important reason for Christianity's success in its partial parricide of Judaism is that while Jewish Jihadists provoked the mass slaughter of their less rigorous fellow Jews by the superior Roman forces, most early Christians chose passivity and made themselves palatable to Rome with the remarkable concession attributed to Jesus,

"Render therefore unto Caesar the things which are Caesar's; and unto God the things that are God's.

This unique, self-limiting statement of the sphere of religion ceded a separate domain to temporal affairs, though more honored in the breach. That power-sharing concession may have been a singular factor leading

eventually to the idea of the separation of Church and State, and even the Scientific and Technological Revolutions and modern Democracy.

So much of history is serendipity. The Antonine Plagues (165-180 and 251-266 CE) weakened Rome's spirit and sent it scurrying for miracles so that when Christianity received the blessing of Constantine, who no doubt was swayed by his pious Christian mother, the Christian dike burst. Numerous ideologies collided and foundered as Christianity's swirling waters inundated the declining Roman Empire. Eventually, a small set of theologies regarding the nature of Jesus and the Trinity and a small set of sects governing the Christian flock emerged triumphant.

The Plague of Justinian (541-42 CE) and its recurrences over the next century dealt a series of devastating blows to the contending Roman-Byzantine and Persian Sasanian Empires, who exhausted each other with endless wars. That, in turn, opened a niche for marauding Desert Arab followers of Muhammad (570 – 632 CE) to spread Islam from Gibraltar to the Indus from about 630 to 750 CE, and eventually to the Philippines. Islam, like almost all other religions developed its schisms, such as the Sunni-Shiite divide, which have left Muslims reviling and slaughtering each other to this day.

Another religious revolution occurred as Christians rose from their self-imposed Dark Ages after Viking and Magyar invasions eased between about 900-1000 CE. Western Europe then rose to a medieval peak as innovative revolutionaries who invented or improved and popularized many mechanical devices including plows, the horse collar, the clock, watermills and windmills, ships, and spectacles. Beginning in 1347, the Black Death wreaked havoc on Europe already reeling from climate setbacks but soon thereafter opened niches that led directly to the Renaissance and eventually, the Scientific and Industrial Revolutions.

A century before Galileo, the voyages of discovery and economic advance of Atlantic Europe, and the closing of the Mediterranean coupled with increasing exactions by Rome helped lead to the Catholization of indigenous peoples of the Americas and to the Protestant Reformation mainly north of the Alps.

The Reformation produced a profusion of offshoot Christian religions and sects whose founders incorporated almost every version of theology and philosophy. This was done in the face of great controversy, combat, and slaughter, as people martyred themselves over obscure issues mandated by their sects. Jonathan Swift mocked these religious controversies as Big vs Little Endians –the religions of Lilliput and Blefscu (England and France) based on which end of the egg to break.

8.7 THE ENLIGHTENMENT

The Enlightenment or Age of Reason produced a Religious Revolution. As science and technology advanced it led to the halfway house of Deism, the idea that after God gave us and all creation a jump start, with Newton's Laws, etc., He freed us to grow up on our own. This idea was supported by the predictive and practical success of Newton's Laws of motion which seemed inviolable. The laws implied that once you knew the position, mass and velocity of all objects, the future course of the universe was predetermined. The established religions didn't take too well to Deism, which bordered on and sometimes ascended to Atheism.

Indeed, the Enlightenment was the first period in recorded history to give people the freedom to proclaim and print that they are atheists.

Two great American documents of the Enlightenment, Thomas Jefferson's *Declaration of Independence* and the *Constitution of the United States*, gave expression to some of these ideas and freedoms. The Declaration of Independence mentions the new God of Deism thrice, while the Constitution of the United States makes no mention of God.

The first reference to God in the Declaration is the phrase, "...the Laws of Nature and of Nature's God." This can be seen as Deistic. It still relies on a Creator as the fount of our Rights, but uses the terminology of a geometric proof, starting with self-evident axioms or truths

"We hold these truths to be self-evident, that all men are created equal, they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness"

Not only did the writers of the Constitution avoid the word, God, they implicitly acknowledged both Atheism and the Quaker proscription on oaths by allowing an affirmation in place of an oath. Affirmations omit the phrase, "so help me God". Franklin Pierce was the only president to use the affirmation, but John Quincy Adams and Theodore Roosevelt as well as Pierce swore on law books rather than Bibles. It was reported that Lincoln, when asked by a minister to include God in his oath responded by saying that the word, God did not appear in the Constitution and he would not depart from the letter of the Constitution.

What great fortune it is for us that the Founders excluded God from our government. All subsequent attempts to inveigle God back into government have been attempts to limit the public weal. Those attempts were not long in coming. They started in earnest with the Second Great Awakening and continue to the present.

8.8 COEVOLUTION OF RELIGION AND SCIENCE

From its ancient origins, a primary focus of religion was to explain (and presume to commandeer) natural phenomena. For religions that are now defunct or extinct we call those explanations myths. As science advanced with functioning, verifiable explanations or laws for natural phenomena and made successful predictions and technological inventions based on those laws, religion was forced to retreat and its domain shrank. In parallel, belief in and the domain of miracles also shrank.

Religions have always felt threatened by the advances of science, but theologians and Church leaders have made too big deal of some issues that had little or no impact on belief. Such issues could be called Velcro Ideologies because they hold together two things that can be separated without harm to either. During the long centuries that the Catholic Church fought the heliocentric theory tooth and nail, our solar system rotated almost halfway around the galaxy. The fear was that displacing man outside the center of the universe would invalidate God's presumed plan and would turn people from faith. In fact, it is not our location in space but the scientific mode of thinking that has had an adverse effect on faith. But so long as the perceived threat of heliocentricity existed, scientists were made to recant or to burn. Eventually, religion had to give way and Aristarchus, Copernicus, Kepler, Galileo, and Newton triumphed without seriously injuring the faith or the faithful.

With Darwin the story continues. The hegemony of orthodox religious belief was tottering when Darwin came along. Linking us to lowly apes and turning back the geologic clock by millions and ultimately billions of years really blew the minds of the upholders of the faith. Thus, they began a war on Evolution they are still waging today, to their eternal shame.

The only way to maintain the pre-Darwinian position is compulsory, obdurate ignorance. Ultimately, believers will be forced to acknowledge Darwin and all the biology and geology that followed, yet I predict that this will barely impair their faith. Instead, they will simply find some other justification and basis for their faith and remain just as placid about all its absurdities and inconsistencies as they always have been. However, as with all advances of knowledge, a few will feel compelled by facts to abandon some outmoded belief.

What is more important is that in the process of advancing, science forced us to a different mode of thinking. The scientific mode of thinking is not natural to us, and one proof is how long it takes to learn science (and math). More natural and cozy is the symbolic way of thinking, giving nature personnel, purposes and motives.

Science sees design (order) with some randomness and chaos, and impartial laws; religion sees designers and intent.

CHAPTER 9

ATHEISM AND REASON EMERGE

9.1 CLOSET ATHEISM

I begin this brief history of Atheism with a few words of profound gratitude. There are many marvelous historians from whom I have learned, but first among them is Will Durant, later accompanied by his wife, Arial in their 11 volume *Story of Civilization*. They have been anchors in my knowledge and understanding of history and many aspects of human nature and behavior.

Long before my revelation as an atheist, there were atheists, skeptics, and questioners who bushwhacked a path and illuminated it for all of us. For millennia atheism was anathema to all religions and governments and was treated so harshly it was summarily silenced. Its early existence was indicated mainly by allusions of its religious enemies such as that in Psalms 14 and 53, "The fool hath said in his heart, there is no God," or in tales with morals designed to ensure the righteous destruction of defiant mythological characters by the gods. Thus, for example, Athena transformed the mortal weaver, Arachne to a spider for her crime of pride. And even though Socrates remained true to the gods, his fellow democratic citizens executed him for threatening the fabric of Athenian society merely by virtue of his questioning (and his arrogance).

Because it was dangerous for any Ancient in the Western World to proclaim atheism, all claimed that they remained true to the gods. But one anomalous Roman poet-philosopher, a follower of Democritus and Epicurus among other Greek materialist philosophers, came perilously close to denying the Gods. Titus Lucretius Carus, whose poem, *De rerum natura* – *Of the Nature of Things* was disinterred at the dawn of the Renaissance after a medieval burial of 1000 years, allowed there were Gods but made them irrelevant. He removed them from all matters in the universe and replaced them with atoms and natural laws he thought were fundamental and eternal. With the Gods safely on terminal leave, Lucretius levelled devastating criticisms at belief and religion that became calling cards of later atheists. Perhaps his most important point was that the representatives of religion operate by attempting to instill fear and that all their fables are designed with this in mind.

Because only atoms and space are eternal, the earth, oceans and sky formed by some cosmic joining of atoms, are in the process of wasting,

and will die either with a whimper or in some conflagration. Lucretius presents something of a natural history of humankind far more accurate than the Adam and Eve allegory. Our ancestors had a primitive, animal start. They developed language and music by extrapolating from animal sounds and bird songs. And they invented weapons, agriculture, metallurgy, weaving, transportation by land and sea, technology, and ultimately, civilization with laws replacing power (sometimes).

Men came to religion because their dreams revived the dead and because they sought without understanding to explain nature and all its awesome phenomena such as earthquakes and thunder and lightning, which they ascribed to gods they created in their minds.

"O humankind unhappy!--when it ascribed unto divinities such awesome deeds, and coupled thereto rigours of fierce wrath! What groans did men on that sad day beget even for themselves, and O what wounds for us, what tears for our children's children!" p. 151.

It is a great pity that once the idea of the gods became implanted in us it has been perpetuated.

Lucretius insisted that natural phenomena result from natural processes. Even though most of his 'explanations' of phenomena are wrong, his descriptions of them were accurate and detailed, and many were cast within some logical framework. Thus, for example, the rivers do not fill the sea because water evaporates from it, a statement of the hydrologic cycle, also described in *Ecclesiastes*. Plagiarizing from Aristophanes' play, *The Clouds* (423-417 BCE), Lucretius satirized the belief that lightning bolts were hurled by Zeus to wreck vengeance on some unbelieving miscreant since they fell randomly on anyone unlucky enough to be in the wrong place at the wrong time and since they always appear in clouds.

"Why never hurtles Jupiter a bolt upon the lands nor pours abroad clap upon clap, when skies are cloudless all?" p. 169.

In arguing that the soul, which he claimed consists of subtle atoms too tiny to detect, was infused in the body, was born with it and dies with it, Lucretius was not the least queasy or squeamish. He described in gruesome detail how when a man or animal is hacked that the hacked limbs or sections quiver for a few moments. Using lines that Thomas

Gray plagiarized for his *Elegy in a Country Churchyard* (1750), Lucretius insisted that when life ends it ends.

"Thee now no more the joyful house and best of wives shall welcome, nor little sons run up to snatch their kisses and touch with silent happiness thy heart. Thou shalt not speed in undertakings more, nor be the warder of thine own no more." p. 79

Even if the atoms that you are made of happen by some infinitesimally remote chance in some remote future time to recombine exactly as they have in you, your future clone can have no awareness of the previous version of yourself. Therefore, "Eat, drink and be merry, for tomorrow you die." This motto of epicurean *living* is an exaggeration of Epicurean *philosophy*, which advocated a life of restrained pleasure, without the wanton profligacy or debauchery that leads to premature dissolution. Within those wide limits, everyone should live their lives with the pursuit of happiness as a fundamental right, and without needless fears. In particular, no one need fear burning in Hell for any actions or thoughts in life because there is no Hell (except *on* Earth).

In their attempt to discover the nature of reality, Ancient philosophers fell into one of two distinct camps — Materialism and Idealism. Materialism holds that the only things that exist are matter and space. Idealism holds that 1: reality consists of mind and spirit, and 2: ideal forms of concepts such as beauty and good have a real existence despite the fact that they are immaterial. Among the Ancients, Democritus, Epicurus, and Lucretius were materialists while Anaxagoras and Plato were idealists. Aristotle was mainly an empiricist.

The Ancient philosophers argued on behalf of their stances using attractive reasoning, but with inadequate observational basis. Logic at its best identifies situations that are not contradictory; it cannot assure which logical possibilities actually exist. This makes it difficult to imagine how any of the philosophers and their acolytes could have been so sure of their stances, all based on unfounded speculations, when their gaping ignorance of natural laws was recognized by all. How can you talk about atoms without devices such as an electron microscope? Yes, a volume of gold weighs more than 20 times an equal volume of wood or water, so it is logical to assert, as Lucretius did, that wood and water have much larger empty spaces between (or within) the atoms than gold does, but it still remains speculative. As for the ideal forms of Plato – no one ever claimed to see them. There is some basis for finding qualities of beauty, such as symmetry, but there is no basis or evidence for asserting the existence of some ideal form of beauty other than as a word.

Of course, where ignorance reigns, displaying an intolerant sense of certainty is a standard human approach. All too often, when knowledge and understanding are limited or absent, conjecture on intellectual issues turns to confrontation and controversy. Egos trump facts and eloquence trumps truth. Evil arises once advocates transmogrify their favorite concepts as ideology and formulate rules of behavior and punishments for presumed transgressions. Thus, it is not always the ideas themselves, but always the abuses to which they are put that create problems.

Physics wrestled with a materialist-idealist dichotomy at the beginning of the 20^{th} century. Duality triumphed. In 1905, Einstein showed both that mass and energy are interchangeable ($E = mc^2$) and that light exhibits features of solid particles and of waves. In 1924, Louis de Broglie, extending the work of Niels Bohr, showed that electrons exhibit features of elusive waves as well as discrete particles. This was one of the landmark discoveries that led to quantum mechanics.

It might be asked which stance – Materialism or Idealism – is worse in the sense of being more prone to perversion. Both can be perverted but to my mind, giving mind precedence over matter is the more nefarious of the two because it prioritizes the unseen and unfelt over what we can plainly see (of course, using our minds). In other words, it prioritizes unreality over reality. And this quality is precisely why religion tends to latch onto Idealism with a static cling that has all the force of an electromagnet in a junkyard. The preference of religions for Idealism lies in the greater power of invoking the unseen over the seen as a means to corral people's minds and bodies. Hinduism and Buddhism are at root idealistic religions, and Christianity apotheosized idealism – "In the beginning was the word and the word became flesh".

All the ideas of Lucretius, including materialism, were anathema to early Christian ascetics, led by Jerome, a convert by guilt to Christianity, who forsook his lascivious love of women and Greek and Latin Classics. Jerome is our source for the fabrications that Lucretius was driven mad by a love potion, that it was during a bout of insanity that he wrote his sinful work, and that his madness led him to commit suicide. In *The Swerve*, (2011) Stephen Greenblatt emphasized that it took a major, protracted campaign by Jerome and his followers to replace Epicureanism with Christian asceticism. They did this by relentlessly slandering Lucretius and disparaging his work and in so doing, replaced a sane philosophy with an insane religious dogma. Both Plague and the decline of the Roman Empire and Civilization gave credence to the Christian propaganda, ably capitalized on and preached by Augustine that blamed the troubles on the lack of Christian faith.

With the triumph of religious Idealism, *De rerum natura* was buried and the opaque cloak of ignorance covered a darkened Europe for much of a millennium.

Through the Dark Ages the tenuous thread of reason was preserved and ultimately diffused back to Europe. Medieval philosophers, most of whom stuck to the party line of their religions – for example, Anselm, Maimonides and Thomas Aquinas – nevertheless were prodded by rational doubt of their irrational doctrines.

A fitting representative of the flowering of doubt and the resurgence of some rational sanity was William of Occam, who lived from about 1287 to 1347 and wrote a century before *De Rerum Natura* was exhumed. William remained in the loving embrace of Mother Church, but advocated many ideas that put him at risk. One is Occam's razor, a minimalist principle essential not only to science but to reason in almost any field.

Occam's razor is actually quite ancient. It was phrased loosely by Aristophanes in *The Clouds*. Socrates argues with Strepsiades, a devout, elderly farmer.

STREPSIADES: Who causes the rain to fall? Answer me that!

SOCRATES: Why, these [clouds], and I will prove it. Have you ever seen it raining without clouds? Let Zeus then cause rain with a clear sky and without their presence!

Aristotle phrased Occam's razor in compact, philosophical lingo, and it was restated by others who preceded Occam. But it has become indelibly linked to Occam. The modern statement is,

"Entities should not be multiplied without necessity."

In other words, the simplest explanations are the best.

How did Occam use his razor and how has it been used since his time? Begin with God. If you can explain something in the natural world without needing to refer to God (e. g., that rain always comes from clouds), then leave God out of the explanation. That sounds sensible and modern, and indeed, much of science proceeds by Occam's razor.

But Occam's razor was dangerous; it led to a refutation of any rational proof for the existence of God. So, to squirm out of what would likely have been a death sentence, Occam conceded that God could be known, but only through faith.

Occam went on to challenge other authorities. He opposed prioritizing the Church over Christ and the divine right of kings over the people. Somehow, Occam survived the wrath of the Church and the Kings but succumbed to the Black Death, which neither Church nor King would ever be able to cure or prevent and which still unborn science had not yet learned to cure or prevent.

Over the next few centuries repeated challenges to the money- and land-grabbing Church helped prod the Reformation with its religious wars, mass forced conversions, and holocausts, such as of the Huguenots in France. Exhaustion from these wars helped lead to a gradual increase of tolerance. Confusion caused by endless intractable, alternating vendettas between the multiple sects and dogmas, each claiming sole access to the truth about God made it seem that all were cursed and wrong. The discovery of the New World and the circling of the globe broadened minds, increased rationality and skepticism, as with Erasmus and Montaigne, and raised doubts about the inerrancy of religion. These factors all helped open a crack for atheism that was torn wide open by the triumphs of the Scientific Revolution and the Enlightenment.

9.2 THE ENLIGHTENING SCIENTIFIC REVOLUTION

The assaults of the Scientific Revolution have helped forced Religion to its greatest retreat. The new triumphs of science, which propelled natural law into prominence, cast doubt on and reduced need for miracles and revelation, and began to classify religion as a superstition.

Even so, most early atheists felt obliged for the safety of their lives to stay below the radar. Almost all atheists who dared print their thoughts used the standard ruse of disavowing the atheism they preached while doing all they could to undermine the religion they presumably advocated. It didn't always work. Perhaps the first such overt book on atheism was *Atheism Conquered*, written by Tomasso Campanella while in jail in 1607, which was finally published after he escaped to France under the protection of King Louis XIII in 1636. Both Giulio Vanini in 1619 and Kazimierz Łyszczyński in 1689 used that ruse in their heretical writings but still had their tongues cut out before being burned at the stake. Łyszczyński's treatise, *On the Non-Existence of God*, was destroyed but several quotes from it remain from his trial, such as,

"God is not a true being but a being existing only within the mind; a being chimeric by its nature".

In this camp there arose one major early survivor. Thomas Hobbes lived much of his long life cowering at the edge of risk. Hobbes's cynical definition of religion, given in *Leviathan* (1651) was just one of his skeptical, antireligious sentiments that illuminated the road to atheism.

"Fear of power invisible, feigned by the mind, or imagined from tales publicly allowed, religion; not allowed, superstition,"

The spirit of protest was in the air but repression was on the ground. In 1640, a decade before Hobbes risked his life with *Leviathan*, Uriel da Costa, a Converso Jew who fled Oporto, Portugal for Hamburg and Amsterdam, committed suicide after enduring the humiliation of having all members of the congregation step on him as he lay on the ground as part of a reconciliation from a seven-year long excommunication by the Portuguese Jewish community of Amsterdam. Da Costa's problems began in 1616 when he pointed out discrepancies between the Bible and Jewish practices of the day, and urged a religion based only on natural law that would dispense with the customary ceremonies.

When da Costa shot himself, 8-year-old Baruch Spinoza was likely playing nearby. Spinoza, an early promulgator of Biblical Criticism, confessed that he would have preferred to remain an orthodox Jew, but was forced by logic and reason to abandon fundamentalist acceptance of the literal words of the Bible.

"Although from childhood I was awash in the common beliefs about Scripture, I ended up finding myself forced to admit these [inconsistencies] that I am presenting here." *Theological-Political Treatise*. (1670).

Spinoza aimed multipronged analyses and critiques at conventional religious beliefs and practices. As we have seen, he pointed out numerous inconsistencies in the chronology of the Bible. He proved that Moses could not have been the author of Deuteronomy, because at least portions of it were written generations and even centuries later. Spinoza's critique exerted wide influence as a well-timed tour de force though the idea of Biblical criticism was first suggested by Abraham ibn Ezra, a Spanish Jew who lived from 1089 to c.1167 CE.

Spinoza also opposed the casuistry used in the attempt to explain away the Bible's numerous inconsistencies, arguing that,

"The belief in deep mysteries in Scripture has led to intolerable superstition and to other ruinously bad consequences.... And in

any case religion doesn't need any superstitious embellishments such as the pretense that it is full of mystery. On the contrary, tricking it out with such inventions diminishes its splendor."

Spinoza argued that the existence of God is proven by the laws of nature rather than by the seeming exceptions. Hence it is foolishness to have faith only through the apparent miracles. (Thomas Paine would repeat this argument.)

"The laws of nature are God's eternal decrees and volitions.... [Ordinary people think that] nothing proves the existence of God more clearly...than an episode in which nature doesn't maintain its order. If someone explains things—including 'miracles'—through their natural causes, or who sets himself to understand such events—the general populace will accuse him of eliminating God, or at least eliminating God's providence."

Miracles were coming under increasing attack during the Scientific Revolution, with Spinoza at the helm. He argued that in many cases, the reporting of miracles follows from the human tendency to 1: embellish and distort observations that are not understood and, 2: color them with ongoing prejudices and preconceptions. He pointed out that scientific discoveries were forcing religion to retract its descriptions and explanations of natural phenomena, and he focused on the Bible's tale that Joshua commanded the Sun to stand still. First, Copernicus and Galileo demonstrated that the Earth and the other planets revolve around the Sun. Next, Spinoza hypothesized that a mirage – a phenomenon due to unusually large atmospheric refraction - was what made the Sun appear to stand still (though not for a full day). Given that Spinoza was an expert on refraction – he ground lenses for a living (which contributed to his early death) – he knew whereof he spoke. A desert mirage, which makes distant land look awash in water, can also account for the Biblical story of the parting of the Red Sea and the disappearance or drowning of Pharaoh's army (a suggestion I first heard from Alistair Fraser).

Given the inconsistencies and scientific ignorance demonstrated in the Bible, Spinoza offered an Apologia, asserting that God inscribed belief and faith in each heart and reinforced them by giving us reason. This makes religious belief a personal matter. Spinoza thus considered the corporate component of religion (recall §3.1) to be invalid.

Therefore, whereas you are free to formulate your own personal religious views, you are obligated to follow dictates of the legal system in political matters, which by their nature are public and communal.

- "The core [of religion] has to do not with external actions but rather with simplicity and sincerity of heart; so it doesn't come under any public legislation or public authority....
- The supreme authority to explain religion and to judge regarding is possessed by each individual person. Why? Because this is a matter of individual right.
- The supreme authority to interpret the laws and make judgments concerning public affairs is possessed by the legal system. Why? Because these are matters of public right."

Despite shredding all pretensions and making shambles of all claims that the Bible, the official book of rules and punishments, is the unaltered, immutable word of God and hence a document of perfection, Spinoza continued to embrace religion, asserting that natural law is a proof of God's existence and that the Bible is worded in such a way as to best convey moral truths to ignorant people. He maintained the moral perfection of the prophets and the essential purity of the message of the Scriptures. He argued that since the essential message of the Scriptures shone through like a gem in its matrix, it proved the existence of God (an early form of Kant's argument). But his moral argument is tendentious and flimsy. The horrific aspects of the immorality of the Bible, with its murders, wars, holocausts, curses, imprecations, and damnations – all commanded by God – submerge any moral gems in a toxic matrix.

The Jewish authorities of Amsterdam, orthodox by nature and timidly cautious in a Protestant nation of tenuous tolerance, excommunicated the unrepentant Spinoza in 1656. How did Spinoza manage to survive? His friendships with Christians and sympathy with Christian views may have kept him alive, and certainly kept him in contact with fellow human beings. Spinoza insisted that moral truth is an absolute, just as Jesus and Paul taught, so it should be followed on principle rather than by blindly obeying laws imposed and empowered by fear and superstition and enforced by might.

And what is the absolute, moral truth? It is none other than the Golden Principle, which is common to almost all religions as a cornerstone of morality.

"Scripture is properly called 'the word of God' only in relation to religion, i.e. in relation to the universal divine law....To love God above all else, and to love your neighbor as yourself."

It is a wonder to me that at this point Spinoza did not mention Occam's razor, for the morality he urged could more easily, logically, and

compellingly have been urged without tacking on any invisible agent. For sure in hostile territory, we are permitted to take only small steps.

Spinoza went on from the *Treatise* to the *Ethics*, where he expounded a pantheist view of the universe. Pantheism is the view that everything is in and of God. One cure for pantheistic reverence is pigeon poop falling on your head or shoulder. To Spinoza, mind and matter were not separate but integral parts of his Monist universe. And so, while Spinoza dismissed any possibility of a personal God and of an afterlife in a heaven or a hell, he concluded that,

"The highest good of the mind is the knowledge of God, and the highest virtue of the mind is to know God."

