

Ix1 – EXcursion to Examine Some Bleached Bones & Skeletons in the Graveyard of Mistaken Ideas

Dear: This is the start of the first of four of this book's "excursions". The goal of this excursion (i.e., of these chapters labeled with **Ix**) is to examine "some bleached bones and skeletons in the graveyard of mistaken ideas". That's my way of saying (with a little license!) that I want to show you some possible origins of ideas about gods, souls, eternal life, and so. Two related excursions will explore "The Quagmire of Revealed Religions" (in **Qx**) and "Your Indoctrination in The Mountainous God Lie" (in **Yx**). The other excursion deals with "Uncovering Understanding" (**Ux**). Other authors would probably label such excursions as "appendices", but I hope that you'll find in them material that's somewhat less boring or "dry" than what's usually relegated to an appendix.

And before I begin this multi-chapter excursion to the "graveyard of mistaken ideas", maybe I should try to respond to the expected question: "What the devil's going on?" To respond to that hypothetical question, let me go back to another question that, a few chapters ago, I assumed that you might ask me: "Does it really require a whole book to explain why you don't believe in God?" In response to the second question, I tried to explain that my answer would depend on the person to whom I was responding: I could respond to my wife in a sentence or less; I could respond to my daughter in a paragraph or so; but responding to my grandchildren, for whom I feel I should provide a sound alternative to the silly "god idea", I've obviously concluded that a entire book would be necessary – *or more!* And in response to the hypothetical question about these excursions (viz., "What the devil's going on?"), my response is: What's "going on" is the "*or more!*"

What happened, Dear, is the following. While writing this book, the more I dug into "the god idea" the bigger the book became. As I already mentioned in an earlier chapter, I had concluded (decades ago) that "God's a bunch of garbage", but until I started writing this book, I didn't appreciate what a monstrous pile of trash it is. When the book then became very long, I decided to break it into two books, reasoning roughly as follows.

Whereas your grandmother and I had rejected the god idea as silly (pretty much independently, especially for her), which we did without digging very

deeply into the enormous extent of the “god garbage”, I thought that I wouldn’t need to reveal the full extent of the garbage to my grandchildren. My thought was that, if I referenced just some “common features” of the “god idea” (e.g., the speculations that God created the universe, that He was waiting in the wings to judge people after they died, and so on), then it would be sufficient to show my grandchildren just how silly such ideas are and then show them the much more reasonable ideas that are at the base of humanism. That was to be the basis of “Book 1”, and in “Book 2”, I’d “flush out the details”, demonstrating at least some of the remaining huge pile of garbage contained in “the god idea”.

Eventually, though, for a number of reasons, I abandoned the idea of two books. One reason was simply that the task of writing the two books didn’t “flow smoothly” (and I therefore expected, neither would the task of reading them). Of course, not that the existing production “flows smoothly”, but the other option was even worse. A second reason was my concern that I could ever get you to crack a second book written by your grandfather! If my grandfather had written something similar for me (or even if my father had), I doubt that I would have had the perseverance to read a second book – maybe not even a first book! But a more important reason was that I became quite concerned that I wasn’t adequately accounting for the difference between your experiences and mine.

In my case, although I remember attending “Sunday School” in a room in the basement of “the Church”, I don’t remember anything about it – except maybe coloring some pictures and being glad when it was finished for another week. I also remember that every morning at “regular school”, while the majority of the kids said one version of “the Lord’s prayer”, we few “Catholics” went out into the hall and were “supposed to” say it “the correct way” – although I don’t recall that we ever did, except maybe when a teacher was watching: we just had a few more minutes to fool around!

More significantly, I remember an incident one time when I was hitchhiking, when I was six to eight years old (or so), and was given a ride by two priests. I don’t remember if my nearest-age brother was with me that day, but anyway, in those days and where I lived, hitchhiking was relatively safe (even though, as I later learned, many priests were – and still are – notorious for sexually molesting young boys). During the resulting car ride (maybe for about 20 minutes duration), I recall asking the priests a bunch of questions (I guess about life-after-death, who made god, and similar), and

* Go to other chapters *via*

though I don't remember their responses, I clearly remember my feelings when I got out of the car (at a gas station at the bottom of the hill, right near the wharf – in case you wanted to know!): I felt convinced that those two priests were a couple of idiots! Soon thereafter, I rebelled: I refused to go to church; I refused to “waste my time” listening to any fool priest mumble a bunch of “mumbo-jumbo” about heaven and hell and about “Jesus Christ” and “God Almighty”, when “obviously” the priests didn't know what the devil they were talking about.

But, Dear, your exposure to religion has been enormously greater than mine. Ever since you were a baby, pictures of Jesus and “the profit” Joseph Smith have been plastered about your house. At dinner every day you've been thanking God “in the name of Jesus Christ our Lord”, every night you've been saying your prayers, every week you've dressed up in “your Sunday best” to attend Church, and you seem to have been going to an endless series of “Church activities”, which apparently almost dominated your social life (picnics, parties, sporting events, concerts, lectures, whatever). Thus, maybe it's inadequate even to say that you were “exposed” to religion: I was exposed to religion, you've been immersed in it – if not damn-near drowned in it. I became concerned, consequently, that unless I went into details about “the god idea” somewhat commensurate with your experience, then you might consider this book “superficial”.

Let me try to put that differently. In my case, it was relatively easy to slough-off “the god idea” as nonsense, because I never got beyond “the big picture” painted by the primitive priests (God made the universe, He's waiting in the wings to judge everyone, etc.) – which seemed to me, even as kid, do be a bunch of silly speculations. Independently, long before we met, your grandmother also shoved “the god idea” aside as a bunch of “silly word games”, even though she was immersed in it perhaps even more than you – because her father forced her to attend a Catholic school. But her mother (your great grandmother) wasn't religious (nor was her mother's father), and maybe that gave your grandmother some strength to stand on her own. And let me add that, based on almost 50 years of data, I guarantee that your grandmother has the strength to stand up to anybody!

But in your case, I don't know – and can't determine – where “you're at”. I can't determine your feelings about “the god idea” even by asking you; only you know if you truly “love the Lord Jesus Christ, with all your heart and all your soul” – or if you just “mouth the words” and, deep down, you consider

it to be a charade. But I admit to being concerned that your indoctrination has “really taken”, not only because of some of the things you’ve said and because of your obvious delight in “being awarded” some new “church gizmo” but also because of a recent experience with your mother. In this experience, your grandmother was trying to have a serious talk with your mother, and your mother expressed her obviously deeply felt concern about her “saving” her and her children’s “immortal souls”. Your grandmother gasped, and the conversation soon ended: it’s usually useless to try to have a serious talk with someone who’s living in a dream world.

And therefore, Dear, these “excursions”. If the clerics’ silly “science” has captured your mind as badly as it apparently has captured your mother’s (and her mother’s), then I dearly hope that you’ll have the perseverance to go on these excursions with me. In them, I’ll dig deeper into “the god idea” to try to expose the roots of your indoctrination and to show you some bases for alternative science – developed since the time of the Ancient Egyptians!

Thus, especially with the first three of these four excursions, I plan (in essence) to elaborate on M.M. Mangasarian’s assessment (referenced in chapter **ii**): “Religion is the science of children; science is the religion of adults.” In the fourth excursion, dealing with “Uncovering Understanding”, I’ll try to show you some of the origins of some scientific ideas. If you’ll take these excursions, then maybe you’ll be better able to decide how you want to live your life. On the other hand, if you are already pretty well convinced that all your indoctrination has been a charade, then maybe you want just to glance at what’s in these excursions, but skip the details.

And while I’m here