But, if God is in everything and everything is in God then pantheism seems to me to be a modern, and perhaps more sophisticated form of animism. If this is the case, let us again use Occam's razor and ask where in pantheism is the need for God. Others, of course asked the same question. Thus, pantheism could be simply a rational coward's form of atheism. So, Will Durant called Spinoza "the God-intoxicated atheist".

Can we go one step further? Spinoza had a compelling psychological reason to embrace pantheism. Spinoza, an excommunicated Jew in a Christian world, was an outcast among outcasts. Wouldn't such a person be attracted to a theology that says we are all one? It is for much the same reason that many 19th and 20th century Jews embraced Socialism and Communism, the political systems that claim all men are brothers and would eliminate the religions, nations, and racist ideologies that separate people (and that have often oppressed Jews).

Spinoza modeled his arguments on the deductive perfection of geometry, which held great allure for philosophers of that age, beginning with Descartes, continuing with Hobbes and Locke, and leading to Thomas Jefferson in his construction of the Declaration of Independence. The statement, "We hold these truths to be self-evident," is an Axiom.

But the extension of deductive reasoning outside geometry, while tempting, is flawed. Aside from any errors in logic and any gaps in knowledge, we can dispute or reject any theological, philosophical or political axiom. Despite these flaws, the allure of the geometric approach magnified Spinoza's enormous impact. By exposing errors in the Bible, by attempting to replace commands with a humanistic ethics, by being rational, Spinoza accelerated the dismantling of religion.

Unlike Spinoza, Matthias Knutzen did not beat around the burning bush of atheism. In 1674, four years after Spinoza's *Treatise*, Knutzen published three letters using Biblical inconsistencies to openly flaunt his

antireligious sentiments and outright atheism with the statement, "Above all, we deny God". This qualified Knutzen as the first unabashed, self-declared atheist in modern European history. For good measure, Knutzen also denied the Devil and any afterlife, and would dismantle the Church and all its offices. Shortly after the publication of these letters, Knutzen disappeared from history.

Swirling through the floodgates of doubt and denial, Pierre Bayle felt free enough to unleash a tirade against religion in his *Historical and Critical Dictionary* (1697). Bayle was a Calvinist who took a 17-month hiatus in France as a Catholic and then, when he returned to Calvinism, also returned to Holland for reasons not mysterious. There, while officially towing the line he placed almost every imaginable heretical and atheistic view in other people's mouths and then disavowed these views so feebly there could be no doubt by anyone with half a brain they were his views. In this way, as well as by living in tolerant Holland, he stayed alive and almost avoided censure. Bayle's influence on future atheists was augmented by his insistence that a society of atheists would be at least as moral as a society of believers.

Isaac Newton remained firmly in the fold, but his work imparted new energy and momentum to the massive, but still indirect assault on religion through his laws of motion, acting under the force of gravitation. These laws enabled anyone to predict the motion of planets and comets. More to the point, Newton's Laws imparted such allure to the power of scientific laws that it became natural to view miracles as exceptions to natural law and question why the God who created natural law would ever have need to resort to exceptions.

Thomas Woolston also remained within the fold but made the mistake of reviving the ancient notion advocated by Origen (c. 250 CE), at a when Christian theology had not yet ossified, that many Biblical stories and miracles, including those of Jesus, should be seen as allegorical. Thus, to Woolston, the blindness that Jesus cured was spiritual and not physical. His *Discourses and Defenses* (1727-29) attracted immense attention, selling over 30,000 copies. For this proclaimed grievous threat to and offense against religion Woolston was promptly convicted of blasphemy, assessed a fine he couldn't pay, and spent the rest of his life in jail, dying there in 1733.

God was giving way in France as well. As the reign of Louis XV (1715-1774) tumbled through aristocratic decadence toward the Deluge of Revolution and Terror her artists brought France's new God, Eros – romantic, wistful, refined, and lascivious love – onto center stage. It was the illusory daydream of privileged nobility on the precipice, and for that reason was enveloped in mist, just as God had been for so long.

9.3 JEAN MESLIER'S TESTAMENT

While the loving mists were guarding France's upper crust an inconspicuous creation was taking shape behind them. What follows is perhaps the most extraordinary episode in the history of atheism, accompanying a true and heart wrenching tale.

Father Jean Meslier died in the year Thomas Woolston was jailed in England for blasphemy. Meslier's death would have gone completely unnoticed except for an extraordinary gift he bequeathed to his humble parishioners, to France, and to the world.

Who was Jean Meslier and what was his gift?

Meslier was a pious, almost anonymous priest of the tiny, obscure parish of Etrépigny in the Champagne region of France, near Belgium. He might well have been the village Hampden of Thomas Gray's *Elegy in a Country Churchyard*. For 40 years, he served his simple parishioners with sympathy, kindness, understanding, and integrity, performing all the rites and sacraments of the Catholic Church. At the end of every year, he gave his parishioners all that remained of his tiny annual salary.

The sole notable incident of Meslier's life occurred when the local lord abused some parishioners. Meslier chastised the noble in a sermon and did not waver in the face of censure that followed by the overbearing bishop. Otherwise, all was quiet in his parish and in his life. Upon his death Meslier bequeathed most of his worldly possessions to his parishioners but also distributed three identical handwritten copies of his *Testament*, one of which fell into the hands of Voltaire.

Throughout his life, Meslier gave no indication he was anything but a faithful, obedient servant of Mother Church and no one had even an inkling of the existence of the *Testament*. In this eloquent essay, perhaps the most devastating, damning diatribe against and critique of religion and the second extant unapologetic advocacy of atheism, we get to know a gentle soul, unshakable, strident, and irate in his conviction that religion is a destructive sham. It is likely that Meslier read Lucretius and Spinoza among others because he echoes and enlarges on many of their arguments and sentiments. The *Testament* raises almost all the challenges to religion and belief in God that have been raised by subsequent atheists. It is for these qualities that I review it at length.

Meslier prefaced the *Testament* with a remorseful apology to his parishioners for the harm he did by not being honest about his hatred of the religion and its practices he imposed on them.

"I have seen and recognized the errors, the abuses, the follies, and the wickedness of men. I have hated and despised them. I did not dare say it during my life, but I will say it at least in dying, and after my death; and it is that it may be known, that I write this present memorial in order that it may serve as a witness of truth to all those who may see and read it if they choose.

If I embraced a profession so directly opposed to my sentiments, it was not through cupidity. I obeyed my parents. I would have preferred to enlighten you sooner if I could have done it safely....I call heaven to witness that I also thoroughly despised those who laughed at the simplicity of the blind people, those who furnished piously considerable sums of money to buy prayers. How horrible this monopoly [of] those who grow rich by your sweat and your pains...I detest their insatiable cupidity and the signal pleasure such fellows take in railing at the ignorance of those whom they carefully keep in this state of blindness....What a disdain I had for my ministry, and particularly for that superstitious Mass, and those ridiculous administrations of sacraments....What remorse I had for exciting your credulity! A thousand times upon the point of bursting forth publicly, I was going to open your eyes, but a fear superior to my strength restrained me and forced me to silence until my death."

This starting-point confession imparted to Meslier's *Testament* a tone of sincerity that strengthened it immeasurably. He could neither gain nor lose anything by its publication. I do not expect he entertained any hope of winning from it fame or immortality (which he did not believe in); indeed, he feared it would be burned. But the one thing Meslier did not fear was that any harm would come to him, as he was already safely dead. This made his honesty and motivation for writing impossible to doubt. Voltaire's assessment was,

"A dying priest accusing himself of having professed and taught the Christian religion, made a deeper impression upon the mind than the *Thoughts of Pascal*."

Meslier's assault on religion was relentless and thorough. His *Testament* is essentially a series of comments and counterexamples aimed at dismantling and debunking all the claims, arguments, and rationalizations that advocates of religion have ever made on behalf of belief and all the challenges they ever leveled at doubters.

The preface is more like an extended abstract, containing most of the ideas of the *Testament* in capsule form and revealing Meslier's thought processes. He begins by noting that if men used common sense they would see "that all religion is but a castle in the air," but that men accept religion by virtue of fear and ignorance and because they do not comprehend it. Then they preserve it by habit.

The type of religion people choose, Meslier asserts, fits their personality and the times. It began barbarous and brutal because people and nations began barbarous and brutal.

"Originally, savage nations, ferocious, perpetually at war, adored, under various names, some God conformed to their ideas; that is to say, cruel, carnivorous, selfish, greedy of blood. We find in all the religions of the earth a God of armies, a jealous God, an avenging God, an exterminating God, a God who enjoys carnage and whose worshipers make it a duty to serve him to his taste. Lambs, bulls, children, men, heretics, infidels, kings, whole nations, are sacrificed to him."

Once empires formed, princes found that instilling religion made their subjects docile and prone to being enslaved. And so, religion with its priests became wedded to government with its kings and tyrants. Theology was established as an afterthought to prop the established religion and attempt to explain away its numerous inconsistencies and contradictions. Meslier targeted theology, which he defined as, "ignorance of natural causes reduced to a system". Given his dismissive attitude toward theology, he wasted no effort to refute the classical 'proofs' of God's existence by Anselm, Thomas Aquinas, etc., using Occam's razor to simply dismiss them out of hand.

"Take hold of second causes; leave to theologians their "First Cause," of which nature has no need in order to produce all the effects which you see."

Meslier argued that religious founders and theologians invariably disparaged reason and our senses in favor of blind faith. This halted human progress and imposed a counterproductive, heaven-sent moral code that made everyone enemies of everyone else.

"Religion associating God with men has visibly weakened or destroyed the ties which unite men. Mortals imagine that they can, with impunity, injure each other by making suitable reparation to the Almighty Being....Religion...in taking possession of morality, totally obscured its principles."

Meslier insisted that we would act with a greater sense of morality if we based our actions on the Golden Principle backed by appropriate secular punishments for miscreants and rewards for model citizens, despite the self-serving arguments of princes and clerics that we need a God-given absolute moral code to prevent chaos. This has proven to be a standard response to the universal charge by believers that morality would lose its basis and fall apart if atheists took over. Thus, for example, the Philosophes of the generation after Meslier took great pains to show that a rational, human-based morality combined with earthly punishments could replace the terrors of divine imposed morality with its eternal punishments. In Meslier's words (echoing Spinoza),

"We are constantly told that without a God, there can be no moral obligation...moral obligation implies a law; but this law arises from the eternal and necessary relations of things among themselves, which have nothing in common with the existence of a God.... The law that compels man not to harm himself, is inherent in the nature of a sensible being....The law which compels a man not to harm others and to do good, is inherent in the nature of sensible beings living in society."

Meslier examined and analyzed how the believer's religious orientation develops. He pointed out that "Our nurses are our first theologians." Thus, inculcation begins in infancy, when, "The brain...is...like a soft wax, ready to receive all the impressions we wish to make on it." The lessons are taught so early in life that

"We believe that the ideas, true or false, which at a tender age were forced into our heads, were received from nature at our birth; and this persuasion is one of the greatest sources of our errors."

The terrorizing lessons aim to instill fear, rendering people unable to question and producing a state of psychological dependency and paralysis that not only imprisons the mind but makes the person feel at risk if he were to so much as listen to anyone who deviates from the established orthodoxy.

"He who from his childhood has had a habit of trembling every time he heard certain words needs these words and needs to tremble. In this way he is more disposed to listen to the one who encourages his fears than to the one who would dispel his fears."

Meslier was perfectly positioned to make these observations about the enormous influence of childhood inculcation and the subsequent shutting of the mind. He was the spiritual guide of his parishioners for their entire lives – from the moment of their birth to the moment of their death – so he watched and was able to see and understand their physical, mental, spiritual, religious, and psychological development. Had Meslier been born 200 years later he would more likely have become a psychologist than a priest.

What are the lessons that religions teach? First and foremost, fear must be instilled or capitalized on. Fear is based on ignorance, so man must be kept ignorant. The best way to keep man ignorant is to demean, suppress, and prohibit reason and the senses, especially where they conflict with faith. And given there is some chance that man can question what he sees, God must be made invisible and uncontactable except, of course, by ancient prophets. Religions also praise and attempt to mandate poverty of the masses (which keeps them in their place) while the Churches and Governments enrich themselves as they enforce the poverty of their flock by draining their scanty resources.

"How is it that we have succeeded in persuading reasonable beings that the thing most impossible to understand was the most essential for them? It is because they were greatly frightened; it is because when men are kept in fear they cease to reason; it is because they have been expressly enjoined to distrust their reason. When the brain is troubled, we believe everything and examine nothing.... Ignorance and fear are the two pivots of all religion."

Meslier reserved special venom against Christianity because it added disdain for our lives and our nature. And he found aspects of Christ's character to be repugnant.

"Shall we imitate, then, the Jesus of the Christians? Can this God, who died to appease the implacable fury of His Father, serve as an example which men ought to follow? Alas! we will see in Him but a God, or rather a fanatic, a misanthrope, who being plunged Himself into misery, and preaching to the wretched, advises them to be poor, to combat and extinguish nature, to hate pleasure, to seek sufferings, and to despise themselves; He tells them to leave father, mother, all the ties of life, in order to follow Him."

What are the characteristics of God most likely to be believed and least likely to be questioned? First of all, God must be invisible. After all, anything you can see, such as an idol can be destroyed in front of your eyes. Second, his ways must be inscrutable, because "if religion were clear, it would have fewer attractions for the ignorant." The inscrutable quality allows us to evade or excuse apparent contradictions that result from the many properties ascribed to God such as that he is the uncreated Creator, who is infinite, eternal, immaterial, all knowing, all powerful, all good, and, of course, perfect. Meslier used these assumed properties in conjunction with observations of the real world to point out numerous inconsistencies, if not absurdities.

"God will always be a cause contradicted by its effects, or of whom it is impossible to judge by His works. We shall always see evil, imperfections, and follies resulting from a cause claimed to be full of goodness, of perfections, and of wisdom."

It is impossible to reconcile an all good, all powerful, all knowing, and all seeing God with the obvious existence of evil.

"If God had the foresight of the future, did He not foresee the fall of His creatures whom He had destined to happiness?"

And those religions that claim Satan exists are forced to admit that an all good God created Satan and hence created evil.

"Why did God create a Satan, a malicious spirit, a tempter...whose victories and terrible influences upon the human race He must have foreseen?"

Next, we come to what such a God has done in creating and then handling us.

"If God could not render him sinless, why did He take the trouble of creating man, whose nature was to become corrupt, and which, consequently, had to offend God? On the other side, if God Himself was not able to render human nature sinless, what right had He to punish men for not being sinless?"

An eternity of misery or torture promised for the vast majority of us after we are through with our pathetic, finite lives. What beneficent creator or parent could ever order, nonetheless condone such a grossly disproportionate infinite punishment for finite sin? And in the same breath, we are told that God loves us and that we must love God. But,

"No man upon earth can have the least spark of love for a God who holds in reserve eternal, hard, and violent chastisements for ninety-nine hundredths of His children."

Even the act of praying is an absurdity or a futile attempt to change God's will (following Spinoza and Bayle).

"Praying to God, asking a favor of Him, is to mistrust His vigilant care...to endeavor to put obstacles in the way of His justice; to implore the assistance of God in our calamities, means to appeal to the very author of these calamities."

Then there is the matter of the soul, whose existence Meslier, as a materialist, pooh-poohed.

"Theologians...needed [immaterial] souls and chimeras to populate the imaginary regions [heaven and hell] which they have discovered in the other life....The superiority which is given to mind over matter, or to the soul over the body, is based upon the ignorance of the nature of this soul...but the most simple movements of our bodies are...enigmas as difficult to divine as thought."

As a child of the Scientific Revolution and proponent of the Enlightenment, Meslier also ridiculed all talk of miracles (Spinoza style).

"But what is a miracle? It is an operation directly opposed to the laws of nature. But, according to you, who has made these laws? It is...your God, who, according to you, has foreseen everything, counteracts the laws which His wisdom had imposed upon nature! These laws were then defective."

Meslier was particularly irate about what man has done to man in the name of religion. He hated the religious and political leaders who promulgate and enforce religion, with the purpose of aggrandizing themselves while subjugating their fellow humans, and justifying any action no matter how immoral.

"We shall see, almost everywhere, men governed by tyrants, who make use of religion but to brutalize their slaves, whom they oppress by the weight of their vices, or whom they sacrifice without mercy to their fatal extravagances. Far from being a restraint to the passions of kings, religion, by its very principles, gives them a loose rein. It transforms them into Divinities, whose caprices the nations never dare to resist.... Everywhere religion seems invented but to lull to sleep the people in fetters, in order to furnish their masters the facility of devouring them, or to render them miserable with impunity."

So much for how religion allows leaders to treat their followers! An even worse fate is reserved for the inevitable, necessary enemies of the faith.

"Nothing is more dangerous than a religion which licenses the ferocity of the people, and justifies in their eyes the blackest crimes; it puts no limits to their wickedness as soon as they believe it authorized by their God, whose interests, as they are told, can justify all their actions. If there is a question of religion, immediately the most civilized nations become true savages, and believe everything is permitted to them. The more cruel they are, the more agreeable they suppose themselves to be to their God....Is there anything better calculated to annihilate every idea of morality in the minds of men, than to make them understand that their God, who is so powerful and so perfect, is often compelled to use crime to accomplish His designs?"

I note here that the Reign of Terror would, some 60 years after Meslier, show that similar inhuman excesses could be committed not only in the name of religion but in the name of any implacable ideology, atheism included.

And to those ready to excuse religion as sacrosanct while blaming all excesses and atrocities committed in its name on the frailties and perversions of humans, Meslier had this response.

"When we complain about the violence and evils which generally religion causes upon earth, we are answered at once, that these excesses are not due to religion, but that they are the sad effect of men's passions. I would ask, however, what unchained these passions? It is evidently religion; it is a zeal which renders inhuman, and which serves to cover the greatest infamy. Do not these disorders prove that religion, instead of restraining the

passions of men, does but cover them with a cloak that sanctifies them."

It is fair to acknowledge that Meslier's *Testament* is a diatribe, in which no good about religion is admitted or mentioned. Did not Meslier feel that he had done much good in his role of priest for his parishioners that he might not have been able to do otherwise? Meslier also denies or ignores human beings' apparent innate proclivity for faith that religion takes advantage of when it inculcates its dogmas. This was a shortcoming Meslier shared with others of his epoch. The elevation, indeed, apotheosis of Reason led intellectuals to believe that education was all that was needed to erase religion and belief from the mental slates of humans.

There are inconsistencies in the *Testament* that are difficult to rectify. It is hard to argue that we can reason but do not have free will. It is hard to argue how religion has imprisoned and terrorized men's minds and at the same time deny its power to restrict or curtail our immoral acts. The social taboos and senses of shame and guilt in most of us are either innate or so easily inculcated and amplified by early training, as we can see by contrast with some autistic people, that it helps explain why religious proscriptions and curses have their impact on most of us. The death of God also means eliminating the feeling of a greater purpose in life, which may lead to nihilism or wanton licentiousness, as with the Marquis de Sade.

All that being said, Meslier, with his *Testament*, stands tall as advocate for human freedom.

9.4 THE HALFWAY HOUSE OF DEISM

Some of those in the generation after Meslier were outright atheists but more made the safer choice and confessed only to being deists.

Deism is the idea that some God, perhaps logos, created the universe and at some point left it on its own. That assertion claims to solve the nasty problem of how everything got here and skirts the thorny problems of the existence of evil given an all powerful and all good God in what Voltaire satirized as "the best of all *possible* worlds". Even though Deism purports to hold onto God, in effect, it gets rid of God – at least any God that any religion posited.

Deism was first propounded by philosophers during ancient times but was revived and proved popular among the cultural elite who flowered in the century leading up to the American Revolution. Perhaps its major source, inspiration, and excuse followed from the Scientific Revolution and the expanding concepts of the enormity and order of the Universe. Perhaps the critical, influential idea was developed by those who extrapolated with questionable logic from the mathematical tour de force, Newton's *Naturalis Principia Mathematica* (1687), to the arena of religion. According to Deism, the Creator designed the Universe in such a way that it was ruled by Newton's Laws of Motion plus all other laws of nature. It was then given an initial push so that its subsequent course transpired without any other further guidance or interference. This new religion elevated the status of mass, giving a boost to materialism, but it also acknowledged spirit in the form of force.

The growing astronomical knowledge gave people such as Thomas Paine the idea that there might be countless millions of worlds that might be peopled with creatures similar to us. Paine continued by ridiculing the idea that in each of these millions of worlds, God created some serpent who seduced some Eve and that Eve in turn tricked her Adam, cursing the entire planetary populace so that God's son would have to come down to each planet to redeem its people by dying on the cross as a sacrifice for the flawed design of God's own creations. And these countless millions of deaths of Jesus surpass the level of absurdity.

Deism was popular in England, France, and the United States. Although public and political figures were reluctant to admit to dispensing entirely with God the Father, it is likely that those who at least briefly joined the Deist camp included Michel de Montaigne, Voltaire, Jean Jacques Rousseau, David Hume, Thomas Paine, Maximilien Robespierre, Immanuel Kant, Charles Darwin, Benjamin Franklin, Thomas Jefferson, James Madison, and possibly George Washington, the last whose views on religion were enigmatic other than he was tolerant for all sects and that he made the assumption that religion supports public morality. Deism has faded from its glory days but remains alive in the United States, likely due to the pressure in much of the country to appear religious. It is hard to sever the umbilical cord.

Deism asserts that all the tools that we now have were provided by this impersonal God-force-being, starting with the creation of matter and the laws of physics. But, as with any unverifiable assertion, it too runs into problems. At what point did God leave? Did he leave immediately after creating mass and the laws of physics? Did he hang around long enough to create in order, life, reproduction, sex, instinct, consciousness, intelligence, and self-awareness?

All these are fitting subjects for debate and, of course, have been vigorously debated without a hint of a solution or agreement or evidence.

A scatological version of Deism is that the universe is God's effluvium or feces. That might explain better why he abandoned it or perhaps even buried it to let it rot and disintegrate on its own. And David Hume suggested that it is more likely that God was some generative, almost biological, force rather than a force of mind.

Thomas Paine insisted he was a Deist, but his inflammatory book, *The Age of Reason* (1794) might be called a primer for Atheists, for his strongest arguments were designed to shred organized religion and the bulk of its claims. Paine's scholarship was highly derivative, taken in good measure from predecessors such as Spinoza, but his eloquence was his own. Following the spirit of Spinoza, Paine stressed that God's book was the Universe rather than the Bible or any manmade book, which he considered the Bible and Quran, etc. to be. He showed the Bible to be full of violence, frequently immoral, and scathed it as being contradictory. All these features revealed the hand of man rather than the hand of God, and paled before the magnificence of the Universe.

"Do we want to know what God is? Search not the book called the Scripture, which any human hand might make, but the Scripture called the Creation."

One of Paine's wittiest and perhaps most accurate assertions is, "any system of religion that has anything in it that shocks the mind of a child, cannot be a true system." Another is that when the Devil carried Jesus to the top of the highest mountain to show him all the kingdoms of the world, none of the kingdoms of the Americas were mentioned.

Paine argued that Mystery, Miracle, and Prophecy were three means to impose religion on people. Mystery, other than the sense of wonder at all we see, Paine called "the antagonist of truth". According to Paine, moral actions and feelings follow logically from serving the order of the universe without any belief in a personal God. He stated that Mystery serves to bewilder the mind while Miracle (which would violate natural laws) serves to puzzle the senses. And what Miracle claimed for the past Prophecy claimed for the future. Paine saw it as much more likely that claimants for miracles were liars or delusional rather than that the events they related occurred [David Hume's argument], while self-proclaimed prophets couched their predictions in such a vague manner that anyone prone to give credence to their tales could.

Consider the prophecy of Isaiah 7: 14, "the young woman is with child and she will bear a son". Christians mistranslated the word, halma (the young woman) as a virgin, thereby allowing an injection of Greek mythology into Christianity. Furthermore, Isaiah did not prophesy a

future pregnancy because the young woman (likely his own wife) was already with child. But we are told that Jesus expressly saw and modeled himself as the fulfillment of Isaiah's prophecy.

Any deliberate action taken to fulfil a prophecy only says something about the person trying to fulfil it and not about the prophet or the prophecy. Say, for example, I predict that God's daughter will take the form of a young woman who will emerge from the ocean at Coney Island in a red bathing suit after a thunderstorm. Years later, a young woman reads this prophecy and, imagining herself to be its fulfillment, goes swimming in a red bathing suit at Coney Island during a thunderstorm, manages not to get electrocuted, and emerges after it. Centuries later her followers claim that the fulfillment of the prophecy proves she is God's daughter. This neither makes me a great prophet nor the woman divine. It only speaks to the beliefs of the young woman and her followers.

9.5 ATHEISM'S MOMENT IN THE SUN

The banner of atheism unfurled by the solitary and anonymous Jean Meslier was taken up next by the gregarious and famous philosophe and genial atheist, Baron d'Holbach. Almost everyone who knew d'Holbach described him as one of the most lovable, unassuming, and brilliant of men. He ran a salon that for years met twice a week. There, philosophes and other men of culture, believers or not, were welcome and discussed the latest ideas. Benjamin Franklin was among the many distinguished and famous guests. At the Salon the discourse on deep subjects was witty and might get intense, but led by the always amiable d'Holbach was always tolerant and never rancorous. The openly and sinfully rich D'Holbach was a secret philanthropist. He was devoted to his wife, and after she died young, he married her sister, and was devoted to her as well. This was a model man, whom all admired.

Unlike most of his fellow Philosophes, who either dared not or chose not to go beyond deism, the rage of the day, arguing that there was a Creator who left the Universe on its own like a clock that had been designed and wound, d'Holbach did not mince words about his atheism. But in his blatantly antireligious writings he did exercise caution by publishing all of them under other names, including his magnum opus, *The System of Nature* (1770), to which he assigned authorship to a man who had been dead 10 years.

D'Holbach wasted not a word to get to his point (but sounding close to Meslier).

"The source of man's unhappiness is his ignorance of Nature. The pertinacity with which he clings to blind opinions imbibed in his infancy, which interweave themselves with his existence, the consequent prejudice that warps his mind, that prevents its expansion, that renders him the slave of fiction, appears to doom him to continual error.... He quits the contemplation of realities to meditate on chimeras. He neglects experience to feed on conjecture, to indulge in hypothesis. He dares not cultivate his reason, because from his earliest days he has been taught to consider it criminal. He pretends to know his fate in the indistinct abodes of another life, before he has considered of the means by which he is to render himself happy in the world he inhabits...he pursues phantoms that resemble an ignis-fatuus, which at once dazzle, bewilder, and affright." *The System of Nature*

D'Holbach's stated aim was to destroy the delusions and terrors implanted in man from birth by tyrants and priests and replace them with reason so that, "he may become a virtuous, a rational being, in which case he cannot fail to become happy." This assumption, namely that reason accompanied by education would lead humans away from their irrational beliefs (and directly to happiness) was a dominant aspect of the Philosophes' thought and a direct outgrowth of the Scientific Revolution and the Enlightenment that followed.

As beneficiaries of the Scientific Revolution, most of the Philosophes and even many 'enlightened' theologians gave our rational veneer far more credit than it deserves and downplayed the far greater power of our irrational core. Thus, even those theologians who held to their faith felt compelled to use reason and logic to 1: reconcile nature and science with religion, 2: attempt to explain mysteries, inconsistencies, and contradictions in religious texts and doctrines and, 3: provide rationalizations for miracles and the ever invisible supernatural. Their tortured casuistry built labyrinths that boggled the mind but also provided atheists and deists of the Age of Reason and the Romantic Period with the strings or wings that led the way out.

Facts proved the faith in reason at least partly wrong. Since that time, near universal, and often secular, education has spread widely around the globe yet religion and belief in God, though diminished, remain firmly entrenched, certainly in the heartland of the United States. That is because beliefs are already established by the time children reach school age and continue to be reinforced by parents and the social milieu, which show the power of very early inculcation and continuous reinforcement of any belief. In countries such as China, where most parents do not

teach their children to believe in God and where the self-proclaimed Communist Government discourages such beliefs a large percentage of the population consider themselves atheists. And belief in Western Europe, though still substantial, is at an all time low, likely in good part because its citizens en masse have sought respite from their exterminating 20th century ideologies.

9.6 ENLIGHTENED FORAYS INTO PASSION

Given all the effusiveness over reason, there were prophets in the Enlightenment wilderness who recognized the primary power of the inherently irrational passions. David Hume, Jean Jacques Rousseau, Edmund Burke, and Immanuel Kant were leaders among the prophets who provided the clarion voices and themes for the next Age.

The skeptical philosopher, David Hume was up front about it. In his *Treatise of Human Nature* (1839) he insisted, "Reason is, and ought only to be the slave of the passions." Hume used surgical logic to dismantle philosophies of materialism and spiritualism, as well as free will and causality. He pointed out that we impose cause and effect upon events without proof because all we observe are sequences of events. Cause and effect are at best probable.

Hume's reasonings gave migraines to succeeding generations of philosophers and theologians; resolving Hume's analyses has, I think, been impossible; bypassing them, necessary. Hume, of course, never pretended to live by his philosophical cogitations – he lived like a normal human being complete with emotions and the assumption of cause and effect – but neither he nor anyone else could dismiss his stream of logic that dismantled so much of philosophy and religion.

As for religion, Hume dismissed or disparaged every aspect of it while maintaining the pose of Deist for safety's sake. His assessment was that as religion evolved from polytheism to the monotheisms of Judaism, Christianity and Islam, intolerance grew and mandated hypocrisy. Hume argued that morality was not implanted by God but was based entirely on our primal social instincts. He insisted that miracles be judged by their probability. What was more likely, that a dead person returns to life or that the person who swears to it is lying, deceived, or deluded?

"It is strange...that such prodigious events [miracles] never happen in our days. But it is nothing strange...that men should lie in all ages." *An Enquiry Concerning the Human Understanding* (1748).

Noting the myriad sufferings, imperfections, and perpetual war in the animal world, Hume gave more than a hint of Darwin by arguing that nature's chaos and misery, culminating in inevitable death, made a mockery of the idea of intelligent design. Instead,

"The whole presents nothing but the idea of a blind nature, impregnated by a great vivifying principle, and pouring forth from her lap, without discernment or parental care, her maimed and abortive children....Why may not an orderly system [such as a spider web] be spun from the belly as well as the brain." *Dialogues Concerning Natural Religion* (1751).

Hume's friends begged him not to publish such blasphemous material. Hume, often assailed by religious leaders, was convinced; he allowed his reason to overcome his emotions and ego, so the *Dialogues* was only published in 1779, three years after Hume's death.

Edmund Burke, like David Hume, proceeded with sober rationality to demonstrate the primacy of emotion over reason, though as the great spokesman for political conservatism he deeply preferred Reason. Burke stressed in his essay, *The Sublime and Beautiful* (1757) that "Terror is in all cases...the ruling principle of the sublime." And what rouses terror in us is anything that possesses qualities such as immensity, obscurity, darkness, power, magnificence, sudden loud noise, and pain. All of these overwhelm and stupefy our senses so that terror overcomes reason and proves that emotions are primary.

Jean Jacques Rousseau, swaddled from birth in the arms of the Alps surrounding his native Geneva, elevated love of the sublime beauty of the natural world to what would become a central theme for the Romantics. Foremost among the Enlightenment's rebels, Rousseau at every turn placed Heart over Mind, Emotion over Reason, the Irrational over the Rational and, the Subconscious over the Conscious. Rousseau lined up these priorities as supports for religion, but he was no reactionary. Given his heretical views including that "Man is born free" and pure, (denying Original Sin) both the Catholic Church of France and the Calvinist Church of Geneva sought to squelch him so that he was forced to take refuge in a series of places, where he was alternately celebrated and hounded out.

Immanuel Kant, the philosopher most responsible for transforming the Enlightenment, was one of history's great polymaths. Terrorized as a child by his mother's Pietist Lutheran upbringing, he became a geographer and scientist, explaining 1: why the Moon's rotation is locked, 2: that the planets form by accretion, and, 3: Saturn's rings are

made of rocks and ice (all of which are testimony of God's greatness). His scientific knowledge and insight, his long experience as a revered teacher, and wide-ranging, mostly unbiased mind made his thoughts on education, society, religion, and philosophy far more interesting, incisive and profound.

Before going further, I must confess that while I have read Kant's **On Pedagogy**, and snippets of other works, my knowledge of his two most revolutionary philosophical works, the *Critique of Pure Reason* (1781) and the Critique of Practical Reason (1788) is based on reviews and analyses (including Will Durant's), with selected quotes. I have avoided reading these two Critiques for two reasons. First, I took to heart the warnings about their length and opacity. Second, and far more important, after I read David Hume's An Enquiry Concerning Human Understanding I found his skeptical analyses and criticisms of religion, causality, etc. to be logically impregnable. I automatically assumed and still do that any attempt to disprove them is doomed to failure, and it would be a waste of my time to dedicate any effort on such an abortive attempt. Far better that I spend my time trying to learn about the world around me, whose existence I take for granted, and whose beauty and poetry astound me, than trying to ferret out logical but sterile certainties about whether it exists, which can bear no fruit.

One of Kant's great scientific contributions to philosophy, which he elucidated in the *Critique of Pure Reason* (1781), was to show that our senses, such as vision, that allow us to make observations of the world around us, not only suffer from physical limitations of the sense organs, but also from the brain's processing operations (for example, the optical illusions described in §8.3). Thus, the human brain is designed to organize sensations into perceptions, perceptions into conceptions, conceptions to science, and ultimately, to wisdom. Kant's ideas rested upon two foundations.

1: The brain is not a blank slate or tabula rasa (asserted by John Locke), but has some sort of wiring or template that determines how we think.

Kant asserted that these mental facilities are a priori, but if he meant it in the same sense that mathematics is a priori then that is a great, unfounded leap. Clearly though, Kant would have loved living today with the findings of neuroscience.

2: We know the external world only after it has been mediated by our senses.

Although this is a tautology (i. e., a self-contained logical statement), taking the idea to its logical extreme means that we cannot be sure that anything exists outside our senses, which is preposterous, as Kant himself (like David Hume) would freely admit. But Kant also applied this tautology to 'prove' our lack of certainty of the existence and nature of God. This caused him trouble with religious authorities after his liberal protector, Frederick the Great, died.

This is where things stood after Kant completed the *Critique of Pure Reason* (1781). Then, presumably with the hope of restoring on moral grounds the underpinnings of religion he had just destroyed on logical grounds, Kant switched to moral considerations in the *Critique of Practical Reason* (1788).

Kant spent an inordinate amount of time and effort searching for logical certainties and moral absolutes. Why? Because for Kant all roads are paved with morality and lead to God. Nietzsche dismissed this aspect of Kant by disparaging his 'theologian blood'. To cut to the chase, the reviews and criticisms plus my reading of Kant's *Pedagogy* convinced me that despite his extraordinary intellectual growth, Kant remained umbilically tied to the religious intimidation of his infancy and youth.

"Religion is the law in us, in so far as it derives emphasis from a Law-giver and a Judge above us. It is morality applied to the knowledge of God....The divine law must at the same time be recognized as Nature's law, for it is not arbitrary. Hence religion belongs to all morality....The law that is within us we call conscience." *Pedagogy*, p. 112-13.

This quote sounds like Thomas Aquinas's 'proofs' of God in which Kant equated God with the moral imperative.

"We must hearken to God, rather than to man,' signifies no more than this, viz. that should any earthly legislation enjoin something immediately contradictory of the moral law, obedience is not to be rendered."

Why this attempt to glue religion and God to what is perceived as a 'good' or 'moral' aspect of human behavior? And are moral absolutes only what can be proven by the mathematical and logical proofs by contradiction following the tradition of Socrates?

No! For, moral law is not absolute – it is a law of survival that evolved within most of us (for there are exceptions such as sociopaths) as a consequence of needing to live in a clan or group. And certainly,

conscience is weak and tentative, as anyone knows who has filched a bar of soap from a motel or a sugar or coffee packet from a restaurant.

Kant was no Pollyanna. He not only recognized deviance and unsocial, competitive behavior in human nature but praised it as part of the wisdom of Nature that enables progress ala Adam Smith's *Wealth of Nations* (1776). We can now go much further, thanks in good part to Charles Darwin and Alfred Wallace. Natural selection, and not some absolute moral imperative, has made us for the most part cooperative and obedient conformist drones, but also has imparted in us elements that make some of us geniuses, innovators, artistic creators and others, rebels, revolutionaries, rascals, and degenerates. Nonconformists make drones squirm and feel uncomfortable, but nonconformists are the saviors of the species at times when rapid and drastic changes of the environment would doom a species of rule-bound conformists to extinction.

Despite Kant's praise for nonconformists, he consistently maintained his moral sense or law as 'a priori'. This sense and Kant's kind, modern sounding views on education are revealed in the following delicious quotes from his treatise *On Pedagogy*.

"Children should learn from their youth up to detest vice – not merely on the ground that God has forbidden it, but because vice is detestable in itself. If children do not learn this early, they are very likely to think that, if only God had not forbidden it, there would be no harm in practicing wickedness." p. 20-21.

"Understanding is the knowledge of the general. Judgment is the application of the general to the particular. Reason is the power of understanding the connection between the general and the particular." p. 71

"The best way to understand is to do." p. 80.

"If we wish to establish morality, we must abolish punishment. Morality is so sacred and sublime that we must not degrade it by placing it in the same rank as discipline. The first endeavor in moral education is the formation of character. Character consists in readiness to act according to maxims." p. 84.

"Punishments inflicted with signs of anger are useless. Children then look upon punishment simply as the result of anger, and upon themselves merely as the victims of that anger." p. 89.

(Alas, how I have offended here!)

"A religion which makes people gloomy is a false religion; for we should serve God with a joyful heart, and not of constraint." p. 92.

"A child should learn early to reverence and respect the rights of others." p. 102.

"We only excite envy in a child by telling him to compare his worth with the worth of others." p. 105.

Kant was far too independent a thinker to endear himself to the religious community. He would purge religion of its punitive and authoritative aspects. Despite that, he remained too emotionally tied to religion's pietistic, moral imperatives branded in his youth to ever think of giving them up. Indeed, he almost demanded morally perfect behavior — "There is no single instance in which a lie can be justified." p. 104. Such perfection has its shortcomings. There can be no white lies. There can be no surprise parties. There can be no fairy tales — other than God, of course. "All novels should be taken away from children." p. 73. Kant, like all designers of utopias, revealed he was at heart a censor. However, if we follow Kant's example to a tee, we have no need of worry. Why? For if we were all as sterile as Kant there would soon be no more children. Then, within two generations this admirable human race would, like the passenger pigeon, be doomed for extinction, but unlike the passenger pigeon, without a shot being fired.

And so, we pass on from Kant, but as we do so we note that in attempting to 1: include psychology and science in philosophy and, 2: reconcile reason with idealism Kant broadened the way of thinking of philosophers and theologians who followed. That plus the revived recognition of the primacy of the emotions over the intellect led Romantics and philosophers alike to include psychology in their interpretations and analyses of religion, faith, and belief, which psychology would do its best to kill.

I must mention one more notable atheist who acknowledged, indeed, immersed himself in the primacy of the emotions in the years leading up to the French Revolution. That was the Marquis de Sade, from whose name was born the word, sadism. The Marquis, whose early education included priestly beatings more than likely coupled with sexual abuse, helped convert him not only into a sadist but an atheist. In his *Dialogue between a Priest and a Dying Man* (1782), de Sade recast Meslier's

arguments almost verbatim in dramatic format, but used them to champion his, shall we say, amatory nature and exploits.

The Marquis de Sade's atheism and sadism signaled France's problems as the 18th century wound down to its chaotic conclusion. Below the surface there was a whole lot of shaking going on. The rising Bourgeoisie Middle Class, many of whose members remained religious but, given a voice by the Deist and Atheist Philosophes and even the emotional Rousseau, did their best to undermine Monarchy and the Church. Almost everyone, it seems, was bent on overthrowing authority. And with the growing chaos, any excuse or reason was sufficient for the Bourgeoisie to confiscate as much as possible of the outlandish wealth and lands of the monarchy, the nobility, and the Church.

It was when nonbelievers and believers alike dismantled the ancient authorities of Church and Monarchy without providing a stable replacement authority that they washed away civil society's surface veneer of decorum, and set loose our irrational nature. The result was that havoc and misery, not virtue and happiness prevailed until the populace was so exhausted by the French Revolution and the Reign of Terror that it reinstated the authoritarian rule of law and order.

Chaos ensues when Atheism, or indeed, any ideology or religion is accompanied by reckless abandon, debauchery, and sadism. Civilization flourishes when Atheism or any government, secular or religious is accompanied by restraint, kindness, and gentility. Thus, Atheism per se is never the root of revolution or of society's problems.

How is revolution triggered? An excellent geologic analogy is the eruption of Mount S. Helens. Early in 1980 a reservoir of magma and compressed gas under the mountain began welling up toward the surface. On 18 May 1980 an earthquake shook the mountain so violently that a huge chunk of its north slope, lubricated by melted snow, slumped in a gargantuan landslide. That chunk was the cap that held the magma in check; once it slid off the depressurized mix of magma and gases had the strength to explode, obliterating the forest for over 6 miles.

The case is the same with revolution. Complaint, protest, and revolt arise only after the overwhelming pressure of repression is reduced enough to provide them opportunity, and when poor conditions are ameliorating and improving enough to inflate expectations beyond reality. Then a tiny match can spark a conflagration.

And so it was that on 14 July 1789 the shaking in France led to the storming of the Bastille, and the volcano of Revolution erupted in full bloom. Once the Revolutionary forces were set loose every horror that had previously been committed in the name of God and King were now executed in the name of Liberté, Égalité, Fraternité.

Oh, the ironies of history and of human psychology! Atheism and Deism, fraternal twin offspring of the Age of Reason and minority beliefs that normally oppose authority, didn't do well when they became for a brief moment the unfettered authorities. They reached their zenith during the Reign of Terror, with compulsory Atheism in command first as the loony *Cult of Reason*, the world's first state sponsored atheistic religion. That didn't last long. Robespierre turned the tide back in the direction of God with his equally insane compulsory deistic *Cult of the Supreme Being*. Each of these two closely related but mutually mistrusting revolutionary groups wallowed in their own orgies of guillotining and other mass executions. The Terror drew to its exhausted close after the wily atheist mass-murdering executioner Joseph Fouché turned the tide against Robespierre, who in turn was guillotined.

When the dust finally settled the fiscally decapitated Church and monarchies once again set about attempting to spread their tentacles back over the face of Europe. But God was on the ropes, and without God there can be no divine right of kings. So, even though the Monarchy in France was briefly restored with the sputtering finale of Louis XVIII after Napoleon's fall, it was on its way out.

CHAPTER 10

THE DEEPER LAYERS OF BELIEF

10.1 THE SUBLIME, SUPERMAN, AND SOCIETY

New patterns were etched in the settled dust. The Reign of Terror helped expose the frailty of Reason when faced with the much greater power of our irrational passions, and thereby made prophets of Hume, Burke, and Rousseau. The Romantics of the early 19th century took the baton from these prophets, welding and apotheosizing the concept and adulation of the Sublime to displace or even replace God.

The Vision of a Sublime Wilderness was further clarified by increased pollution of the environment. The Industrial Revolution brought mixed blessings. Philip de Loutherbourg's painting, *Coalbrookedale by Night* (1801) showed how diabolical furnaces of industry lit the sky in nocturnal competition with the Sun.

The Sublime Wilderness was being polluted, yes, but the steam engine exhibited such power that Man could feel like a God. Add Napoleon's outrageous military triumphs over Europe's monarchies and the new, still inchoate cults of genius and the Superman replaced God and the Divine Right of Kings. What need is there for God when we are the geniuses, the supermen, and when our power vis-à-vis technology has become gargantuan? And so, atheism inundated the floodplains of men's minds and souls, setting many adrift from religious childhoods and educations.

At the tender age of 18, Percy Bysshe Shelley, already a poet, was expelled from Oxford for his not so anonymous essay, *The Necessity of Atheism* (1811). Largely repeating arguments of Meslier and d'Holbach, Shelley wrote,

"Every time we say that God is the author of some phenomenon that signifies that we are ignorant of how such a phenomenon was able to operate by the aid of forces or causes that we know in nature.... All religious nations are founded solely on authority; all the religions of the world forbid examination and do not want one to reason."

Friedrich Schleiermacher (son of a Calvinist Pastor of the Prussian army), who, like Kant, clung to the faith while waging war with his own

personal skepticism, developed the field of 'higher' biblical criticism or hermeneutics. 'Lower' biblical criticism seeks inconsistencies in and between the texts. Higher criticism seeks to gain an understanding of religious texts by ferreting out the social attitudes and psychological orientations of the authors. Higher criticism is more difficult to verify and to agree upon, as are most sociological or psychological arguments, but it is potentially far more damning to religion if it shows that belief in God is a product of our minds and hence a figment of the imagination.

Arthur Schopenhauer, a godless disciple of Immanuel Kant also influenced by Napoleon, centered his philosophy about the primacy of the will over the intellect, in *The World as Will and Representation* (1818). In acknowledging the power of the will as a life force that affects thought, Schopenhauer advanced the application of psychology to philosophy and religion.

David Strauss (sent at age 12 to a theological seminary) advanced the cause of atheism in his *Life of Jesus, Critically Examined* (1835). Believers accepted the miracles of the New Testament at face value. Skeptics of the Age of Reason argued that the authors of the New Testament gave miraculous interpretations to natural events. Strauss claimed that the writers of the New Testament were out and out propagandists intent on proving that Jesus fulfilled the Messianic claims made about him, and so, tacked mythological properties on a man whose historical existence, character, and ideas were shadowy at best.

Albert Schweizer was later to write in the *Quest for the Historical Jesus* (1905), that Strauss "filled in the death-certificates of a whole series of explanations," of Jesus's miracles and thus, the search for the historical Jesus could be divided into "the period before David Strauss and the period after David Strauss." Needless to say, Strauss's book created a furor and was opposed by almost everyone, but served as an inspiration for generations of atheists.

Ludwig Feuerbach was one of those inspired by Strauss. Feuerbach initially aimed for a career in the Church, but was seduced by philosophy. He then used psychology to take up the banner of atheism in his magnum opus, *The Essence of Christianity* (1841). Its thesis is that belief in God is the outward expression of inner feelings and thoughts, the external projection of man's inner nature, i. e., externalizing (§5.2-5.4.). This concept links to that of the Superman, in that it makes each of us God, and thus self-sufficient.

To Feuerbach Christianity represented an advance over Judaism in that it gave primacy to our innate feelings over rules. We are progressing towards Atheism. Once we are Supermen we will no longer externalize our great internal qualities. But now, many of our problems stem from failing to recognize that our internal feelings are the sole reality concerning God. However, humanity is evolving.

"God is the highest subjectivity of man abstracted from himself.... per se, his relinquished self....Religion is the disuniting of man from himself....Religion is human nature reflected, mirrored in itself....What yesterday was still religion is no longer such to-day; and what to-day is atheism, to-morrow will be religion."

When we externalize we diminish and pervert ourselves through religious practices that transfer our perceived good qualities away from ourselves. First, sacrifice requires we give away the best of us or in us. With the Jews, the animal sacrificed had to be unblemished, perfect. And when Catholic monks and nuns pass up sexuality they sacrifice what is perceived as the highest value! Second, the Passion of Christ is a transmutation of the pain felt in love. "Love attests itself by suffering.... To suffer is the highest command of Christianity." Third, the Resurrection of Christ transmutes to our own personal guarantee of eternal life...

"the satisfied desire of man for an immediate certainty of his personal existence after death—personal immortality as a sensible, indubitable fact."

And Revelation is the clearest form of religious illusion.

"The religious mind...has the immediate certainty that all its involuntary, spontaneous affections are impressions from without, manifestations of another being. The religious mind makes itself the passive, God the active being.... The belief in revelation exhibits in the clearest manner the characteristic illusion of the religious consciousness."

Feuerbach pointed out the inevitable contradictions of all [but mainly Catholic] beliefs and rituals. Isn't the Trinity – the union of man's threefold nature, mind, will, and love – polytheism? And, is the wafer the body of Christ or a wafer? Is the wine His blood or wine? Is the water of Baptism water or not? Even love and faith are contradictory.

"The essence of religion, its latent nature [revealed by love], is the identity of the divine being with the human; but the form of

religion, or its apparent, conscious nature [faith], is the distinction between them."

It is in the contradiction between love and faith that we must rise above religion. Thus, Feuerbach returns to the idea of Spinoza, Meslier, other atheists, and the Philosophes that morality must be human based because,

"Wherever morality is based on theology, wherever the right is made dependent on divine authority, the most immoral, unjust, infamous things can be justified and established."

The Essence of Christianity proved to be a watershed document in the history of religion and atheism, inspiring immense controversy. It was an illustrative document of the ferment of the first half of the 19th century, with its repeated uprisings against the entrenched authorities. And as the Industrial Revolution helped transmute Romanticism to other creeds Atheism joined hands with the new, rising creeds of Socialism and Communism.

Karl Marx, child of Romanticism and the Industrial Revolution, was an atheist from an early age. Marx's secular Jewish father converted to Christianity to bypass economic barriers for Jews in Germany emplaced both de jure and de facto (by law and by actual practice), that were further raised by the abrogation of Jewish Rights in Prussia following Napoleon's final defeat in 1815.

Marx ignored or downplayed innately greedy and aggressive aspects of human nature, as all confirmed Socialists and Communist must, and blamed the world's ills on the corrupting impact of private property, which stresses having over being. "Private property has made us so stupid and partial that an object is only ours when we have it." Because we cannot appreciate anything unless we have it, we have made ourselves needy, and "The needy man, burdened with cares, has no appreciation of the most beautiful spectacle." *Economic and Philosophic Manuscripts of 1844*.

Marx reworked and amplified Georg Hegel's concept of Alienation to describe man's disjoint place in modern society. He blamed the division of labor under Capitalism as the root cause of the destruction of Man's individuality. Man, segmented by the isolating world of Capitalism, sought in desperation to restore his wholeness and, while in the resulting pain, found consolation and a sense of community in religion.

"Religious suffering is, at one and the same time, the expression of real suffering and a protest against real suffering. Religion is the sigh of the oppressed creature, the heart of a heartless world, and the soul of soulless conditions. It is the opium of the people."

"The abolition of religion as the illusory happiness of the people is the demand for their real happiness. To call on them to give up their illusions about their condition is to call on them to give up a condition that requires illusions. The criticism of religion is, therefore, in embryo, the criticism of that vale of tears of which religion is the halo." A Contribution to the Critique of Hegel's Philosophy of Right, Karl Marx (1843).

In *Marx's Concept of Man* (1961), Eric Fromm argued that Communism was to Marx a form of secular Messianism that would eliminate acquisition of property as a goal of humanity and, with the new perspective and knowledge gained from the conquest of nature by science and technology, restore humanity's innate purity at a new, higher level – a humanistic Second Coming or return to the Garden of Eden. In the process, Communism would eliminate Capitalism's economic enslavement, its dehumanizing mindless, soulless labor and, at last, the need for the fiction of God and religion. But Marx recognized that such a transformation was fraught with pitfalls.

"What a contradiction it would be if, the more man subjugated nature by his labor and the more the miracles of the gods were rendered superfluous by the miracles of industry, he should abstain from his joy in producing and his enjoyment of the product.... Atheism and communism are...the actual realization for man of man's essence." p. 33, 72.

Marx's incendiary *Manifesto of the Communist Party* appeared just as Europe's Revolutions of 1848 were erupting. The revolutions were squashed so Marx's ideas had to smolder for 70 years before bursting into flame in Russia. The subsequent spread of Communism, in a totalitarian form Marx abhorred yet fearfully anticipated, did produce widespread atheism, but only as an ideology imposed with varied degrees of severity and brutality rather than evolving naturally. Atheism is still widespread in pseudo-Communist China, where none of the JCI trio ever got more than a toehold, but there has been a resurgence of belief in God and Christ and life after death, along with the reestablishment of alliances between the majority religions and the governments in the nations that emerged after the collapse of the Soviet Union in 1989.

10.2 EVOLUTION VS THE BIBLE

Even before Marx's Communist and atheistic rhetoric reverberated to the rafters, a theory that would give religion an even more enduring migraine had been evolving quietly in the halls of Science. Charles Darwin had been working *On the Origin of Species by Means of Natural Selection* (1859) for more than 15 years when he was prodded to hurried publication after Alfred Wallace proposed the almost identical theory in 1858. This was the seminal moment when Evolution drew its red line in the sand against the Biblical story of Creation.

The idea of evolution by natural selection was prodded by Pessimism as a reaction against the Pollyanna optimism philosophy of Gottfried Wilhelm (von) Leibniz. In his 1714 essay on Monadism (elemental entities), Leibniz asserted that God, the ultimate monad, created what is "the best of all possible worlds," for if it was not the best possible then He could not possibly be omniscient, benevolent, and omnipotent. How logical and how true is this reasoning of Leibniz, and how comfortable a concept, the maximization principle, to the coinventor of the Calculus with its technique for finding maxima (and minima) of functions. But, of course, the logical alternatives in Leibniz's reasoning included either that there is no God or that the God who made the Universe lacked at least one of the three abovementioned ascribed qualities.

How about beneficence? One horrific event called Leibniz's optimism into question, at least for many Christians. On Saturday, 01 November 1755, the day of the Feast of All Saints, a violent earthquake levelled Lisbon, Portugal, the holiest city in all of Catholic Christendom, setting off a tsunami and fires and killing 40,000 to 50,000 people. How could this possibly happen in the best of all possible worlds guided by a beneficent deity? Largely in response to the event, six-year old Goethe began to question his faith and Voltaire penned his satirical and pessimistic response, *Candide* (1759).

Thomas Malthus, a curate of the Church of England, added a new pessimistic idea. Malthus was brought up in a cultured home – Rousseau was one of his father's friends. In the darker days in the wake of the Reign of Terror Malthus, who included mathematics in his studies, published the first edition of the *Essay on the Principle of Population*, (1798). This pessimistic assessment of limitations to human well-being and happiness is based on the observation that, when unimpeded, population tends to increase geometrically (e. g. doubling, $2 \rightarrow 4 \rightarrow 8 \rightarrow 16 \rightarrow 32$) but food production can only increase arithmetically (e. g. increasing by 4, $2 \rightarrow 6 \rightarrow 10 \rightarrow 14 \rightarrow 18$). Thus, population eventually outruns production, causing subsistence of many and starvation of at

least some. War and disease can cut population enough so that the reduced population may thrive for a while but will soon reproduce enough to drive the population once again to starved excess. Malthus's theory was seminal among the influences that inspired both Charles Darwin and Alfred Wallace to formulate their theories.

William Paley, an English Clergyman, did his best to resuscitate Leibniz's best of all possible worlds in his book, *Natural Theology* (1802), a primer on Intelligent Design. Here was a new, valiant effort to overcome the contradictions involved in asserting an all-knowing, allgood God in a world with evil. Does evil exist? Of course, it's undeniable! But despite disease and death, Paley insisted that the evil that exists is the absolute minimum compatible with natural law, including Malthus's laws on population. For the most part however, life is happy, and the universe is beautiful, benevolent, and designed with just enough imperfections to show us how marvelous it is, and the optimum needed to point to the wonder of God. God, of course is the intelligent designer, creator of the universe, the best of all possible watchmakers of the best of all possible watches.

The young Darwin, who studied to and almost became a clergyman, was so taken by Paley's *Natural Theology* that he practically memorized it and, for several years believed every word of it. Indeed, Paley's book is beautifully written and expertly argued with much knowledge of biology by a gentle, high principled man (a preincarnation of Mr. Rogers) who supported the American Revolution, vigorously opposed slavery, and frowned on the inhuman excesses of the French Revolution. Paley tried valiantly to hold onto the Old Time Religion. But even as he did, he was forced to acknowledge the nascent revolution in geology being excavated all around him.

With this background we move from the glittering gutters of philosophy and theology to the plain promenade of science.

Revolutionary times engender revolutionary ideas and changes in all fields. The French Revolution not only helped give birth to Romanticism in Art, Music, and Literature, it opened a new period in geologic exploration and discovery that, as we have seen in §7.4, dismantled Biblical chronology and creation stories. To that, it added paleontology, biology, and comparative anatomy.

In 1779, at the age of 10, Georges Cuvier discovered and fell in love with the world of fossils. He began studying natural history, specializing in mammals and birds, and adding geology. In 1796 he broke upon the scene with two revolutionary articles that established the field of

comparative anatomy and advanced the nascent field of paleontology. In these articles, Cuvier showed that 1: African and Indian Elephants and Mammoths are distinct but related species and, 2: tree sloths are related to extinct Giant Sloths.

Since most fossils are woefully incomplete, Cuvier used his knowledge of anatomy to extrapolate from a few bones to what the entire skeleton and the animal with flesh must have looked and behaved like, and what species it might have been related to. Ironically, Cuvier, the man most responsible for providing the critical concepts and techniques as well as damning facts for piecing together the jigsaw puzzle of life's history on Earth that would prove evolution, maintained to the day he died (of Cholera in 1832) that species might go extinct, but all were created immutable by God.

It is important to note here that long before evolution was recognized as a possibility even orthodox believers had to be troubled by the anatomical similarities between us so-called unique humans and other creatures in the animal world. Way back in 1555, Pierre Belon, called by Ivan Pavlov the "prophet of Comparative Anatomy", published *The Natural History of Birds* which contained drawings of the skeletons of a human and a bird on facing pages, showing the homologous bones. And the homologies between humans and other simians are much closer.

At the end of the 18th century, knowledge of Earth's history of life was so piecemeal it was still almost possible to interpret extinctions as results of the Biblical Flood. And facts be damned, theologians and religious authorities had a vested interest in maintaining their prejudice of fixed species, sensing danger to their authority and legitimacy. For, if all plant and animal species other than humans could evolve, and if the anatomy and physiology of animals, especially primates, so closely matched that of humans, it would be natural to extend evolution to humans.

Despite glaring gaps in the fossil record, which at that time did not provide a single example of evolution into a new species, the few geologists had by the late 1700's assembled enough pieces of life's jigsaw puzzle to extrapolate to the ancient idea that life had evolved over the vast expanse of geologic time. Thus, in 1796 Erasmus Darwin, Charles's paternal grandfather, proposed that life on Earth evolved from a single tiny filament.

"Would it be too bold to imagine, that in the great length of time, since the earth began to exist, perhaps millions of ages before the commencement of the history of mankind, would it be too bold to imagine, that all warm-blooded animals have arisen from one

living filament, which THE GREAT FIRST CAUSE endued with animality... possessing the faculty of continuing to improve by its own inherent activity.... This idea of the gradual formation and improvement of the animal world seems not to have been unknown to the ancient philosophers." **Zoonomia** (1794–1796)

One means of this improvement is "that the strongest and most active animal should propagate the species". Erasmus clung to the idea that the world was created by God but noted that life appeared as "one great slaughterhouse, one universal scene of rapacity and injustice".

Evolution (like revolution) was in the air. In 1800, Jean Baptiste de Monet Lamarck, who coined the term Biology and previously thought species to be fixed, became convinced that species did evolve, though much of his fame is due to his (largely) mistaken attribution of evolution to characteristics acquired during the parents' lifetime. Lamarck's work and advocacy helped stimulate the debate and research on evolution.

Geology and fossil hunting became crazes in the first half of the 19th century, drawing hundreds, and then thousands to its service, who filled many pieces of life's jigsaw puzzle. It soon became undeniable that there had been many extinction and appearance events, and it also began to appear that there might be considerable continuity in the great pageant of life. Dinosaur fossils were unearthed in the sedimentary sequence below that of mammals, leading Cuvier to declare that an Age of Reptiles preceded the Age of Mammals. Other geologists built on the work and geologic maps of William Smith to construct a geologic time scale, which John Phillips assembled in almost complete modern form in 1841.

What caused all these extinctions? They could not be due to a single Noah's flood, so multiple floods were sometimes invoked. Then a new candidate arose – the Theory of Ice Ages. How did this theory arise? Let's encase it in a story.

In 1780 Luigi Galvani touched an electrically charged scalpel to the sciatic nerve of a skinned dead frog's leg. A spark flew and the leg twitched. This critical experiment planted the seed for the idea that electricity could bring life to inanimate matter. A signal geological event in April 1815 then linked animation and ice ages. That was the eruption of Tambora, on one of the Lesser Sunda Islands of Indonesia.

Tambora was possibly the largest volcanic eruption in the last 10,000 years. Its veil clouded the atmosphere and shielded the ground from the Sun, producing spectacular sunsets and twilights (which inspired the painter, J. M. W. Turner to paint vivid sunrises and sunsets), and cooling the climate so much that 1816 became known as the "Year Without a Summer".

During the summer of 1816, several young writers vacationed in the Swiss Alps. During hikes on the few days of good weather they witnessed grinding Alpine glaciers advancing. But many days were so dismal they were trapped indoors. According to Mary Shelley...

"I passed the summer of 1816 in the environs of Geneva. The season was cold and rainy, and in the evenings we crowded around a blazing wood fire, and occasionally amused ourselves with some German stories of ghosts, which happened to fall into our hands. These tales excited in us a playful desire of imitation. Two other friends and myself agreed to write each a story founded on some supernatural occurrence."

John Polidori wrote *The Vampyre* (1819), creating that now tiresome, endlessly repeated genre. Mary Shelley, recalling Galvani's experiment linked it to the possibility that life might be created from inanimate matter. That, combined with the oft dismal weather and the visibly and audibly advancing Alpine glaciers, led her to conceive *Frankenstein*, the first science fiction novel, whose monster was inured to cold and leapt across glaciers with impunity.

The advancing glaciers also caught the attention of scientists. In 1816, Switzerland's Giétro Glacier advanced so far that its head crossed a valley and blocked its river. A growing lake, impounded by the ice dam, grew to menacing proportions. A similar ice dam had burst in 1595, drowning 140 people downstream. The Swiss engineer, Ignaz Venetz was commissioned to drill a canal through the glacier to reduce the magnitude of the impending flood. His drilling reduced the lake, but not enough. The ice dam burst in 1818, drowning 44 people.

Venetz observed some geologic features around the Swiss glaciers and was informed that they were also observed many miles from the Alps. These features, which had long been observed and linked to alpine glaciers by other scientists and for centuries by local residents included 1: moraines, ridges of rubble plowed by glaciers and, 2: glacial erratics, huge boulders displaced great distances from their origin. They led Venetz to conclude that much of Northern Europe was once covered by glaciers, an idea he expressed in 1821 in the first draft of *Mémoire sur les Variations de la température dans les Alpes de la Suisse*, which appeared in final form in 1833.

Venetz was at the head of a growing coterie of scientists who were concluding that glaciers had once been more widespread. At a lecture in 1829, Venetz convinced Jean de Charpentier, who in turn lectured on his own version of the theory in 1834. Independently, Karl Friedrich

Schimper, who was first (in 1837) to name Ice Ages, concluded in 1835 that ice had once caused an 'obliteration'. In the summer of 1836, Schimper and de Charpentier led a doubting colleague, Louis Agassiz into the field. Agassiz then beat his colleagues to publication (without due acknowledgement) in his *Étude sur les Glaciers* (1840). Agassiz, a convert much like Paul, then became the chief advocate for the idea that there had been multiple, huge ice ages. Like all revolutionary ideas, the Ice Age Theory took time to be widely accepted, but it soon competed for floods as a cause of at least some extinctions. Recall from §7.4 that varves were later used to disprove the literal Biblical chronology.

In 1831, nature loving Darwin, knowing nothing about Ice Ages or evolution, still orthodox, and with a copy of Paley in hand, or at least in mind, set off on the Beagle for the voyage of exploration and discovery that would change his life and the world. Though he retained his orthodox religious views during the voyage, he slowly amassed data that would come to perplex and trouble him and cause his views to evolve. Toward the end of the voyage he began to doubt both the fixity of species and the view of nature as beneficent.

One gratuitously cruel animal behavior particularly troubled Darwin about the idea that this is the best of all possible worlds God could create and still make it conform to natural law. The ichneumon wasp injects its eggs into caterpillars it paralyzes. When the eggs hatch, the wasp larvae eat the caterpillar alive. Indeed, nature abounds with examples of such gratuitous cruelty, such as cats toying with mice before killing them.

Darwin was well-regarded as a naturalist and geologist even before he returned to England because of the collections and notes he had sent on ahead. Upon his return, he interacted with many scientists including Charles Lyell. The ornithologist John Gould showed Darwin that he had misidentified some of the birds on the Galapagos as wrens and blackbirds, while in fact they were among 12 separate species of finches on the different islands. The striking differences between these species of finches was one of the crucial pieces of evidence that jumpstarted Darwin on the path to evolution by means of natural selection.

Reading Malthus's *Essay on the Principle of Population* provided Darwin with the critical spark, as he recalled in his Autobiography.

"In October 1838, that is, fifteen months after I had begun my systematic enquiry, I happened to read for amusement Malthus on Population, and being well prepared to appreciate the struggle for existence which everywhere goes on from long-continued observation of the habits of animals and plants, it at once struck me that under these circumstances favorable variations would tend

to be preserved, and unfavorable ones to be destroyed. The result of this [process of natural selection] would be the formation of new species. Here, then, I had at last got a theory by which to work..."

From that point, Darwin set to work in earnest. He knew that in evolution he had a tiger by the tail. His hesitancy to publish was reinforced in 1844, when Robert Chambers published his anonymous popular science book, *Vestiges of the Natural History of Creation*, whose wide circulation was due in part to the fact that it was immediately condemned by conservative Christian figures such as the orator Bishop Samuel Wilberforce. This was the same Wilberforce who would in 1860 confront Thomas Huxley in a famous debate on Darwin's theory that only many years later was scripted (by Huxley and friends) in Huxley's favor.

Wilberforce: [Might I enquire] whether you were descended from an ape on your grandmother's side or your grandfather's?

Huxley (Aside to Sir Benjamin Brodie): The Lord hath delivered him into my hands.

Huxley (Aloud): If the question is put to me would I rather have a miserable ape for a grandfather or a man highly endowed by nature and possessed of great means of influence and yet who employs these faculties and that influence for the mere purpose of introducing ridicule into a grave scientific discussion, I unhesitatingly affirm my preference for the ape.

There were several less eloquent and likely more accurate versions of Huxley's response, but the general rendition of the encounter was validated and came to have enormous impact in support of the theory of natural selection. Not universal impact, mind you, for we are still saddled with 'Intelligent Design'.

10.3 GOD IS DEAD: SUPERMEN IN ACTION

Darwin's Theory of Natural Selection gave an inadvertent boost to the concept of the Superman, brought to prominence by Napoleon's conquests (which helped inspire Goethe's *Faust*, 1808) and furthered by Herbert Spencer's "Survival of the Fittest" (1852). The timid, repressed Friedrich Nietzsche took up the banner of the Superman (Übermensch) in Dionysiac form, asserting in *The Gay Science* (1882), through the mouth

of a madman, that 'God is dead'. The atheistic concept of the Superman became a craze in Europe and especially in Germany.

Vladimir Kandinsky's monograph, *On the Spiritual in Art* (1910) is a prime example of how pervasive the Superman concept became. Kandinsky makes numerous references to Superman type artists whose genius creates new tastes and truths that the dull masses, the herd, is blind to but is compelled to follow because genius shows it is right. The Superman theory was rammed together with Eugenics to selectively breed a master race. The Nazis and the Japanese took the idea and transmogrified it with their racist ideologies into the inferno of World War II. The opposite concept, that of Communism, was to elevate every common man to an identical level and to demean all oligarchs and capitalists except, of course, the chief Communist Comrade.

Thus, the 20th century witnessed two gross perversions of 19th century atheistic idealism, first on the Left, with Communism in Russia and then on the Right with Fascism in Italy and Nazism in Germany despite Nietzsche's repugnance of German anti-Semitism. Germans corrupted Nietzsche's Superman to install a godlike Führer and scourge to presumably inferior, impure peoples. Then, trained by a millennium of Christian anti-Semitism and other parochial hatreds, supplemented by Nazi propaganda, Germans gave their ancient religious prejudices a secular gloss to carry out their Holocausts.

In one of the great ironies or quirks of history, both Nazism and Fascism on the Right and Communism on the Left were atheistic at their roots but God and religion crept in on the Right, in part because Fascists and Nazis are 'racially' exclusive while Communists 1: welcome all people as Brethren and, 2: were first to gain political power in Russia, whereupon they ousted the Church. So, when the Nazis and Communists struggled to gain power in Germany in the 1920's, guess which side the flailing Church supported. With a nod of assent and smile of ambivalent complicity, Pope Pius XII and the Catholic Church ceded their miter of antisemitism to the Nazis. In the United States the attempt to establish atheistic Communism ran counter to religious conservatism in the Bible Belt, so it was natural for Americans of the Heartland to support both the far Right and Capitalism and revile Communism and Socialism.

10.4 WOMEN JOIN THE FRAY

While European men were dispensing with the celestial God and replacing Him with terrestrial, totalitarian gods, and 'genteel' men and women of the American South were plumbing their Bibles to justify

slavery, women of Western Europe and the Northern United States were wrangling to emerge from their own brand of slavery.

The women's primary emphasis was on obtaining equality under the law – the vote, education, economic independence, and employment opportunity. They had varying views on Religion and most treated it as a side issue – a distraction that might harm their main goals. That may be why we don't hear too much from most of the early Suffragettes even though many of them recognized organized religion as being just one more of the forces used to subjugate them.

One of the first women to carry the banner of equality was Mary Wollstonecraft, the mother of Mary Shelley. In *A Vindication of the Rights of Woman* (1792) Mary W. admitted that while women were the physically weaker sex and had good reason to capitalize on their beauty, they would be as accomplished as men and lead lives as meaningful, if they had equal access to education. As it was, women's minds were trivialized and their bodies weakened from infancy by means of the sole focus their parents and the society placed on them to embellish their beauty and appear fragile to men. The result was to constrict and confine their realm in life.

"Taught from their infancy that beauty is woman's sceptre, the mind shapes itself to the body, and roaming around in its gilt cage it only seeks to adorn its prison." p. 30.

Mary did not make a frontal assault on religion but she did criticize the inferior role assigned to women in the Bible, while maintaining she was a believer. This was a theme several Suffragettes would enlarge upon.

"[I] doubt whether woman was created for man. This means, of course, that I don't accept every sentence of the Bible as literally true. But if the cry of 'irreligion' or even 'atheism' is raised against me, I will simply declare that if an angel from heaven told me that Moses' beautiful, poetical account of the beginning of the world cosmogony and of the fall of man is literally true, I still couldn't believe what my reason told me was derogatory to the character of the Supreme Being." p. 54.

Mary promised a longer work on religion but never got to it because she died from sepsis 10 days after giving birth. Mary's posthumous reputation was temporarily sullied by her husband William Godwin in his tell-all biography, describing her unconventional life, love affairs, illegitimate child, and suicide attempts. As a result, Mary's works were

marginalized for some time. Nevertheless, many enlightened women (such as Jane Austen) read and were influenced by her.

When old authorities weaken and freedom movements abound, it is tempting for outcasts to dispense with God. Ernestine Rose was a triple outcast – an Orthodox Jewish woman. Ernestine began to have doubts about God at age 5 by seeing the severities her Rabbi father subjected himself to. As she grew, she questioned him about the religion and rebelled internally when he refused to explain. At 16 her mother died, leaving her an inheritance, which the father confiscated to betroth her to a man she didn't love. This activated the rebel in Ernestine. She refused the match, demanded and obtained her rights in civil court, and left home when her father married a girl her own age.

Thereafter, she fared on her own with her invention of perfumed paper, passing through Western Europe into England, where she associated with Robert Owen, industrialist turned utopian socialist, and genial deist, who stated that true religion must be based on first principles (e. g., The Golden Principle) and that all organized religions are false. In 1835, Rose cofounded England's first atheist society, married and immigrated to the United States in 1836, where by 1837 she was already a renowned lecturer and formidable debater as an early Abolitionist, Suffragette, and Atheist. An excerpt from her essay **Defense of Atheism** (1861) shows her mastery of the subject.

Sweep all belief in the supernatural from the globe, and you would chase away the whole fraternity of spectres, ghosts, and hobgoblins, which have so befogged and bewildered the human mind, that hardly a clear ray of the light of Reason can penetrate it. You would cleanse and purify the heart of the noxious, poisonous weed of superstition, with its bitter, deadly fruits—hypocrisy, bigotry, and intolerance, and fill it with charity and forbearance towards erring humanity. You would give man courage to sustain him in trials and misfortune, sweeten his temper, give him a new zest for the duties, the virtues, and the pleasures of life. Morality does not depend on the belief in any religion. History gives ample evidence that the more belief the less virtue and goodness.

In 1838, Ernestine Rose became the first woman to submit a petition allowing women to own property, which became law eleven years later. She encouraged and became friends with Susan B. Anthony and Elizabeth Cady Stanton and other prominent Suffragettes. Ernestine's fiery speeches were what inspired Susan B. Anthony to become a public lecturer on Women's issues.

Many leading Suffragettes opposed religion for demeaning women and had varying degrees of doubt regarding the existence of God. But most considered it so important to enlist religious women to their cause, and ally with liberal but religious men, that they eschewed open avowal of atheism as politically counterproductive. With this hint, can you guess why the United States mints Susan B. Anthony dollars and not Elizabeth Caty Stanton dollars, when it was Stanton who initiated the Suffragette movement in 1848, and who recruited her younger friend Susan to the cause four years later? Could it be Stanton's face was not chosen because she vocally opposed what she saw as repressive, man dominated religion, while Susan B. Anthony kept her agnosticism hidden from public view lest it hurt the cause of women's suffrage? By the way, another leading Suffragette, Matilda Joslyn Gage, the mother-in-law of Frank L. Baum, author of the *Wizard of Oz*, was also marginalized for her vocally antireligious views.

Elizabeth Stanton went through a religious childhood, terrorized by visions of damnation. She suffered an emotional crisis after attending and taking to heart dark sermons of a founding revivalist, evangelical preacher of the Second Great Awakening. Her father, sister and brother-in-law rescued her from the preacher's grip and helped return her to sanity with a trip to Niagara Falls. For the rest of her life she actively opposed religion as a poison of the human psyche.

"I can truly say, after an experience of seventy years, that all the cares and anxieties, the trials and disappointments of my whole life, are light, when balanced with my sufferings in childhood and youth from the theological dogmas which I sincerely believed, and the gloom connected with everything associated with the name of religion....I view it as one of the greatest crimes to shadow the minds of the young with these gloomy superstitions; and with fears of the unknown and the unknowable to poison all their joy in life." Stanton, *Eighty Years and More*, p. 27.

For women, who are perhaps more vulnerable on average than men to preaching on the risks of damnation, the doctrines and practices of many religions including Judaism, Christianity and Islam, added gratuitous debasement of women relative to men.

"The canon and civil law; church and state; priests and legislators; all political parties and religious denominations have alike taught that woman was made after man, of man, and for man, an inferior being....

The Bible teaches that woman brought sin and death into the world, that she precipitated the fall of the race, that she was arraigned before the judgment seat of Heaven, tried, condemned and sentenced. Marriage for her was to be a condition of bondage, maternity a period of suffering and anguish, and in silence and subjection, she was to play the role of a dependent on man's bounty for all her material wants, and for all the information she might desire on the vital questions of the hour, she was commanded to ask her husband at home, subject to man....

So perverted is the religious element in her nature, that with faith and works she is the chief support of the church and clergy; the very powers that make her emancipation impossible." Elizabeth Cady Stanton, *The Women's Bible* (1895), Introduction.

As an atheist, I have witnessed with a sense of sadness and irony women's struggle for equality in religion. When I was a child a woman rabbi was "unheard of, unthinkable", as Tevya would have said. Now, in the more liberal branches of Judaism there are more women than men serving as rabbis and cantors. To my view, instead of finding freedom by discarding religion, which almost invariably demeaned them, women have successfully embraced equality in the slavery that is religion.

10.5 CLEANING UP AND POWERING UP

By the late 19th century Europeans should have begun to feel like the Supermen Nietzsche promised we would evolve into. Human lifespan began to increase after about 1850, first as a result of improved public health and sanitation, and second, following the discovery that many diseases are caused by microbes. Three examples of improved sanitation are, 1: the use of the antiseptic, sodium hypochlorite (Clorox), 2: The proof by John Snow in 1855 that an outbreak of cholera in one district of London was caused by the septic water from the Broad Street pump rather than by something in the air. That plus the problem of handling waste water were chief among the factors that led over the following decades to the construction of sewer systems and water treatment plants that chlorinated water. Chlorination may have added the single greatest increment to lifespan by eliminating diseases such as cholera, typhus, and typhoid. Then, 3: the definitive disproof of spontaneous generation

by Louis Pasteur in 1859, showing that meat could be protected from maggots by screening flies from it.

Pasteur's disproof of spontaneous generation reconfirmed work done in the early days of microscopy. In 1658, the devout Jan Swammerdam discovered red blood cells and, in 1669, showed by dissecting insects that they initially came from eggs. One year earlier, in 1668, Francesco Redi, "the father of parasitology", who showed that parasites came from eggs, anticipated Pasteur in using a screen placed over a jar containing meat to demonstrate that maggots came from flies.

The second factor that increased human lifespan grew from the proofs by Louis Pasteur and Robert Koch of the ancient speculation that some of the world of tiny animalcules first reported by Leuwenhoek in 1676 with primitive microscopes and rudimentary techniques were germs or bacteria that cause many diseases. (Viruses were discovered soon after.) Pasteur, Koch, and others followed this discovery by developing vaccines. The resulting advances in medical science saved and extended lives while improving the quality of life.

The germ theory and attendant improvements in biological and medical sciences did more than improve and extend human life. By solving some of humankind's most baffling and enduring mysteries, they took a giant step in making the universe and life more comprehensible. That dealt another major, though never mortal, blow to false, irrational beliefs, often fostered or promulgated by religions, that illness, disease, and contagions are caused by an angry God or by malevolent spirits as punishments for heresy or immorality. Unfortunately, repeated resurgences of conspiracy theories that disease-eradicating vaccines are harmful, fomented mainly by religious conservatives such as the Taliban, but also rampant among secular people show that facts can never eradicate superstitions.

Living standards improved after 1850 even more rapidly than human lifespan as the dizzying pace of technological advance accelerated. The puny limitations of animal strength were grossly superseded by gargantuan engines and machines. The electricity that powered many machines overwhelmed the darkness of night to illuminate entire cities. The telephone began to transmit soft voices across the ocean. Railroad and steamship companies built complex networks of huge and powerful vehicles that hurtled through space at unprecedented speeds and linked the world more closely. The train was perhaps the 19th century's foremost symbol of progress and signpost of man's dominion over nature with its almost astronomically accurate schedules and earth-shaking locomotives.

For a while people felt they had created a fate, and that they could finally vie with the gods. But the mantle of divinity is never worn easily.

The scientific discoveries and technological advances took an emotional back seat to changes that came at the expense of the soul. The last decades of the 19th century proved to be an extremely unsettling time. The alienation recognized by Marx was greatly exacerbated. Fewer people were needed to raise the food for the world's growing population. Mechanization rendered obsolete timeworn talents of many artisans. The excessed and unemployed populations emigrated to overcrowded cities or new lands like America, where they often became aimless automatons in the factories. Abject poverty grew with wealth, a problem that persists to this day and was noted, analyzed, and criticized by Henry George in his best-selling opus magnum, *Progress and Poverty* (1879) and by Max Nordau in *The Conventional Lies of our Civilization* (1883).

10.6 ENTER THE PSYCHOLOGISTS

Amidst all this turmoil, the revelations of religion retreated before the triumphs of science and the might of machinery. With religion yielding center stage, where was one to go for spiritual comfort or guidance? A plethora of divisive ideologies that catered to society's uprooted and deeply disturbed souls proliferated almost spontaneously. Too often to our dismay, people replaced the celestial God with terrestrial gods.

As the 19th century wound to its close in the increasingly mechanized and unforgiving universe, deeply disturbed souls rose to the forefront of the arts as civilization's spokesmen. While largely mute scientists and inventors claimed the ever-expanding domain of the rational and visible universe, the more voluble and vocal displaced artists were obliged to retreat step by step toward the invisible world of the irrational. Abstraction, distortion and dissonance then diffused through the fiber of the arts. The outcast artists deposed Nature and forced it to play a servant's role to their psyches. The painters' Nature became a mere roadmap to point the way to the 'beyond'.

In almost the same year that Nietzsche first proclaimed that God was dead (1882) and the great Brooklyn Bridge was completed (1883) Albert Pinkham Ryder (living a mile from the Bridge) painted *Toilers of the Sea*, a weird, dimly lit nocturne with a solitary small sailboat tossed by a turbulent sea and a corona around the Moon. Ryder expressed the feeling of many late 19th and early 20th century artists succinctly. "I am trying to find something out there beyond the place on which I have a footing." Humans were portrayed as weird, distorted misfits in an uncharted, hostile world. One look at works such as Edvard Munch's *Scream* (1893) leaves little doubt about what was meant.

Who could have foreseen the hydra that evolved from the romance of Science and the Sublime and the partnership of Progress and Poverty?

Psychologists! Psychologists would mete staggering blows to religion.

The increased attention that philosophers, scientists, and artists gave to the fact that everything we see, or think we see, of the world around us must first pass through and be processed by the filter of our minds gave birth to a new field of study – psychology. Kant thought our subjectivity made such an independent discipline impossible, but psychologists, physicians, physicists, and biologists proved Kant wrong by finding ways to measure objectively many aspects of our minds and brains.

Psychology was born as a distinct discipline when scientific methods were first used to test and validate the age-old, enduring speculations of philosophers, artists, and writers on how the human mind works.

The beginnings came from diverse roots. Perhaps the first was Galvani's discovery in 1780 that the nerves act like wires, transmitting information and commands in the form of electric currents. Starting in 1811 Charles Bell in England and François Magendie in France independently 1: mapped the nerves between the brain and the spinal column, 2: demonstrated that each transmits electrical signals in one direction only, 3: discovered that spinal nerves for pain *end* in the frontal part of the brain and those for movement *originate* in the posterior part of the brain and, 4: proved that nerves direct the facial expression of emotions. This work inspired Darwin in his study of human emotions.

Brain mapping was pioneered in 1836 by Marc Dax, who discovered the region of the frontal cortex responsible for speech, but his work was overlooked. Paul Broca made the same discovery in 1861 and validated it over the next 5 years by performing autopsies of brains of 12 people who had lost their speech. Broca's work led others to seek and find the regions of the brain responsible for sight, hearing, decision making, bodily movements, etc. and so the brain came slowly to be mapped.

Broca was an outspoken atheist who 1: dedicated much time to anthropology (founding the Société d'Anthropologie de Paris in 1859), 2: supported Darwin's Theory, and 3: as a pioneer in comparative anatomy showed our similarity to other simians. He stood firm in facing down the expected, relentless opposition of the French Catholic Church.

Ernst Weber made the first quantitative study of the human mind. He performed controlled experiments where only one quantity at a time was varied. In 1834, he demonstrated that the mind measures relative and not absolute quantities (recall §8.3). As an example, you cannot tell which of

two weights is heavier until the difference between the two is at least 8%. This is called the just-noticeable difference. The just-noticeable difference between two lights or two colors is 2%.

Gustav Fechner, who became an atheist, quantified this as the Weber-Fechner Law (stimulus is proportional to the logarithm of response) and furthered Weber's discoveries by demonstrating that when physical stimuli such as the voltage of a shock increase geometrically our feeling of pain increases linearly. By establishing quantitative links between physical stimuli and mental processes, this was just one of Fechner's founding works of experimental psychology.

Physicist, physiologist, and experimental psychologist, Herman von Helmholtz was a leader in the invention and development of precision instruments used to determine quantitative aspects of human physiology, including visual and auditory acuity and sensitivity, reaction times, and speed of thought processes. As an example, Helmholtz was the first (in 1849) to measure the speed that nerves transmit electrical signals $\approx 30~\text{m}\cdot\text{s}^{-1}$ or 60 mph. Neuroscience was on the way.

In 1879, Wilhelm Wundt, a physiologist who had served as one of Helmholtz's assistants, established the first laboratory dedicated to the study of how the human mind works. This step constituted the 'official' birth of psychology as an independent discipline. The prolific Wundt raised psychology as an empirical science primarily on the level of conscious human thoughts, images, and feelings. He investigated the concept he named *apperception*, by which humans automatically piece together or complete elements of a pattern such as thinking they see a church with a steeple when they only see the steeple, exemplified by the optical illusion, Kanizsa's Triangle (recall §8.3).

Wundt worked with large numbers of human subjects. Given that we are creatures whose complex behavior bears no apparent relation to the simple, precise laws encountered in physics, such as Newton's second law of motion (F = ma), or the ideal gas equation (pV = nRT), understanding that behavior cried out for statistical analysis.

Francis Galton added substantially to psychology by including and advancing the field of statistics. Galton focused on compiling actual statistics on the variations so essential to Darwin's theory of natural selection. These included both physical and mental variations such as height, weight, strength, speed, and intelligence, which led to the concept of IQ, and gave Galton a rationalization for his theory of Eugenics.

Even though none of the abovementioned discoveries was designed to make a direct assault on religion and belief in God, the inevitable growth of understanding about how the brain works forced religious views to yield ground step by step. Innocent questions such as, "Where in the ever

more probed and ever tinier microscopic world of the folds and nerves of the brain is our invisible and ever more remote soul hiding?" arose naturally — with, of course, no answer. But with the exposure and investigation of the unconscious mind, the indirect and inadvertent assault on religion was soon to become direct and deliberate.

10.7 PLUMBING THE DEPTHS

Even discounting dreams, people long recognized the existence of the unconscious but perhaps its first unambiguous depiction was Henry Fuseli's 1781 painting, *Nightmare*. An incubus sits on a woman sleeping with her back arched in a sexually provocative pose, while a horse's head emerging from curtains stares at her to affirm it is *her* night*mare*. The painting caused a scandal because of its implied sexual content. Of course, sex has long been intertwined with violence in horror stories, and more recently, horror movies. The painting's revolutionary character is that we are no longer so sure the incubus is an external agent, such as a sorcerer or witch. No! The incubus is more likely a product of the dreaming woman's unconscious imagination.

Carl Gustav Carus, MD, PhD, painter, and polymath child of the German *Sturm und Drang* movement, became the first scientist to identify the unconscious as the source of the psyche. Carus's book, *Development History of the Soul* (1846) inspired the philosopher, Karl von Hartmann to write his *Philosophy of the Unconscious* (1869), which in its turn popularized the idea of the unconscious and which influenced psychologists including Sigmund Freud and Carl Jung.

Several years before Hartmann's philosophical opus, Helmholtz (1867) was investigating unconscious inference – the idea that optical illusions and other unconscious impressions take priority over our rational thoughts. This fertile concept lay fallow for over a century, but has recently been revived as recognition of the primacy and priority of the subconscious over the conscious, rational mind has again become a focus in psychology.

The recognition of the existence, even the primacy of the unconscious mind was so well established by 1883 that Max Nordau could ascribe belief in God to its power and write, "The human heart has no more precious possession than illusion," in his chapter on Religion as the first among *The Conventional Lies of Our Civilization* (p. 52). Nordau notes religion's outlandishly disproportionate impact and how it has inveigled itself into our unconscious and hence every aspect of our lives, though he

hoped that as the species evolves it will eventually forsake religion (ala Feuerbach and Marx).

"Religion receives into her arms at its birth the infant of civilized life; she becomes its unyielding, implacable companion throughout its entire existence, and will not relinquish her claims even upon its death-bed." p. 32

"Belief in super-natural, abstract powers...exists unconsciously even in men of the highest culture, and...has penetrated into the farthest recesses of their minds, where moods, sentiments, and emotions are evolved, beyond the control of the will. In these mysterious depths ancient prejudices and superstitions still maintain their supremacy and it is incomparably more difficult to drive them out, than it is to frighten away the owls and bats from the nooks and crannies of a steeple belfry.

In this sense, that is, as a partially or entirely unconscious clinging to transcendental ideas, Religion is in fact a physical relic of the childhood of the human race; I go still further and say that it is a functional weakness, caused by the imperfectness of our organ of thought, one of the manifestations of our finiteness." p.35-36.

Nordau then diagnosed the mental factors and processes that led humans to religion and belief in invisible gods or spirits, and practices such as sacrifice (recall §8.2).

Psychologist, William James was much softer on personal religion than Nordau but also focused on the power of the unconscious in *The Varieties of Religious Experience*. It is an extraordinary power indeed, for our unconscious life has primacy over our conscious veneer.

"If we look on man's whole mental life...that they inwardly and privately follow, we have to confess that the part of it of which rationalism can give an account is relatively superficial. It...can challenge you for proofs...but will fail to convince or convert you...if your dumb intuitions are opposed to its conclusions. If you have intuitions at all, they come from a deeper level of your nature than the loquacious level which rationalism inhabits. Your whole subconscious life, your impulses, your faiths, your needs, your divinations, have prepared the premises...and something in you absolutely KNOWS that that result must be truer than any logic-chopping rationalistic talk, however clever, that may

contradict it....This inferiority of the rationalistic level in founding belief is just as manifest when rationalism argues for religion as when it argues against it.... The unreasoned and immediate assurance is the deep thing in us, the reasoned argument is but a surface exhibition. Instinct leads, intelligence does but follow." p. 58.

James made it clear that the *Varieties of Religious Experience* was a psychological study of personal (as opposed to organized) religion and hence was confined to the inspirations, revelations, searches, quests, and inner, unconscious motivations of individuals, which he saw as the sources and founts of all religion.

James acknowledged that personal religion arises within us. Quoting Swami Viverananda, James expressed indifference as to whether there is any external basis for or confirmation of our religious feelings, or belief in God.

"Why does man go out to look for a God? ... It is your own heart beating, and you did not know, you were mistaking it for something external." p. 389.

Even as James dismissed and invalidated all claims for an external basis of religious experiences, he took an ostensibly gentle tone on *personal* religion. Thus, for example, psychological disturbances, which may lie at the source, cannot by themselves invalidate a religious revelation. Echoing the biblical sentiment, "By their fruits ye shall know them, not by their roots." p. 19, James considered religion to be good if it helps people in their lives (recall §6.2).

James would have agreed with the argument that if religion were eliminated from the face of the Earth and all memory of its existence erased, people would soon enough create it anew based on their psychological orientation.

James constructed his own list of the psychological traits that lead to religion. First, "Religion, in short, is a monumental chapter in the history of human egotism." p. 370. Two other linked traits are our craving for certainty and penchant for patterns.

"The mere outward form of inalterable certainty is so precious to some minds that to renounce it explicitly is for them out of the question. They will claim it even where the facts most patently pronounce its folly." p. 253-54.

"But we look for the regular kind of thing exclusively, and ingeniously discover and preserve it in our memory." p. 332.

A potentially sinister trait leading us to religion and belief in God is our adulation of and obeisance to power.

"Dislike of the saintly nature seems to be a negative result of the biologically useful instinct of welcoming leadership, and glorifying the chief of the tribe. The chief is the potential, if not the actual tyrant, the masterful, overpowering man of prey. We confess our inferiority and grovel before him. We quail under his glance, and are at the same time proud of owning so dangerous a lord. Such instinctive and submissive hero-worship must have been indispensable in primeval tribal life." p. 281

Thus, originates our proclivity to create gods (and celebrities). And what gods and what religion do we create? Optimistic people create happy religions while pessimistic people create harsh, punitive religions. And one type can neither understand nor tolerate the other.

James gives many examples of happy, optimistic believers who are once-born. He contrasts them with pessimistic believers who tend to be 'born again'. James points to the irrational in the sense that an optimist and pessimist viewing the same fact will have entirely different observations — in today's lingo, alternate facts — guided more by their natures than by what they actually see. Thus, to the optimist,

"...The slaughter-houses and indecencies without end on which our life is founded are huddled out of sight and never mentioned, so that the world we recognize officially in literature and in society is a poetic fiction far handsomer and cleaner and better than the world that really exists." p. 71.

On the other side, pessimistic, nihilistic souls, especially at times of life crises, need a stronger, more punitive and redemptive religion. Thus,

"Coarser religions, revivalistic, orgiastic, with blood and miracles and supernatural operations, may possibly never be displaced. Some constitutions need them too much." p. 124.

James admits to lacking any personal experience of the mystical state but documents and analyzes mystical experiences and revelations, which he considers to lie at the heart of personal religion. He notes four qualities.

- 1: *Ineffable*, as is the concept of vision to blind people in H. G. Wells story, *The Country of the Blind* (1904).
- 2: *Noetic* a person who has had a mystical experience is certain it contains indisputable truth.
- 3: *Transient* the mystical state tends to last no more than of order half an hour.
- 4: *Passive* during the trance the person receives the knowledge or revelation.

Certain conditions, such as stress, exhaustion, isolation, or fasting (as in the case of Muhammad), are more conducive to mystical experiences. Many of the mystical experiences described or quoted by James occur in the moments before sleep at night in the dark. The transition state between sleep and wakefulness is marked by a range of hallucinations (called hypnagogia) that include dreams or dream fragments, repetitive thoughts or feelings, visual, auditory, and tactile sensations, and out of body experiences. As I first fall asleep, especially in recent years, I often have dream fragments, many of which are repetitive, that waken me before I finally fall into a deeper sleep. I have these less often upon wakening in the morning. But my revelations always occur in the waking moments after a night's sleep or a nap of at least several hours.

Certain personality types are more prone to having mystical experiences. James points out that the best candidates for conversion at revivals are also better subjects for hypnotism. He notes the comment of a doctor that for such addictive personality types it is often a matter of one consuming addiction replacing another.

James notes dominant characteristics of posthypnotic suggestion, which he links to the mystical state and to the unconscious (recall §5.3). After a hypnotized person who has been given a command to perform some act upon a given signal is wakened, he or she will perform the act unconsciously and if asked why,

"always trumps up an improvised pretext for his behavior if the act be of an eccentric kind. It may even be suggested to a subject to have a vision or to hear a voice at a certain interval after waking, and when the time comes the vision is seen or the voice heard, with no inkling on the subject's part of its source." p. 179.

Mystical experiences can lead to fundamental changes in life style or outlook, including religious conversion. Some mystical experiences have such a profound impact they cause either the onset or termination of conversion disorders – paralyses or blindness with no neurological cause. James links these to saintliness. Of course, in most people the experience, accompanied by emotions ranging from submission and resignation to harmony and tranquility to elation, ecstasy, rapture, or euphoria, leads to a conversion that is temporary. Yes, most people backslide, but for a few people the conversion is permanent and may include sudden and lifelong abstention from alcohol, tobacco, or sex. It may overcome the normal inhibitions that keep us from essential actions or from fulfilling our dreams. Its permanence and intensity, indeed, its very existence may be greatly assisted by the attachment to a known ideology, doctrine, cause, or religion.

Thoreau, a latter-day Romantic, attached this conversion (possibly to solitude at Walden) to a feeling of unity with or joy over the beneficence of Nature rather than God. In such conversions the person feels protected, safe, and in harmony with the world or with God. These feelings harmonize with any religion.

"Religious rapture, moral enthusiasm, ontological wonder, cosmic emotion, are all unifying states of mind, in which the sand and grit of the selfhood incline to disappear, and tenderness to rule." p. 212.

At every point James decouples the feelings, revelations, and mystical experiences, which are internal and psychological, from any external object, yet he maintains that religion has some objective, external reality at its foundation and is not merely psychological. Like Thomas Paine, who professed a belief in a single God and then dismantled every fairy tale surrounding God, James sounds perilously close to atheism.

I recall only once having a feeling of unity with nature. It was after my one triathlon. I was physically exhausted and yet could not sleep. My normally regimented mind had relaxed. As I was walked down the driveway of my home in Upper Saddle River, New Jersey I noticed the birds chirping, I felt in harmony with them and with the visual surroundings. Mentally, I was as loosey-goosey as I ever was and this relaxation rendered me open to a feeling akin to reverence.

These altered states can be visible to other people. One time, I misconstrued some hint by a prudish girl who I had desired as evidence of her love for me. I walked into the grill at MIT flush with a triumphant illusion of being loved and noticed a couple of women looking at me with desire. It is possible that women gazed at me that way more other times than I was normally cognizant of (when I was young and good looking) and that my happy illusion simply made me aware of their

gazes, but I don't know. Surely, body language is strong enough to be seen so I was and remain confident that my impression was objective. I connect my momentary aura of confidence to a religious vision although there was no religious object. James also compared religious visions to visions and thoughts of lovers.

Grand scenery has also inspired some of my elevated feelings, as was the case with many Romantics. Others have attached similar feelings to God. There is a question, of course, regarding the relation between the feeling of awe and the object the mind attaches to it. With scenery, the existence of the object is visual and verifiable by others. The internal source of the feeling is more elusive and is one more of the miracles as are life, consciousness, intelligence, and self-awareness. Certainly, there are still more seeming miracles in heaven and earth than natural philosophers have yet explained but scientists are working on them and making progress because they ultimately lie within the realm of science.

It is difficult to document, but religious revelations have a limited scope. None of them have Laozi appearing to a Muslim who had never heard of Laozi, or Muhammad appearing to a Christian who never heard of Muhammad. None accurately describe or even name specific future prophets or events. None that are specific can be attached to an object that is completely outside the experience of the visionary. All accounts of people who communicate with the dead are unverified or apocryphal.

The placebo effect and white coat syndrome (higher blood pressure in the doctor's office) are just two of many links between mind and body that may seem weird but are real and can be powerful. Within bounds, you can will yourself happy or sad, calm or stressed, and healthy or sick. There is abundant scientific verification of what is called neural top-down control of physiology, namely that the conscious thoughts we generate in our cerebrum can influence the autonomic nervous system and change hormone production in the hypothalamus and hence alter our metabolism, immunity, stress level, etc.

Here is one incident I experienced forcefully. My mother slipped and suffered a hairline fracture in her cervical vertebra (C7) a few months after a laminectomy and fusion operation on her neck. That required a second surgery. After the first surgery, my wife and I had taken care of my mother for six weeks. She proved to be extreme high maintenance, which I found difficult because I am not a nursing type personality. From the moment of the diagnosis that a second operation was imperative not only did I feel bad for my mother but I worried for myself that I would have to put up with her insatiable demands for another six weeks. That was in the afternoon. By nightfall I was sick.

James focused exclusively on personal religion in *The Varieties of Religious Experience*, specifically avoiding all consideration of theology. But he felt compelled to comment briefly on some impacts of organized religion. He noted distinctions between inspiration and conventional behavior,

"When a religion has become an orthodoxy, its day of inwardness is over: the spring is dry; the faithful live at second hand exclusively and stone the prophets in their turn." p. 256.

James did take a few swipes at organized religion when it acted counter to the wellsprings of personal religion, acknowledging that it can impose psychological burdens that lead to harmful practices.

"The hopelessness of Christian theology in respect of the flesh and the natural man generally has, in systematizing fear, made of it one tremendous incentive to self-mortification." p. 229-30.

He also noted the license given by a religious ideology to perform the vilest acts with indifference as one of organized religion's great evils.

"All invasive moral states and passionate enthusiasms make one feelingless to evil in some direction." p. 71

In light of these statements, I find it incredible that James made the following lame attempt to absolve religion of so much evil done by it or in its name, with the preposterous excuse that his investigation of religion dealt solely with the "purely interior life" and with the bogus distinctions by which he attempted to amputate religion from the limbs he misnamed its 'wicked partners'.

"The basenesses so commonly charged to religion's account are thus, almost all of them, not chargeable at all to religion proper, but rather to religion's wicked practical partner, the spirit of corporate dominion. And the bigotries are most of them in their turn chargeable to religion's wicked intellectual partner, the spirit of dogmatic dominion, the passion for laying down the law in the form of an absolutely closed-in theoretic system.... Piety is the mask [for holocausts committed by religious groups or in the name of religion], the inner force is tribal instinct." p. 257.

It would have been more honest and far more courageous, given the times James lived in, to acknowledge that religion's 'wicked partners' are, in fact, its wicked alter egos or at least its wicked characteristics. Mr. Hyde is the unconscious alter ego of conscious Dr. Jekyll.

We now pass from William James' benevolent analysis and assessment of personal religion to the harsh treatment by Sigmund Freud, an acknowledged atheist. Freud made no bones about relocating God from Heaven to the underworld of the human subconscious. I can do no better than to present a summary list of his assessments and then excerpt quotes from *Civilization and Its Discontents* (1929), which includes Freud's main thoughts on religion.

- 1. Religion's roots are infantile.
- 2. Belief involves a protective and punitive father figure God.
- 3. There is no answer to the question, "What is the purpose of life?"
- 4. Religion is a mass delusion.
- 5. Religion results from the attempt to procure a sense of certainty and protection.
- 6. By demeaning life and intelligence religion allows us to live in delusional happiness.
- 7. Through technology and science we have become godlike but don't feel it.
- 8. Paul's 'universal love' generated intolerance for outsiders.
- 9. By suppressing our sexuality and aggressiveness we gain civilization's protection and misery.
- 10. Anxiety morphs into guilt as external fears of punishment are internalized.
- 11. Renunciation of our instincts leads to conscience and intolerance.

"The origin of the religious attitude can be traced back in clear outlines as far as the feeling of infantile helplessness....what the common man understands by his religion — with the system of doctrines and promises which on the one hand explains to him the riddles of this world with enviable completeness, and, on the other, assures him that a careful Providence will watch over his life and will compensate him in a future existence for any frustrations he suffers here. The common man cannot imagine this Providence otherwise than in the figure of an enormously exalted father. Only such a being can understand the needs of the children of men and be softened by their prayers and placated by the signs of their remorse. The whole thing is so patently infantile, so foreign to reality, that to anyone with a friendly attitude to

humanity it is painful to think that the great majority of mortals will never be able to rise above this view of life. It is still more humiliating to discover how large a number of people living to-day, who cannot but see that this religion is not tenable, nevertheless try to defend it piece by piece in a series of pitiful rearguard actions." p. 7-8.

"The question of the purpose of human life has been raised countless times; it has never yet received a satisfactory answer and perhaps does not admit of one." p. 9

"[The] attempt to procure a certainty of happiness and a protection against suffering through a delusional remolding of reality is made by a considerable number of people in common. The religions of mankind must be classed among the mass-delusions of this kind." p. 13

"[Religion's] technique consists in depressing the value of life and distorting the picture of the real world in a delusional manner — which presupposes an intimidation of the intelligence. At this price, by forcibly fixing them in a state of psychical infantilism and by drawing them into a mass-delusion, religion succeeds in sparing many people an individual neurosis." p. 15.

"Subjugation of the forces of nature [by science and technology], which is the fulfillment of a longing that goes back thousands of years...has not made [us] feel happier....Man has...become a kind of prosthetic God....[but] does not feel happy in his Godlike character." p. 16, 19

"When once the Apostle Paul had posited universal love between men as the foundation of his Christian community, extreme intolerance on the part of Christendom towards those who remained outside it became the inevitable consequence." p. 33

"If civilization imposes such great sacrifices not only on man's sexuality but on his aggressivity, we can understand better why it is hard for him to be happy in that civilization.... Civilized man has exchanged a portion of his possibilities of happiness for a portion of security." p. 33

"The demands of conscience...is simply a continuation of the severity of the external authority....A threatened external unhappiness — loss of love and punishment on the part of the external authority — has been exchanged for a permanent internal unhappiness, for the tension of the sense of guilt." p. 41

"Anxiety which later becomes conscience is indeed the cause of instinctual renunciation to begin with, but later the relationship is reversed. Every renunciation of instinct now becomes a dynamic source of conscience and every fresh renunciation increases the latter's severity and intolerance." p. 41

"Conscience arises through the suppression of an aggressive impulse." p. 42

"The price we pay for our advance in civilization is a loss of happiness through the heightening of the sense of guilt. 'Thus conscience does make cowards of us all." p. 45

"The sense of guilt is at bottom nothing else but a topographical variety of anxiety....[Religions] have never overlooked the part played in civilization by a sense of guilt... [and] claim to redeem mankind from this sense of guilt, which they call sin." p. 46

"So long as virtue is not rewarded here on earth, ethics will, I fancy, preach in vain." p. 51

"Man's judgments of value follow directly his wishes for happiness...they are an attempt to support his illusions with arguments." p. 52

CHAPTER 11

MODERN ATHEISM

11.1 OF HUMAN BONDAGE

Standing on the shoulders of courageous predecessors who helped decriminalize atheism, modern atheists have been able to take more forthright and confident stands. That set a host of writers free to express their views. Let us start with W. Somerset Maugham.

One of the great literary descriptions of a conversion from belief or hope to atheism appears in Chapter 28 of Maugham's *Of Human Bondage* (1915). Maugham named the novel for a phrase in Baruch Spinoza's *Ethics*, which stressed how our irrational side compels and drives us even against our conscious will and rational side. Although Spinoza never became (or acknowledged being) an atheist, Maugham did in effect. The central character, Philip, brought up by a stiff uncle, a preacher, realizes of a sudden that he no longer believes in God.

"[Philip] had ceased to believe...because he had not the religious temperament. Faith had been forced upon him from the outside. It was a matter of environment and example. A new environment and a new example gave him the opportunity to find himself. He put off the faith of his childhood quite simply, like a cloak that he no longer needed. At first life seemed strange and lonely without the belief which, though he never realised it, had been an unfailing support. He felt like a man who has leaned on a stick and finds himself forced suddenly to walk without assistance. It really seemed as though the days were colder and the nights more solitary. But he was upheld by the excitement; it seemed to make life a more thrilling adventure; and in a little while the stick which he had thrown aside, the cloak which had fallen from his shoulders, seemed an intolerable burden of which he had been eased. The religious exercises which for so many years had been forced upon him were part and parcel of religion to him. He thought of the collects and epistles which he had been made to learn by heart, and the long services at the Cathedral....Oh, he had been so bored! His heart leaped when he saw he was free from all that."

Shortly after this revelation, Philip hikes to the top of a hill from which he can view the scene below and is exhilarated. Maugham almost surely experienced such an effortless conversion and was making the point that atheists (or agnostics) can experience the full range of inspirational feelings without believing in God. Maugham did this by comparing Phillip's hike to the Devil's transporting Jesus to a mountaintop to tempt him to worldly power.

"[Philip] was free from degrading fears and free from prejudice. He could go his way without the intolerable dread of hell-fire. Suddenly he realized that he had lost also that burden of responsibility which made every action of his life a matter of urgent consequence. He could breathe more freely in a lighter air. He was responsible only to himself for the things he did. Freedom! He was his own master at last. From old habit, unconsciously he thanked God that he no longer believed in Him. Drunk with pride in his intelligence and in his fearlessness, Philip entered deliberately upon a new life. But his loss of faith made less difference in his behaviour than he expected. Though he had thrown on one side the Christian dogmas it never occurred to him to criticise the Christian ethics..."

As do many atheists, Maugham disputed the claim that Atheists are less moral than Believers. They are simply less burdened by imposed fears of imaginary punishing agents.

11.2 SATIRE-DAY

Satirists and cynics tend to be some of the greatest and most incisive realists. They may be quite conservative, but they upset conventional thinking by presenting it in alternative, often mocking ways that expose its absurdities.

Jonathan Swift, a deacon of the Church, was one of those conservative satirists who felt that social stability and order required having one official religion. That not only made sense given England's decades of turmoil and slaughter due to religious bickering, it may have motivated Swift to write *A Tale of a Tub*, (which I first read on 17 March 2022 after rereading Will Durant's summary in *The Age of Louis XIV*). This rambling story-essay is directed principally against the divisions of Christianity and all corruptions of its original spirit, though Swift essentially dismissed all religions ("Is not religion a cloak?" p. 25),

and was accused of atheism. In the process, Swift, long before Thoreau, stressed that

human understanding seated in the brain must be troubled and overspread by vapors ascending from the lower faculties to water the invention and render it fruitful. p. 50.

This gives greater appreciation of Swift's scatological humor.

Swift couched his parody in terms of a story of three brothers (Peter = Catholicism, Martin = Martin Luther, and Jack = John Calvin) in a way, combined with his normal scatological references, that gave me the best laughs I have had in years.

Through their father's will (God's Commandments) each brother inherits an unadorned coat (Bible), which may not be altered in the least. The brothers, seduced by three alluring women (wealth, ambition, and pride), proceed to embroider and embellish their coats, justifying their actions with nonsensical and casuistic arguments, and woven together so well that it becomes impossible to restore the original coats without damaging them irremediably. In short, they distort, corrupt, and violate all the precepts, principles, and commands of the religion.

Following history, Swift began by spilling his vitriol on Peter, ridiculing many Catholic excrescences and corruptions, beginning with its acquisition and accumulation of wealth and political power, followed by Purgatory, sainthood, sacred art, transubstantiation (calling bread mutton), confession, indulgences, and Papal Bulls as the inerrant word of God in place of the Bible. All the while, Peter

had an abominable faculty of telling huge palpable lies upon all occasions, and swearing not only to the truth, but cursing the whole company to hell if they pretended to make the least scruple of believing him. p. 33.

When Peter's excesses became intolerable to Martin and Jack, they broke with him. Swift then excoriated Protestant deviations, especially those of Calvinism with its harsh predestination and asceticism and the innumerable sects derived from it, giving them absurd nicknames. He began by describing the violence each brother did to his coat in the attempt to restore it to its original state. First, Martin

knew very well there yet remained a great deal more to be done [to strip the coat of its embroidery]; however, the first heat being over, his violence began to cool. p. 40

As regards Jack, who insisted on walking around with his eyes closed (mocking Calvin's stated preference of inner inspiration to observation and reason), he did a far better job of stripping his coat ("zeal is never so highly obliged as when you set it a-tearing") because

the memory of Lord Peter's injuries produced a degree of hatred and spite which had a much greater share of inciting him than any regards after his father's commands. p. 40

Pass the mantle of satire to Mark Twain. His early antireligious forays were innocent enough, such as making fun of how kids and even adults hate church, as in *Tom Sawyer* (1876). Even earlier, when he first gained fame, he commented on the diminutive size of the Holy Land during his Grand Tour of Europe and the 'Orient' in the *Innocents Abroad* (1869).

"One of the most astonishing things that have yet fallen under our observation is the exceedingly small portion of the earth from which sprang the now flourishing plant of Christianity. The longest journey our Saviour ever performed was from here to Jerusalem—about one hundred to one hundred and twenty miles."

In Twain's traverse of the tiny Holy Land, which he described as the wasteland it was in the mid 1800's, he recounted with a light touch all the Biblical violence, the killings, the slaughters, and the immense bloodshed, as if he were describing ancient festivities. Is there a hint in these descriptions about how parochial and nasty our religious views are? In *A Connecticut Yankee in King Arthur's Court*, (1889) Twain discards hints and even satire about religion, aiming bitter invective against the repressive Catholic Church as the Creator of the Dark Ages.

Ironic vituperation against religion was Mark Twain's final literary contribution. In the posthumously published (1962) diatribe *Letters from the Earth* (1909), he didn't miss a trick, encapsulating every critique of religion in the form of excoriating ridicule. It begins in the *High Place* with the *Creator* creating the Universe with Automatic Law, which we call the Laws of Nature, so that it can run on its own, a clear statement of Deism. Some eons of our time later, He creates animals. The tiger is created ferocious, the rabbit timid, and the Creator lets it be known that they are blameless for following their natures. Then the Creator created humans and whisks them to a tiny, insignificant planet named Earth amidst the vast galaxies.

A short geologic time later, Archangel Satan is banished to Earth for some irreverent remarks. The rest of the book consists of the letters that Satan, as an objective reporter, beams back to the High Place describing, with ironic objectivity, what he sees (but does not influence) on Earth. Of course, his descriptions ridicule our beliefs, pretensions, hypocrisy, and egocentrism.

Twain makes it clear that Jewish and Christian concepts of God have nothing to do with the real Creator. Not surprisingly, Sex makes a grand appearance early in the letters, followed by Hell.

"For there is nothing about man that is not strange to an immortal....For instance, take this sample: he has imagined a heaven, and has left entirely out of it the supremest of all his delights, the one ecstasy that stands first and foremost in the heart of every individual of his race -- and of ours -- sexual intercourse! It is as if a lost and perishing person in a roasting desert should be told by a rescuer he might choose and have all longed-for things but one, and he should elect to leave out water!"

"From youth to middle age all men and all women prize copulation above all other pleasures combined, yet it is actually as I have said: it is not in their heaven; prayer takes its place."

Twain took the Bible and the God(s) it portrays to task, savaging its morality by a reductio ad absurdum of such scathing realism that would have forced Kant into trembling admiration.

"Every statute in the Bible and in the law-books is an attempt to defeat a law of God -- in other words an unalterable and indestructible law of nature. These people's God has shown them by a million acts that he respects none of the Bible's statutes. He breaks every one of them himself, adultery and all"

"The first time the Deity came down to earth, he brought life and death; when he came the second time, he brought hell."

Mark Twain lambastes 'gentle' Jesus for his introduction of Hell. His point – the Jews merely slaughtered sinners while the Christians tormented them from infancy on throughout their lives with the added promise of eternal punishment for any infinitesimal infraction of following their natures, implanted in them by God.

"Now here is a curious thing. It is believed by everybody that while he [God] was in heaven he was stern, hard, resentful,

jealous, and cruel; but that when he came down to earth and assumed the name Jesus Christ, he became the opposite of what he was before: that is to say, he became sweet, and gentle, merciful, forgiving, and all harshness disappeared from his nature and a deep and yearning love for his poor human children took its place. Whereas it was as Jesus Christ that he devised hell and proclaimed it! Which is to say, that as the meek and gentle Savior he was a thousand billion times crueler than ever he was in the Old Testament."

Twain added to earlier critiques of belief the recently discovered microscopic world of lethal pathogens and parasites, carefully stowed and preserved on Noah's Ark to the ancient list of gifts of the Benefactor of Being. How anyone without a totally shackled mind could come away from reading Twain's treatment and remain a faithful member of the JCI flock is beyond me. Of course, *Letters from the Earth* will not change anyone's mind. Fundamentalist believers will either refuse to read it or be infuriated by it. Or as Mark Twain noted,

"Very often, in matters concerning religion and politics a man's reasoning powers are not above the monkey's."

What Mark Twain ridiculed about Hell, James Joyce (and more recently Frank McCourt) scathed about the sadistic tutelage of the Irish Catholic priests. During a religious retreat described in the *Portrait of the Artist as a Young Man* (1916), the young artist Stephen Dedalus and all the students were instructed to focus on the *Four Last Things* "as you know from your catechism, death, judgement, hell and heaven." Joyce's portraiture of the Hell he was convinced he was bound for was a Hieronymus Bosch painting of the Doomed and Damned in words.

"All are assembled on that supreme day. And lo, the supreme judge is coming! No longer the lowly Lamb of God, no longer the meek Jesus of Nazareth, no longer the Man of Sorrows, no longer the Good Shepherd.... God Omnipotent, God Everlasting... Supreme Judge, from His sentence there will be and can be no appeal. He calls the just to His side, bidding them enter into the kingdom, the eternity of bliss prepared for them. The unjust He casts from Him, crying in His offended majesty: Depart from me, ye cursed, into everlasting fire which was prepared for the devil and his angels. O, what agony then for the miserable sinners!

Friend is torn apart from friend, children are torn from their parents, husbands from their wives."

Ah, progress! Mark Twain had the advantage over earlier atheists of seeing or at least learning about pathogens at work in God's best of all possible worlds. Eric Blair, known to the world as George Orwell, had the advantage over Mark Twain of seeing Totalitarian Regimes spread death over much of the planet and recognizing them for what they are.

"A totalitarian state is in effect a theocracy, and its ruling caste, in order to keep its position, has to be thought of as infallible." *The Prevention of Literature* (1946).

Amidst all the horrors of War, Purges, and Holocausts, Orwell thought of a brilliant device for an exposé of Russian Communism – *Animal Farm* (1945). Every animal on Mr. Jones' (Czar Nicholas) farm represented a character in the Soviet Union. The pigs, Napoleon (Stalin) and Snowball (Trotsky) carped at each other until Napoleon won because of the dogs (i. e., KGB etc.), who tore apart animals who didn't toe the line. Squealer (a.k.a Molotov) represented the propagandist and liar in chief, who made seeing unbelieving and not seeing believing. The bleating sheep were the conforming Party Members. Then there was Moses, the crow, the avatar of the Russian Orthodox Church, initially banished by the Bolsheviks.

"The pigs had an even harder struggle to counteract the lies put about by Moses, the tame raven. Moses, who was Mr. Jones's especial pet, was a spy and a tale—bearer, but he was also a clever talker. He claimed to know of the existence of a mysterious country called Sugarcandy Mountain, to which all animals went when they died. It was situated somewhere up in the sky, a little distance beyond the clouds, Moses said. In Sugarcandy Mountain it was Sunday seven days a week, clover was in season all the year round, and lump sugar and linseed cake grew on the hedges. The animals hated Moses because he told tales and did no work, but some of them believed in Sugarcandy Mountain, and the pigs had to argue very hard to persuade them that there was no such place."

The Communist regime under Stalin found it was unable to cauterize religious sentiments in the believing masses, so some time after Trotsky was banished the Russian Orthodox Church was allowed to resume a quiet presence that proved helpful to maintaining order – the inevitable alliance of government and God. And Orwell didn't miss that trick.

"In the middle of the summer Moses the raven suddenly reappeared on the farm, after an absence of several years. He was quite unchanged, still did no work, and talked in the same strain as ever about Sugarcandy Mountain. He would perch on a stump, flap his black wings, and talk by the hour to anyone who would listen. "Up there, comrades," he would say solemnly, pointing to the sky with his large beak—"up there, just on the other side of that dark cloud that you can see-there it lies, Sugarcandy Mountain, that happy country where we poor animals shall rest for ever from our labours!" He even claimed to have been there on one of his higher flights, and to have seen the everlasting fields of clover and the linseed cake and lump sugar growing on the hedges. Many of the animals believed him. Their lives now, they reasoned, were hungry and laborious; was it not right and just that a better world should exist somewhere else? A thing that was difficult to determine was the attitude of the pigs towards Moses. They all declared contemptuously that his stories about Sugarcandy Mountain were lies, and yet they allowed him to remain on the farm, not working, with an allowance of a gill of beer a day."

Orwell reserved special venom for the Catholic Church, which was imposed on him from his childhood years in a Convent School and later because of its alliance with the butchery of Franco in Spain. In 1984 (1949), Winston Smith is forced to confess [Catholic style] to seemingly friendly [Father] O'Brien, the representative of the elusive Big Brother, but suffers grievously for it. In 1984 as a Religious Critique (2017) Lindsay Dowty presents the case, giving many examples as haunting parallels, that much of Orwell's bleak dystopia mirrors a Catholic Theocracy, updated with Totalitarian techniques, while the three contending empires are Judaism, Christianity, and Islam.

Let's take a brief step backwards in time to the United States, which has long been a divided nation. Early on, the industrializing North dispensed with slavery, in opposition to the agrarian, slave-owing South. The Civil War, followed by Reconstruction and Jim Crow produced another century of division between North and South. Superimposed on this was the division between Deists and other religious moderates, who largely established the nation, and Fundamentalists, roused from their torpor by the Second Great Awakening.

Fundamentalism took hold of much of the rural heartland of America, fiercely opposed to the modern ferment of the cities, and, in part as a result, to science, an irony since good old boys and country rednecks are

practical, inventive people. Controversies that persist to this day arose over bellwether issues of Global Warming and Evolution.

Perhaps the signal event in this sorry history was the Scopes 'Monkey Trial' of 1925, dramatized with poetic license in the 1960 film, *Inherit the Wind*. [The play was intended as a parable for the right to think in opposition to the mindless terror of the McCarthy era.]

In 1925, Austin Peay the progressive governor of Tennessee signed the Butler Act, which forbad the teaching of evolution. He thought the law would not be enforced, but it was. The idea of a trial occurred to the town fathers of Dayton as a way to put their little town on the map. John Scopes, a substitute biology teacher, who didn't remember if he had in fact taught a lesson on Evolution, agreed to be the defendant. He then coached his students on how to testify. There was much pretrial politicking by both sides. Ultimately Clarence Darrow served as chief counsel for the defense and William Jennings Bryan, three-time nominee for President, served as counsel for the prosecution. One of Bryan's most memorable and oft repeated lines was, "It is better to trust in the Rock of Ages than to know the age of the rocks."

The Trial had its twists, and yes, Darrow did call Bryan to the witness stand though reporter, H. L. Mencken had left the day before. It was Mencken whose sardonic pen aimed at Bryan and Fundamentalism riveted the world's attention on the trial.

"[Bryan] has these hillbillies locked up in his pen and he knows it. His brand is on them. He is at home among them.... Now with his political aspirations all gone to pot, he turns to them for religious consolations. They understand his peculiar imbecilities. His nonsense is their ideal of sense. When he deluges them with his theologic bilge they rejoice like pilgrims disporting in the river Jordan."

Beyond all the attention, the impact of the Trial was uncertain but it certainly did not hold back fundamentalism. Thirteen states attempted to impose laws restricting the teaching of evolution though enough sense prevailed so that only two succeeded. Even so, evolution barely tiptoed into the curriculum until 1958, when Sputnik forced America to wake up to the need for science and technology. After that, fundamentalists had to be more subtle in their war on teaching evolution by creating the fiction of, 'Creation Science' and insisting it be taught alongside evolution. Fortunately, Creation Science and its alter ego, 'Intelligent Design' have been rejected by most school boards and by most states, and exposed for the hollow hoaxes they are.

After the trial ended Dayton returned to its previous obscurity, but the trial did serve as an inspiration for Sinclair Lewis to write *Elmer Gantry* (1927).

Elmer, a wholesome, robust, lazy, and not very bright but charismatic young man, prone to alcohol and women, steeped from birth in the Old Time Religion by a psalm singing, bible-toting, widowed mother and conservative community, was tilted toward a career as a preacher. There, he could wow his flock, committing adultery while excoriating it, drinking while condemning alcohol, totally self-absorbed (at first) while preaching selfless love, etc. – in short living the life of a charming and complete hypocrite, perpetuating and promulgating the ignorance he rose from. A single beautiful sample of Sinclair Lewis's satire is fitting. Early on, Elmer has no idea for a sermon and flips randomly through the Bible in the hope of finding inspiration.

"[Elmer's] original stimulus had run out entirely. Well, he'd get help from the Bible. It was all inspired, every word...He'd take the first text he turned to and talk on that. He opened on: 'Now therefore, Tatnai, governor beyond the river, Shethar-boznai, and your companions the Apharsachites, which are beyond the river, be ye far from thence,' an injunction spirited but not at present helpful."

At present the satirical banner of belief is broadcast by disbeliever Bill Maher, whose many witty remarks about atheism include, "the best thing about being an atheist...is that it takes so little time" and, "Calling atheism a religion is like calling abstinence a sex position." But when it comes to organized religions, Maher is frankly hostile because he feels they have caused and continue to cause irreparable damage. He ranks Mormonism the most absurd, Christianity and Islam the most warlike, and Islam the most repressive of the major religions.

A frequent guest on *Real Time with Bill Maher* is Neil deGrasse Tyson, science spokesman par excellence. I greatly admire Tyson's clarity and broad overview on issues of science and religion. Although Tyson is not a satirist and maintains that he is an Agnostic rather than an Atheist, I include him here because of his incisive analyses of the virtues of the scientific approach and the limitations of fundamentalist religious approaches to natural phenomena. Tyson insists on verifiable, repeatable results of experiments performed by different people. He repudiates any attempt to construct and impose laws and rules that are based on a belief system not anchored in objectively verified knowledge. He notes that all

attempts over history to reconcile faith with reason have failed and that belief in God is based on hopes and fears, without a shred of evidence.

"Every account of a higher power that I've seen described of all religions that I've seen, include many statements with regard to the benevolence of that power. When I look at the universe and all the ways the universe wants to kill us, I find it hard to reconcile that with statements of beneficence."

11.3 UNAPOLOGETIC ATHEISTS

In the past century, conditions have liberalized in some parts of the world. As a result, atheists have proliferated, or have at least come out of the closet (politician atheists excepted).

Bertrand Russell, mathematician, philosopher, political maverick, advocate of free love, and atheist delivered one of the most cited lectures on atheism on 06 March 1927, *Why I Am Not a Christian*. Russell began by stating that by Christian he means someone who believes in heaven and the divinity or at least unsurpassed wisdom and goodness of Christ. He waxed a bit sarcastic by saying that since in England,

"Our religion is settled by Act of Parliament, and therefore the Privy Council was able to override Their Graces and hell was no longer necessary to a Christian. Consequently, I shall not insist that a Christian must believe in hell."

Russell disputed several of the arguments 'proving' the existence of God. He dismissed the First Cause Argument as merely an assertion. He showed that the Natural Law Argument has no need for a God and is complicated by new notions of causality vs chance processes (vis a vis Relativity and Quantum Mechanics). He ridiculed the Argument from Design, favoring Darwin's Natural Selection and using Voltaire's parody, how wondrous it is that the nose was perfectly designed to fit spectacles, and referring to all the imperfections in the world such as the Ku Klux Klan and the Fascists. Russell countered Kant's Moral Arguments for the Deity, noting,

"No sooner had [Kant] disposed of those arguments than he invented a new one, a moral argument, and that quite convinced him. He was like many people: in intellectual matters he was skeptical, but in moral matters he believed implicitly in the

maxims that he had imbibed at his mother's knee. That illustrates what the psychoanalysts so much emphasize – the immensely stronger hold upon us that our very early associations have than those of later times."

Russell rejected the assertion that an absolute moral standard could be a result of God's fiat. Then, tongue in cheek, he proposed that Satan created the Universe when God's attention was momentarily diverted.

Russell considered the Argument for the 'Remedying Injustice' to be strange given all the injustice in the world. He then expressed what he felt to be the prime motivations for belief in God.

"Most people believe in God because they have been taught from early infancy to do it, and that is the main reason. Then I think that the next most powerful reason is the wish for safety, a sort of feeling that there is a big brother who will look after you."

Russell considered Christ's character as presented in the Gospels, bypassing the issues of whether Christ existed and if so, whether he said all that was attributed to him. Russell listed some of Christ's admirable qualities, which he noted few people follow. Then he pointed to some of Christ's faults, from his mistaken eschatology that the World would soon come to an end to his intolerance and vindictiveness by consigning the vast majority of humankind – all those who did not listen, follow, and believe in him – to a fiery, eternal damnation in Hell.

Russell concluded with a series of negative comments about religion. He derided the argument that people need religion to be moral, citing the passage in Samuel Butler's *Erewhon Revisited* (1901) that the main character, Higgs returned 20 years after he had left in a balloon (as did the Wizard of Oz) to find himself apotheosized as a Sun God. When Higgs wanted to tell everyone that he was only human the religion's two leaders, Hanky and Panky, told him that if he revealed he was not God the entire moral fabric of society would collapse.

Russell countered that all moral progress has come *despite the opposition* of the Church. He felt that fear was at the foundation of religion and that Science could overcome it and eliminate the need for religion – a hope dating at least to the Enlightenment that has not yet come to pass and, given human nature, is chimerical.

Russell concludes with an eloquent analysis and plea for what we must do. I quote it in full.

"We want to stand upon our own feet and look fair and square at the world-its good facts, its bad facts, its beauties, and its ugliness; see the world as it is, and be not afraid of it. Conquer the world by intelligence, and not merely by being slavishly subdued by the terror that comes from it. The whole conception of God is a conception derived from the ancient Oriental despotisms. It is a conception quite unworthy of free men. When you hear people in church debasing themselves and saying that they are miserable sinners, and all the rest of it, it seems contemptible and not worthy of self-respecting human beings. We ought to stand up and look the world frankly in the face. We ought to make the best we can of the world, and if it is not so good as we wish, after all it will still be better than what these others have made of it in all these ages. A good world needs knowledge, kindliness, and courage; it does not need a regretful hankering after the past, or a fettering of the free intelligence by the words uttered long ago by ignorant men. It needs a fearless outlook and a free intelligence. It needs hope for the future, not looking back all the time towards a past that is dead, which we trust will be far surpassed by the future that our intelligence can create."

Alas (perhaps), we are not all as rational as Bertrand Russell.

Albert Einstein was! But he was much more than merely rational. Einstein also had a very strong spiritual sense. That conscious duality, which also characterized his science, became a source of deliberate lies spread about his deeply thought and felt clear and unambiguous views on God and Religion. What facilitated the lies was that two of Einstein's epigrams on God and Religion, which are encapsulations of his views, were so easy to misquote and take out of context. Before getting to these epigrams and the views they encapsulated, it is important to note the widespread influence of the lies spread using Einstein's name.

As genius incarnate, who changed our understanding of the nature of the Universe, Einstein was the perfect authority figure for religious advocates and authorities to give conviction to the bogus Argument from Authority that "since Einstein, the greatest genius in the world believed in God, who are we simpletons to dare think that there is no God?" That orthodox religious figures would use the Argument from Authority to squelch opposition is not at all surprising. After all, authoritarians are the most likely to use (and to fall for) the Argument from Authority.

The most famous presumed quote is a paraphrase.

"God does not play dice with the universe!"

Now for the real quotes and their real meanings! The first is from a letter Einstein wrote to fellow physicist and Nobel Laureate, Max Born on 04 December 1926.

"Quantum mechanics is certainly imposing. But an inner voice tells me that this is not yet the real thing. The theory yields much, but it hardly brings us closer to the Old One's secrets. I, in any case, am convinced that He does not play dice."

Einstein used 'the Old One' as a metaphor for the order in the universe and dice, for the notion in quantum mechanics that events at the atomic level are random and not deterministic.

The fact is that from the age of 12, Einstein no longer believed in the God of our forefathers and was frank about it.

"It was, of course, a lie what you read about my religious convictions, a lie which is being systematically repeated. I do not believe in a personal God and I have never denied this but have expressed it clearly. If something is in me which can be called religious then it is the unbounded admiration for the structure of the world so far as our science can reveal it."

Einstein elucidated his feelings and thoughts about God and Religion in several essays and letters. The essay, *Science and Religion*, written in two parts (1939 and 1941) contains the second famous quote,

"Science without religion is lame, religion without science is blind."

This has the flavor of materialist-idealist duality.

Let's look at the essay to see what Einstein meant by Religion in that quote (for he, like William James, distinguished between institutional and ideal, personal religion and used the same word for both), what he thought about God and Religion, and about Religion's proper relation with Science.

You might well expect that Einstein had no trouble defining science and its goals. The goals of science are to discover rules or laws, which enable us to predict phenomena and to reduce those laws to a minimum. The value and legitimacy of science have been certified by our success in using it to make predictions of natural phenomena and behavior of devices of our own design.

"Science is the century-old endeavor to bring together by means of systematic thought the perceptible phenomena of this world into as thoroughgoing an association as possible....It is the aim of science to establish general rules which determine the reciprocal connection of objects and events in time and space. For these rules, or laws of nature, absolutely general validity is required--not proven."

What then is religion, and what are its goals? In an earlier essay, *Religion and Science* (1930) Einstein distinguished between three types or stages of religion – the most primitive is religion of fear, second is moral religion, and third, a stage few have approached, is cosmic religious feeling. It is clear that when Einstein writes about the positive aspects of religion he means the cosmic religious feeling and when he writes about religion's negative aspects, he means mainly the religions of fear and of morality, and all current world religions. Given how small a component the cosmic feeling component is in most of today's religions, it would be better and less confusing to create and use a different word for it.

Despite being widely read in philosophy – Einstein devoured Kant and Schopenhauer among other philosophers as an adolescent – Einstein confessed to having trouble defining ideal, personal religion precisely. He chose instead to illustrate it in terms of special characteristics of what he considered to be religious person. Thus,

"a person who is religiously enlightened appears to me to be one who has, to the best of his ability, liberated himself from the fetters of his selfish desires and is preoccupied with thoughts, feelings, and aspirations to which he clings because of their superpersonal value...which neither require nor are capable of rational foundation."

Einstein judged the domains of science and religion to be separate, but interrelated. Science concerns the search for truth; its domain is restricted to ascertaining what is. Religion concerns the love of and yearning for truth; its domain is restricted to making value judgments, speaking to our aspirations, and establishing them firmly in our hearts and minds.

"For science can only ascertain what is, but not what should be, and outside of its domain value judgments of all kinds remain necessary. Religion, on the other hand, deals only with evaluations of human thought and action: it cannot justifiably speak of facts and relationships between facts."

"Now, even though the realms of religion and science in themselves are clearly marked off from each other, nevertheless there exist between the two strong reciprocal relationships and dependencies. Though religion may be that which determines the goal, it has, nevertheless, learned from science, in the broadest sense, what means will contribute to the attainment of the goals it has set up. But science can only be created by those who are thoroughly imbued with the aspiration toward truth and understanding. This source of feeling, however, springs from the sphere of religion. To this there also belongs the faith in the possibility that the regulations valid for the world of existence are rational, that is, comprehensible to reason. I cannot conceive of a genuine scientist without that profound faith. The situation may be expressed by an image: science without religion is lame, religion without science is blind."

In this use of the word, religion, Einstein clearly meant its cosmic feeling with its yearning for understanding and love of beauty, and not the established institutions, with their ideologies and doctrines designed to capitalize on and magnify our fears and guilts, and with their ultimately anthropomorphic gods ready to punish us for violations of the laws they imposed on us but were themselves willing to break at will via miracles.

"The more a man is imbued with the ordered regularity of all events the firmer becomes his conviction that...neither the rule of human nor the rule of divine will exists as an independent cause of natural events....To be sure, the doctrine of a personal God interfering with natural events could never be refuted...by science, for this doctrine can always take refuge in those domains in which scientific knowledge has not yet been able to set foot."

"A doctrine which is able to maintain itself not in clear light but only in the dark, will of necessity lose its effect on mankind, with incalculable harm to human progress. In their struggle for the ethical good, teachers of religion must have the stature to give up the doctrine of a personal God, that is, give up that source of fear and hope which in the past placed such vast power in the hands of priests. In their labors they will have to avail themselves of those

forces which are capable of cultivating the Good, the True, and the Beautiful in humanity itself."

In short, to Einstein, cosmic religious feeling is a human ideal that has nothing to do with anthropomorphic Gods and unfortunately too little to do with our contaminated religious (and totalitarian political) institutions.

Einstein maintained these views to the end of his life, freely confessing the bondage and link he had with the Jewish environment he was born into but denying special status to the Jewish people or any other people. In the just published 1954 letter to Eric Gutkind he wrote,

"The word god is for me nothing more than the expression and product of human weaknesses, the Bible a collection of honorable, but still primitive legends which are nevertheless pretty childish. No interpretation no matter how subtle can (for me) change this."

"For me the Jewish religion like all others is an incarnation of the most childish superstitions. And the Jewish people to whom I gladly belong and with whose mentality I have a deep affinity have no different quality for me than all other people. As far as my experience goes, they are no better than other human groups, although they are protected from the worst cancers by a lack of power. Otherwise I cannot see anything 'chosen' about them."

Historian Will Durant also ackno, wledged the power and depth of our irrational and inspirational side, and characterized his belief about God in much the same way as Einstein.

"I am still an agnostic, with pantheistic overtones. The sight of plants and children growing inclines me to define divinity as creative power, and to reverence this in all its manifestations, even when they injure me. I cannot reconcile the existence of consciousness with a deterministic and mechanistic philosophy. I am skeptical not only of theology but also of philosophy, science, history, and myself. I recognize supersensory possibilities but not supernatural powers." *A Dual Autobiography* (1977).

In interviews about the time of his autobiography, Durant conceded great wisdom to religion, based on its durability and countless independent spontaneous incarnations around the globe, even though he remained an unbeliever in a personal God. He did conclude that belief in a supernatural being who imparts a moral code is necessary to keep people

and society in order and that religion is one of the essential mechanisms that forcibly socializes man and controls his innate 'pugnacity'. He saw civilizations decline and founder when they forsook the old orthodoxy that accompanied and helped promote their rise. Dare I counter that a successful civilization is gradually rendered vulnerable to dissolution and Barbarian attack by the general relaxation of stiff moral codes and decline of martial vigor and attitudes, all fostered by a prolonged sense of security, accumulated but disparate wealth, and growing cultural and ethnic diversity due to incorporation by conquests and immigration.

Although both Einstein and Durant dismissed the possible existence of an anthropomorphic God, and both felt religious institutions had done great harm, they also felt religion in some form is necessary for maintaining order, so neither were venomous in criticizing religion.

Madalyn Murray O'Hair, perhaps the most influential atheist in America, was surely strident and persistent in her critiques of and fights against religion. In 1960 she sued the Baltimore City Public School System on behalf of her son for its compulsory Bible readings. The case was merged into an almost identical case, Abington School District v. Schempp, which Edward Schempp filed on behalf of his son Ellery, and which came before the Supreme Court in 1963. The court decided in favor of Schempp and Murray that compulsory bible readings in school are unconstitutional. Part of Madalyn's opening statement to the Supreme Court reads,

"An atheist loves his fellow man instead of god. An atheist believes that heaven is something for which we should work now – here on earth for all men together to enjoy."

Madalyn continued grabbing headlines as an outspoken atheist, founding American Atheists in 1963 and heading it until she was murdered in 1995. Ellery, also an atheist went onto a quiet and distinguished career in physics, specializing in nuclear magnetic resonance (NMR).

A spate of eloquent, vocal, and strident atheists have arisen or at least found their voice in the wake of rising Muslim extremism and certainly after 9/11. On that day, Saudi Muslim religious lunatics acted with such depraved indifference to human life and to all moral standards no true atheist would ever have sunk to.

Ibn Warruq was inspired to write *Why I Am not a Muslim* (1995) by the insipid response of the western world to the fatwa against Salman Rushdie by the arch-necrophiliac Shiite Muslim ayatollah of Iran (who provoked and prolonged a Muslim vs. Muslim 'holy' war started by

Sunni Iraq that claimed some 400,000+ lives). A good part of his book stresses the long history of Islamic intolerance and repressiveness.

Atheistic responses to 9/11 came quickly and included Sam Harris's book, *The End of Faith* (2004) as well as books by Ayaan Hirsi Ali and the short film, *Submission* (2004), produced with Theo van Gogh (who was assassinated by a Muslim fanatic). There are now numerous YouTube videos, including Julia Sweeney's poignant, piercing, and humorous *Letting Go of God* (2007), and many books, including,

- 1. Michael Onfray, Atheist Manifesto: The Case Against Christianity, Judaism, and Islam (2005).
- 2. Daniel Dennett, *Breaking the Spell: Religion as a Natural Phenomenon* (2006).
- 3. Victor J. Stenger, God: The Failed Hypothesis (2007).
- 4. Herman Philipse, God in the Age of Science? A Critique of Religious Reason (2012).

The authors of these books go beyond the standard arguments against religion and belief in God, calling upon findings from science that demolish many of the pseudoscientific arguments for God, such as 'Intelligent Design'. They all praise science and reason and denounce blind religious faith and all the evils done in the name of God. Thus Stenger's quote, "Science flies you to the Moon. Religion flies you into buildings." All of this has earned them the title, 'New Atheists'.

The New Atheists view religion as positively harmful, oppose the free pass even secular governments give to religion, and advocate denying any respect to any unfounded beliefs and claims. They also excoriate religious moderates (recall §5.13). For example, Sam Harris states that religious moderates exist only where religion has been reined in by rational government and that by insisting on the continuation of religion, they hold back progress of the mind and give cover and implicit approval to fundamentalist intolerance and its most violent, destructive acts.

I focus on books by two prominent members of the so-called "Unholy Trinity" – Richard Dawkins, and Christopher Hitchens. (Sam Harris is the third and if you add Daniel Dennett you get the "Four Horsemen"). Their debates and lectures on the subject on YouTube make for great listening and entertainment. Each of the Four Horsemen comes at atheism with a different expertise. Harris is a neuroscientist, Dawkins, an ethologist and evolutionary biologist, Dennett a philosopher, and Hitchens was an intellectual journalist and formidable debater.

11.4 GENETICS SHREDS INTELLIGENT DESIGN

Before reviewing Richard Dawkins' best-seller on Atheism, *The God Delusion* (2006) it is appropriate to outline the history of genetics, because as Dawkins shows, genetics shreds the argument by design for the existence of God.

The history of genetics is almost as coiled as the DNA molecule. Let us begin with the work of Gregor Mendel. Born to an impoverished farmer, Mendel became an Augustinian monk to obtain a free education and eliminate the "perpetual anxiety about a means of livelihood". Working alone and in obscurity, he conducted his famous experiments with inherited characteristics of peas between 1856 and 1863, publishing the findings in 1866. For 35 years, no one took notice. (A hint of why Mendel did not succeed at publicizing his work was that he failed the oral part of the teaching certification exam twice and never did pass it.)

Mendel's work constitutes the maximum simplification of the ancient technique of cross-breeding used to improve desirable qualities in domesticated plants and animals. He chose *binary* characteristics – tall stems vs short stems, green seeds vs yellow seeds, angular seeds vs round seeds. For example, he mated pure-bred tall-stemmed plants with pure-bred short-stemmed plants. Every first-generation offspring of the pure-bred plants was tall-stemmed (dominant) but in the second generation, ¹/₄ of the plants were short-stemmed (recessive). This showed 1: how both parents contribute to inheritance, and 2: that many inherited traits remain binary rather than blended, contrary to all previous theories.

Mendel's work was clearly recessive — it disappeared for a generation. During that interim scientists solved several aspects of the mystery of reproduction and inheritance. The nuclei of cells contain the chromosomes, which contain the genetic information coded in DNA. Antoni Leuwenhoek had diagrammed nuclei in cells in 1719. Friedrich Miescher discovered nuclein (nucleic acid) in 1868, and in 1885, Oscar Hertwig discovered that it was the substance of fertilization and heredity. Nine years earlier, in 1876, Hertwig observed that during fertilization, the sperm cell entered the egg. Chromosomes were discovered by Karl Wilhelm von Nägeli in 1842, and in 1878, Walther Flemming discovered that chromosomes split (by the process of mitosis) when cells split.

The independent rediscovery of Mendel's work and simultaneous uncovering of his paper in 1900-1901 formed the basis for something of a grand unification of the piecemeal genetic discoveries. It was only then that scientists realized chromosomes are the entities that carry the genetic material. Proof of the concept, however, took another 25 years.

Another 25 years after that, the race was on to determine the structure of the DNA molecule. James Watson and Francis Crick determined DNA's double helix structure in 1953, one of the great discoveries in the history of science, which Watson recounted in dramatic fashion in *The Double Helix* (1968).

DNA is an enormous molecule with innumerable variations. DNA, with the help of the simpler RNA molecule, determine everything about the plant or animal that will house them, from building the organs, the bones, the heart, the brain and stocking them with proteins, hormones, and enzymes. The precise structure of the DNA in the chromosomes determines whether it will be a virus, bacteria, plant, or animal.

Finding the generic structure of DNA was the starting point of an adventure that has led to a torrent of spectacular discoveries about life. The next major steps involved deciphering the code to see in detail how DNA designs us and determines our nature, and how we evolved. And the techniques that were developed, including gene splicing, allow us to see which segments code proteins, which segments produce a heart, a kidney, and an eye, and which segments are blocked from expressing their actions. We can do some genetic engineering (using CRISPR technology) to change the structure and function, and as we now see, to develop vaccines. It is a giant step in the direction of creating life, *Jurassic Park* style, even if we are still some way off.

We don't yet know how these marvelous molecules first formed, how they found their homes in cells, how the cells formed, learned to respire, ingest, excrete, divide, and eons later to incorporate and partner with other smaller cells, and eons after that to join together, communicate, become specialists, and cooperate. One point comes out clear. This complex myriad of life was not created all at once, but step by step, miracle piled on miracle, over the eons. It is still going on today before our eyes, as it always has. Small mutations occur with statistical regularity. Most are failures but a rare few (which may account for punctuated equilibria) are triumphs and lead us on into the unknown.

The magnificent design or complexity we see today in many biological systems, such as the eye or energy production in the cells (including the Krebs and Calvin–Benson–Bassham cycles that biology students study), evolved over multiple steps and multiple eons and are far from what efficient, optimal designs would be. Whereas each incremental (but possibly substantial) step in the added complexity during evolution may itself have been optimal, the ultimate design (such as human bipedal structure) is itself far from optimal. Why isn't it optimal? There may not have been any direct way that nature could have produced a superior, maximally efficient final product or process.

The ultimate conclusion is that there was no design by fiat of a great mentally anticipating creator. If you insist God is the creator then God did it slowly, incrementally, seemingly randomly by blind experiment, inefficiently, all with enormous waste and destruction. A Noah's flood of obliterations every second for all that went astray over the last roughly 3.5 billion years, not to mention the 10 billion years before that of galactic, stellar, and planetary preparation following the Big Bang.

For anyone with a perspective of the grand, complex, evolution of life (such as Dawkins), an intelligent designer God simply makes no sense.

11.5 DAWKINS AND DELUSION

On 04 January 2020 I began reading Dawkins' *The God Delusion* (2006). I had put off reading it because I felt I first needed to formulate my own thoughts sufficiently. In 1969, I recall being lucky in my PhD thesis that I had not come across an article by Arthur Kent on Magnetohydrodynamic Stability, my thesis topic, until I had made good progress in my research. Had I seen Kent's article a year earlier, I most likely would have abandoned the topic because I would have thought I could not have added anything. Sometimes it pays to do thinking on your own before you expose yourself to the thoughts of the 'experts'. You might come up with new ideas and at least will know what your own ideas are.

In *The God Delusion* Dawkins expressed with great clarity several ideas I thought of on my own but only in protean form as well as several ideas and arguments that were new to me. Here are some highlights.

Theologians have only expertise in Religious texts, such as the Bible, but have no expertise whatsoever regarding any of its miraculous claims, especially those that touch on natural phenomena. "Do you have to read up on leprechology before disbelieving in leprechauns?" Scientists however do have such claims. Therefore, arguments such as that Einstein had no expertise on religious claims and that he should have stuck to science are bogus.

Religion also has no legitimate claim on morality. Dawkins wrote that it is inappropriate to call upon priests, rabbis, ministers, and imams when moral questions arise since they have no more expertise than any man on the street. Doing so gives religion a forum, soap box, and more than tacit approval that it does not deserve. On this point I disagree in part. Whereas clergy can be as immoral as anyone, they do acquire vast experience in dealing with people's problems, so if they leave aside their

agendas they can be helpful. If I had a personal problem I could not confide to a friend or relative, I would first seek out a psychologist, but failing that would be willing to try a reform clergyman.

Dawkins disputes Stephen Jay Gould's magnificent expression, 'non-overlapping magisteria' (NOMA), that science and religion by nature deal with completely separate issues (as Einstein also maintained), but given religion's incessant incursions into natural processes and phenomena, Dawkins is right. There would, indeed be non-overlapping magisteria if religion confined itself to our aspirations, moral issues, values, and life passages without interposing agendas, but it doesn't.

Dawkins distinguishes Natural Selection from a purely random walk process in that surviving changes make it drift in the direction of success. He points out the poor and certainly haphazard design of various organs such as the eye that have resulted from the incremental steps of Natural Selection would not have been the organs that an intelligent designer would have created. He stresses the point that the documented mostly incremental evolution of life by Natural Selection has a far higher probability than the existence of a far more complex, invisible creator who could will such creations.

Some attitudes of religious people involve serious inconsistencies. One is that they vehemently oppose euthanasia despite praising the eternal life, whereas atheists, who consider death to be the end, are much more in favor of ending a life of pain and suffering when there does not appear to be any possibility of recovery.

Dawkins coined the now popular term, *meme*, which he defines as a sociological gene that spreads through society like a virus. To him, religion is a meme that makes people less moral, separates them, and mandates ignorance, prejudice, fanaticism, and bigotry. Religion is a "label for in-group/out-group enmity and vendetta".

Dawkins resents and opposes the injection of religion into public life and the gratuitous perks it is given. He particularly opposes the teaching and inculcation of religion to children by parents and in schools. He resents the fact that children are called Christian children or Jewish children or Muslim children. That means they are given no chance and will perpetuate the nastiness called religion.

Dawkins has no patience whatsoever with religion, feeling that science can replace it without loss because science provides as much comfort and consolation as religion without any of the negatives, and that morality is instilled by our biology, not by religious proscription. He modified Robert Pirsig's statement in *Lila* (1991) to read,

"When one person suffers from a delusion it is called insanity. When many people suffer from a delusion it is called religion."

11.6 HITCHENS: RELIGION AS POISON

Atheist Christopher Hitchens had even less patience for religion. I stand in awe of his formidable debating skills. His overviews and summaries were incisive, he gave no ground when challenged, and seemed always ready with a devasting response. He showed himself as an unpleasant, supercilious character with a wry, biting sense of humor. For example, in a debate with Rabbi David Wolpe, he quipped, "Nietzsche once said that God is *dead*. Then Freud said that God is *Dad*". But when he was dying of esophageal cancer largely as the result of smoking multiple packs of cigarettes per day he showed an admirable stoic, matter of fact attitude.

Hitchens approached Atheism largely as a Social Scientist (though with knowledge of science) in *God is not Great*, (2007), which I first read around 2015 and began rereading on 11 April 2020, when the first draft of *Genial Atheism* was otherwise largely finished. What I remembered of it before rereading it was that I admired Hitchens' eloquence and range, recognized his unrelenting bombast against Religion and belief in God, and that the book began to seem repetitive somewhere about midway. It did not seem repetitive to me the second time around.

I give *God is not Great* an extended review because it constitutes such a compelling, up-to-date summary of every conceivable evil aspect of religion. The book contains many of the classical arguments for atheism and against religion, updated with modern examples. It is a work that shows great scholarship, organization, and memory.

Hitchens begins with his eloquent overview of religions and believers. It so closely matches everything I have written, feel, and think about religion and believers that I must have absorbed more from my first reading than I can remember.

Hitchens seems to have converted to atheism somewhat before the age of 13, though his doubts first arose at the age of 9. His self-image is of a genial atheist, who if invited to church, synagogue or mosque will go and abide the customs out of respect for the believers there. But don't let Hitchens' pretension of geniality toward religions fool you. *God is not Great* lambastes and damns religion at every step and is riddled with sarcasm, mockery, and invective.

In contrast to Dawkins, Hitchens, as a once ardent Communist, acknowledges firsthand the need or urge people have and will have for belief until humankind evolves sufficiently to lose its fear of death.

"There are days I miss my old convictions as if they were an amputated limb. But in general I feel better, and no less radical, and you will feel better too, I guarantee, once you leave hold of the doctrinaire, and allow your chainless mind to do its own thinking."

Hitchens claims we have some evidence of the ignorant origin of religion because we have observed first-hand the origin of the so-called Cargo Cults. During and after World War II, the armed forces invaded and occupied places where previously unknown primitive peoples lived, as in Papua New Guinea. The primitive natives made sterile mimetic efforts to obtain modern goods they saw arriving in planes by building their own runways and look-alike models, hoping they would fly, but of course without engines, which they had no idea of.

He recounts the story of Hugh Marjoe (Mary + Joseph) Gortner, the 4-year old preacher subjected to waterboarding by his hypocritical, venal evangelist parents so that he would perform as instructed without it leaving any marks on his body. When this Shirley Temple of the Evangelical World grew up he starred in an expose video of the cynical techniques that evangelists use to extract a maximum amount of money from their gulled followers, who have real trances, get real shakes, and speak in Tongues (i.e., blabber repetitive gibberish).

Hitchens asserts that the origin of religion involves ignorance plus malice. He gives examples of how religion advocates, praises, commits, and justifies murder, and he lists with resentment and outrage the free passes given to religion to continue committing their crimes. He notes that disasters and plagues have strengthened religious belief and observance, the latter which provides religion with its motive for opposing vaccines and condoms. Religions are presented as antifree, antisex, and antilife. Religions revel in the death wish and fables of the end of the world. While chronicling these properties, Hitchens repeated the chant, "Religion poisons everything".

Hitchens dispenses with the various 'Proofs' of God, noting in the logical-positivist spirit of the atheist philosopher A. J. Ayer,

"What can be asserted without evidence can also be dismissed without evidence."

Regarding the argument from Design, Hitchens described the step-by-step development and consequent inefficiency of the human eye and other sense organs and their inferiority compared to those of birds and other animals. Evolution has been brilliant and cruel with extinctions, needless profusion (sperm and insects) and outcomes that in retrospect can only be seen as random, such as the survival of the first vertebrate, Pikaia, of the End Cambrian Extinction ala Stephen Jay Gould's *Wonderful Life*. He also notes that human evolution is ongoing, with hundreds of genetic changes in the past 5000-15000 years.

Hitchens updates Spinoza's and Paine's criticisms of the Bible's inconsistencies, anachronisms and parochialisms, adding his own condemnations.

"Intelligent school children have been upsetting their teachers with innocent but unanswerable questions ever since Bible study was instituted."

"The ground is forever soaked with the blood of the innocent. Moreover, the context is oppressively confined and *local*. None of these provincials, or their deity, seems to have any idea of a world beyond the desert."

Hitchens claims that the Maccabees introduced a cosmic intolerance into religion that ultimately destroyed Hellenistic culture and replaced it with the messianic lunacy of Orthodox Judaism, Christianity and Islam, though he failed to mention that Antiochus initiated a compulsory Hellenizing campaign with severe penalties for adhering to religious practices. Jewish religious authorities later did all they could to suppress Hellenistic Jews. Intolerance abounded in many directions.

The New Testament matches the inconsistencies and exceeds the evil of the Old. Hitchens turns the favorable assessment of Christ's message by C. S. Lewis (an ardent advocate of Christianity) to an indictment.

"A man who was merely a man and said the sort of things that Jesus said would not be a great moral teacher. He would either be a lunatic...or else he would be the Devil of Hell."

New Testament inconsistencies include 1: The prophecy that Jesus was the Messiah "If it should seem odd that an action should be performed in order that a foretelling be vindicated, that is because it *is* odd." And 2: Mother Mary's Immaculate Conception,

"She herself appears to have no memory of the Archangel Gabriel's visitation, or the swarm of angels, both telling that she is the mother of god. In all accounts everything that her son does comes to her as a complete surprise, if not a shock."

Add to these the monstrous absurdities, such as why

- 1: We are all damned for the 'sins' of Adam.
- 2: A father would sacrifice his son to save everyone else.
- 3: Non-believers would have to suffer eternity for not believing.
- 4: Those who, like Judas, helped fulfil a sacred prophecy would be damned.

Hitchens' summary of these evils is, 1: "The collectivization of guilt is immoral," and, 2: "Religion is scapegoating writ large."

Hitchens abhors the concept of Hell, the imposition of fear from the earliest age by controlling the education and inculcation of children, and all proscriptions against sex and natural urges.

"Nothing proves the man-made character of religion as obviously as the sick mind that designed Hell."

"One could write an entire book devoted only to the grotesque history of religion and sex, and to the holy dread of the procreative act and its associated impulses and necessities."

Castigating the Catholic clergy, he says that their motto should be, "No child's behind left." Religion to Hitchens is Sex Abuser in Chief. He focuses on Circumcision, noting that even Maimonides saw it as unnatural and a device to dull excitement. And he does not ignore the curses placed on both menstruation and masturbation, while forbidding normal sexual activity outside marriage.

"It is hard to imagine anything more grotesque than the mutilation of infant genitalia....The bodily pain caused to that member is the real purpose of circumcision....Clerical control of the sexual instinct, and even of the sexual organs...belongs, like the rest of religion, to the fearful childhood of our species."

Although Hitchens focused first on Christianity and second on Judaism, he indicted all religions. He called Islam an "ill-arranged set of plagiarisms" of earlier religions and local superstitions, decried its use of science and technology only as a negation (ala 9/11) and its enforced fatalism,

"...which believes that all is arranged by Allah in advance, its utter denial of human autonomy and liberty, as well as its arrogant and insufferable belief that its faith contains everything that anyone might ever need to know."

Islam accompanies these qualities with extremely harsh and swift repression for anyone who whispers a word of doubt. And as religion is a magnet for the gullible, he noted that

"The colossal volcanic explosion at Krakatoa in the late 19th century provoked an enormous swing toward Islam among the terrified population of Indonesia."

Neither did Hitchens let Eastern Religions off the hook. He witnessed first-hand the absurd adulation in North Korea – not Communism but, "a debased yet refined form of Confucianism and ancestor worship." He scorned Buddhism, denying its presumed passivity by pointing to the holocausts it has caused, as against the Tamils (and now the Rohingya Muslims). He insists that those who seek enlightenment from,

"a faith that despises the mind and the free individual, that preaches submission and resignation, and that regards life as a poor and transient thing...may think they are leaving the realm of despised materialism but...[may find that they] discard their minds along with their sandals."

As Hoffer stressed and Hitchens concurred, religion and totalitarianism are psychic Siamese twins. "The essential principle of totalitarianism is to make laws that are *impossible to obey*." Any solution to the resulting violations leads to self-mortification of the flesh. And for even those sinners who do punish themselves sufficiently, the authorities, who in the case of Religion are led by its vigilant caste of priests, mullahs, and imams, are privileged and 'commanded' to cauterize all deviations.

Hitchens dismissed the charge that atheistic regimes have perpetrated more evil acts than religions, enumerating the alliances between the Catholic Church and Fascism (from fasces or bundles of rods), first in Italy (Lateran Council 1929) and then throughout Europe — Spain, Portugal, Hungary, Slovakia, Croatia, Austria, and France ("Better Hitler than Blum") both before and during Vichy. Hitler's first diplomatic

accord in 1933 was a treaty with the Vatican. The Church ordered the end of protests against Nazism and provided the Nazis with lists of official faithful so that Jews could be more easily singled out by exclusion. And after the War, the Vatican provided passports and even organized the "Rat Line" for Nazis to escape to South America. They then supported the Fascist Regimes in South America. He also pointed out the subtle return of religion under the Communists.

Religious leaders have done everything they could to limit independent thinking. Even Russian Rabbis, whose congregations huddled in fear of periodic pogroms in the so-called Pale of Settlement to which they were confined, sided with the Czar against Napoleon, who was responsible for removing anti-Jewish Laws but who they feared would bring the (godless) Enlightenment to Russia.

Hitchens asserted that the Hutu led holocaust of Tutsis in Rwanda, one of the most Christian nations on Earth, was inspired by a Catholic Vision. We let religion off the hook too easily. What we call ethnic cleansing in Serbia and Bosnia, was a religious holocaust. And Japan's religion, deifying the Emperor, facilitated the slaughters of neighboring Asian peoples both before and during World War II.

"Things went from bad to worse when Japanese generals had mobilized their Zen-obedient zombies into complete obedience....By the end of the dreadful conflict that Japan had started it was Buddhist and Shinto priests who were recruiting and training the suicide bombers, or Kamikaze ('Divine Wind') fanatics."

Where does the truth lie in these historical events? Ascribing all blame to religion and ignoring the conflicting views and actions of any huge organization is certainly an overstatement. But Hitchens' one-sided view, which attributes all evils to Religion, serves as a useful counterweight to those histories that exonerate or excuse Religion for its many crimes.

Hitchens concludes his eloquent diatribe by asserting that

- 1: "Religion has run out of justifications....It can now only impede or retard or try to turn back the measurable advances that we have made."
- 2: "The only possible moral society must be secular and democratic. Our moral standards are those that have evolved with us as group animals, and have nothing to do with absolute, God-

imposed rules. Socrates phrased this by claiming he was guided by an internal Oracle." As a result, Hitchens issued the following challenge, which he claims no one met, "Name an ethical statement or action, made or performed by a person of faith, that could not have been made or performed by a nonbeliever."

Finally, Hitchens urges atheists to feel proud and speak up. In the old days it was wise to keep your mouth shut if you had any religious doubts or if you were an atheist. John Stuart Mill mentioned he kept his mouth shut and considered it one of his moral failings. That may have been wise at that time, but times have changed. At a debate in Little Rock, Hitchens queried the audience and was shocked to find that "half the people attending thought they were the only atheists in town." It seems that Hitchens had actually succeeded in herding cats.

CHAPTER 12

CONCLUSION: ATHEISM EMERGENT

We've reached the end. Looking back through *Genial Atheism*, you can see that the same arguments for and against God and atheism have been repeated over the past two thousand or so years, with increasing information, knowledge, and sophistication, particularly on the side of the atheists, but with much the same substance. That is because the issues remain the same and genetically, we are pretty much the same as we were two thousand years ago. We have far more knowledge, education, food, toys, freedom, and options, but pretty much the same desires, needs, abilities, and fears. Our subconscious minds still have pretty much the same degree of control over our conscious minds, though hopefully a smidgeon less after 2000 years of culling by evolution and civilization.

Atheists were unpopular two thousand years ago, and they remain unpopular today. They were not tolerated then, but ah, 'Vive la difference!' Atheists are tolerated now, at least in many places. They are tolerated wherever religion has lost its monopoly. Where religion retains its monopoly, as in theocracies or closed sommunities, tolerance is not tolerated. "Absolute power corrupts absolutely."

So, my dear atheists, be thankful to be tolerated! Don't expect to be popular. You will never be. You will always be feared and resented by your 'friends' of faith. You will probably have more hobbies and education than they have and ironically, know more about religion than they do so that a partial cure for faith is...knowledge of your faith. You will probably have a greater sense of awe about life and the world than they do. You will have some of the same exhilarating feelings, aspirations, and experiences as the faithful, though you will attribute them to your nature and not to any external source. You will be as or perhaps a bit more moral than they are but you will likely be less charitable and not quite as happy, probably because you will probably be lonelier. You will probably be lonelier because you will always be in the minority (except where atheism is the imposed religion of an a-theocracy such as China) though you may be less lonely because you are more likely to be a loner.

A 2019 survey shows that 4% of Americans admit to being atheists and another 5% admit to being agnostics. That is up from 2% and 4% admitted atheists and agnostics in 1991, but those numbers were, are, and may always be small, and will depend on conditions. Hard times,

poverty, and ignorance increase the neediness for and popularity of God and Satan. Good times, financial security, and *thought-provoking education* decrease the need for God and Satan, and give us courage to step out into the sunshine (with an appropriate sunblock).

Leaving belief in a celestial or terrestrial God is like the movie, *The Good, the Bad, and the Ugly*. The *Ugly* is that you may be shamed, shunned, and excommunicated by those you love and by the community you know, and the resulting isolation you may have to suffer and endure until you find new family and friends. The *Bad* is leaving the comfortable illusion of feeling taken care of, possibly forever, not that you will have any choice once your eyes are opened as an atheist. The *Good*, and it is very good indeed, is leaving behind and therefore, weakening the Evil Empires of Religion and Totalitarianism, which fleece everyone because they have no clothes, and which sell a fairy tale of an Emperor that you must believe in and grovel before or be banished, or die, for the Empire builds walls that shut out the rest of humankind, and will kill you the moment it gets the power to do so.

Perhaps I shouldn't, but I do feel uncomfortable in a crowd of religious people, especially in a religious setting, even when they are my coreligionists. And the more orthodox the crowd, the more uncomfortable I feel. I confess that I would feel much more comfortable and welcome if I could convert them to atheism or at least to doubt, just as they would like to convert me to belief in their convictions. Both conversions, of course, are next to impossible.

But what if this book leads just one believer to the precipice of doubt? I am not talking about the doubt that religions love – the tortured doubt of the fixed followers clinging to their religion in the desperate hope for some sign from God that He exists and cares, such as the sterile, dark doubts Mother Teresa confessed to in her letters. No! I am talking about wholesome doubt, such as when a person says, "I really doubt that". That kind of doubt is good. It is a doubt that stands up and says, "Show me!" It is a doubt that says to all purveyors of pablum, "Now that I think of it, what you are preaching makes no sense. Offer me evidence or proof, or go your way."

If this book leads just one believer to that precipice of wholesome doubt then it will have done some good. What good? Save one person and you save the world. If you started as a believer, perhaps your defection from the Evil Empire will tip the domino that causes it to topple. Then, *Genial Atheism* will prove to be the salvation of the world.

That's it! But wait! I just had another thought.

Born, Max, 205

Index of Names

Abel, 94 Bosch, Hieronymus, 196 Abraham, 81, 94 Broca, Paul, 179 Adam, 2, 17, 55, 58, 70, 85, 89, 93-Brown, Judy, 10 94, 109, 129, 148, 216 Broglie, Louis de, 131 Bryan, William Jennings, 198-199 Adams, John Quincy, 125 Agassiz, Louis, 170 Buddha, 18, 42, 121-122 Aisha, 19 Burke, Edmund, 152-153, 160 Aladdin, 4 Bush, George W., 24, 65 Alexander, 93, 122 Butler, Samuel, 203 Ali, Ayaan Hirsi, 210 Caeser, Augustus, 93 Anaxagoras, 130 Caicai, 89-90 Anselm, 59, 132, 141 Cain, 94 Anthony, Susan B., 174-175 Calvin, John, 37, 56, 194-195 Antonine, 124 Calvin, Melvin, 212 Apollo, 93 Campanella, Tomasso, 133 Aquinas, Thomas, 132, 141, 155 Carus, Carl Gustav, 181 Arachne, 128 Charpentier, Jean de, 169-170 Arendt, Hannah, 21 Chambers, Robert, 171 Ares, 93 Chaucer, 45 Aristarchus, 126 Chon, Don Soo, 44 Aristophanes, 129, 132 Crick, Francis, 210 Ashoka, 122-123 Confucius, 47, 121 Athena, 128 Constantine, 73, 124 Augustine, 55, 73, 131 Conway, Kellyanne, 39 Austen, Jane, 174 Copernicus, Nicolas, 126, 135 Ayer, A. J., 216 Crick, Francis, 212 Bach, Johann Sebastian, 41 Costa, Uriel da, 134 Bacon, Francis, 51 Curie, Marie, 102 Baker, Tom, 65 Curie, Pierre, 102 Bassham, James, 212 Cuvier, 166-168 Baum, Frank, 175 Cyrus, 122 Bayle, Pierre, 138, 145 Damásio, António, 67 Becquerel, Henri, 102 Darrow, Clarence, 200 Darwin, Charles, 100-101, 126, 153, Bell, Charles, 179 156, 165-167, 170-171, 179, 180, Bellamy, Francis, 79 Belon, Pierre, 167 202 Benjamin, 95 Darwin, Erasmus, 167-168 Benson, Andrew, 212 David, 17 Berger, Hans, 67 Davies, Edward R, 33 Black, Joseph, 99 Dawkins, Richard, 72, 107, 211, 213-216 Blair, Eric, 198 Bohr, Niels. 131 Dax, Marc, 179 Boltwood, Bertram, 103 Decaulian, 89

Demeter, 92

Hades, 92 Democritus, 128, 130 Dennett, Daniel, 210 Haidt, Jonathan, 46 Descartes, Renee, 67, 137 Hammerstein, Oscar, 33 Dostoevsky, Fyodor, 43 Harris, Sam, 210 Dowrty, Lindsay, 199 Hartmann, Karl von, 181 Hecht, Jennifer, 54 Dunbar, 117 Durant, Will, 37-38, 128, 154, 193, Hegel, Georg, 163 208-209 Helmholtz, Herman von, 180-181 Einstein, Albert, 131, 204-207, 209, Heracles, 93 212 Hertwig, Oscar, 211 Engels, Friedrich, 78 Hillel, 47, 123 Epicurus, 128, 130 Hirsi Ali, Ayaan, 208 Erasmus, 133 Hitchens, Christopher, 49, 74, 210, 215-221 Esau, 94 Eve, 55, 58. 70, 85, 109, 129, 148 Hitler, Adolf, 219-220 Eyck, Jan van, 41 Hobbes, Thomas, 134, 137 Ezra, Abraham ibn, 134 Hoffer, Eric, 14, 18, 23, 70-71, 219 Fechner, Gustav, 180 Holbach, Baron d', 7, 21, 150-151, Feuerbach, udwig, 161-163, 181 160 Holmes, Arthur, 103 Flemming, Walther, 211 Hume, David, 19, 99, 148-149, 152-Fouché, Joseph, 159 Franklin, Benjamin, 148, 150 155, 160 Fraser, Alistair, 135 Hutton, James, 99-100 Freud, Sigmund, 181, 189-191, 213 Huxley, Thomas, 101, 171 Fromm, Eric, 164 Isaac, 81, 94 Fuseli, Henry, 181 Isaiah, 149-150 Gabriel, 216 Jacob, 16, 94 Gage, Matilda, 175 James, William, 3, 59, 61-62, 182-Galilei, Galileo, 124 189, 205 Galton, Francis, 180 Jefferson, Thomas, 125, 137, 148 Galvani, Luigi, 168-169, 179 Jekyll and Hyde, 188 Garbo, Greta, 85 Jerome, 131 George, Henry, 178 Jesus (Christ), 8, 17, 47, 74, 81, 91, Gideon, 17 92, 93, 94, 114-115, 123, 136, 143-Gilgamesh, 89 144, 148-150, 161, 163, 164, 195-Gladwell, Malcolm, 62 196, 203, 216 Godwin, William, 173 Johnson, Lyndon, 24 Goethe, 171 Jonah, 115 Gogh, Theo van, 210 Joseph (son of Jacob), 16-17 Gortner, Hugh Marjoe, 216 Joseph (father of Jesus), 17-18, 218 Gould, John, 170 Joshua, 135 Gould, Stephen Jay, 38, 106, 214, Joyce, James, 196 Judah and Tamar, 16 Gray, Thomas, 129-130, 139 Judas, 216 Greenblatt, 131 Jung, Carl, 181 Gutkind, Eric, 208 Jupiter (Zeus), 129

Justinian, 124 McCarthy., Joseph, 198 Kafka, Joseph, 69 McCourt, Frank, 196 Kahneman, Daniel, 63 Mencken, H. L., 199 Kandinsky, Vladimir, 172 Mendel, Gregor, 211 Meslier, Jean, 139-147, 150, 158, Kanizsa, 112-114, 180 160, 163 Kant, Immanuel, 136, 148, 152, 154-157, 160, 179, 195, 202-203, 206 Methuselah, 96 Kass, Leon, 94 Michelangelo, 2, 41 Kelvin, 101, 102-103 Michener, James, 33 Kent, Arthur, 213 Miescher, Friedrich, 211 Kepler, Johannes, 126 Mill, John Stuart, 221 Kierkegaard, Søren, 38 Molotov, Vyacheslav, 197 Knutzen, Matthias, 137-138 Montaigne, 133, 148 Koch, Robert, 177 Morris, Colin, 63 Kolberg, Lawrence, 47 Moses, 16, 81, 94, 134, 197 Krebs, Hans, 212 Muhammad, 4, 19, 81-82, 93-95, Laban, 94 123-124, 185, 187 Lamarck, Jean Baptiste, 168 Müller, Erwin, 40 Laozi, 187 Munch, Edvard, 178 Leah, 17, 94 Nägeli, Karl Wilhelm von, 211 Leibniz, Gottfried, 165-166 Napoleon, 159-160, 220 Lenin, Vladimir, 78 Navabi, Armin, 40 Leuwenhoek, Antonie van, 177, 211 Newton, Isaac, 115, 125, 138, 148 Lewis, C. S., 217 Nicholas, II Tsar, 198 Lewis, Sinclair, 201 Niépce, Abel, 102 Lincoln, Abraham, 24, 125 Niépce, Nicéphore, 102 Locke, John, 137 Nietzsche, Friedrich, 105, 155, 171-Louis XIII, 133 172, 176, 180, 213 Louis XV, 138, 193 Nixon, Richard, 24 Louis XVIII, 159 Noah, 89, 96-97 168 Loutherbourg, Philip de, 160 Nordau, Max, 106, 178, 181-182 Lucretius, 128-132, 139 Occam, William, 132-133, 136, 141 Luther, Martin, 37-38, 72, 194 O'Hair, Madalyn Murray, 209-Lyell, Charles, 100, 170 Onfray, Michael, 208 Łyszczyński, Kazimierz, 133 Origen, 138 Mach, 112-113 Orwell, George, 14, 198-199 Madison, James, 148 Owen, Robert, 174 Maugham, W. Somerset, 192-193 Owens, Robert, 102 Magendie, François, 179 Paine, Thomas, 15, 135, 148-149, Maher, William, 201 186, 217 Maimonides, 132, 217 Paley, William, 166, 170 Malthus, Thomas, 165-166, 170 Pangu, 88 Marvel, Andrew, 122 Pasteur, Louis, 177 Marx, Karl, 78, 163-165, 178, 181 Paul, 18, 55, 57, 93, 123, 136, 170, Mary, 18, 216 189-190 Matthew, 27, 114-115 Pavarotti, Luciano, 2

Pavlov, Ivan, 167 Schleiermacher, Friedrich, 160-161 Schopenhauer, Arthur, 161, 206 Peay, Austin, 200 Perez, David and J. Sepulchre, 57 Schubert, Franz, 2 Persephone, 92 Scopes, John, 198 Philipse, Herman, 210 Shaw, George Bernard, 47 Shelley, Mary, 169, 173 Phillips, John, 168 Philo, 114 Shelley, Percy Bysshe, 160 Piaget, Jean, 35 Singh, Bhagat, 22 Pierce, Franklin, 125 Smith, Adam, 99-100, 156 Pirsig, Robert, 214-215 Smith, Joseph, 19 Pius XII, 172 Smith, William, 100, 168 Plato, 130 Snow, John, 176 Playfair, John, 100 Socrates, 38, 155 Solomon, 81 Polidori, John, 169 Spencer, Herbert, 171 Ponzo, 112-113 Spinoza, Baruch, 5, 16-17, 38, 99, Poseidon, 108 Posner, Michael, 67 134-137, 139, 145, 149, 163, 192, Presley, Elvis, 30-31 217 Stalin, Josef, 198 Prometheus, 89 Stanton, Elizabeth, 174-176 Rachel, 17, 94-95 Rand, Ayn, 5 Stenger, Victor J., 210 Redi, Francesco, 177 Steno, Nicolas, 99 Robespierre, Maximilien, 148, 159 Strauss, David, 161 Rogers, Richard, 33 Swammerdam, Jan, 177 Romney, Mitt, 33 Sweeney, Julia, 209 Röntgen, Wilhelm, 101-102 Swift, Jonathan, 124, 193-195 Roosevelt, Franklin, 24 Temple, Shirley, 216 Roosevelt, Theodore, 125 Thoreau, Henry, 6, 194 Rose, Ernestine, 174 Tevya, 176 Rostand, Edmund, 6 Theresa (Mother), 221 Rousseau, Jean Jacques, 148, 152-Trentren, 89-90 153, 158, 160 Trotsky, Leon, 198 Turner, J. M. W., 168 Rushdie, Salman, 9-10 Russell, Bertrand, 202-204 Twain, Mark, 195-198 Rutherford, Ernest, 102-103 Tyson, Neil deGrasse, 201-202 Ryder, Albert Pinkham, 180 Vanini, Giulio, 133 Sade, Marquis de, 147, 157-158 Venetz, Ignaz, 169 Santa, 33, 91 Vinci, Leonardo da, 97-99 Santayana, Jorge, 3-4 Viverananda, Swami, 183 Sapolsky, Robert, 67 Voltaire, 139-140, 147-148, 165. 202 Sarah, 81 Vulcan, 108 Satan, 48-49, 54, 69, 78, 144, 194, Wallace, Alfred, 156, 165-166 201, 221 Warruq, Ibn, 17-18, 83, 209-210 Saul, 17 Washington, George, 148 Watson, James, 212 Schempp, Ellery, 209

Watson, Peter, 42

Schimper, Karl, 169-170

Weber, Ernst, 179-180 Weber, Max, 59 Wells, H. G., 184 Wilberforce, Samuel, 171 Wilson, Woodrow, 24 Wollstonecraft, Mary, 173-174 Wolpe, David, 215 Wooley, J. and M. Ghossainy, 36 Woolston, Thomas, 138-139 Wundt, Wilhelm, 180 Zeus (Jupiter), 92, 93, 107, 129 Zuckerman, Phil, 211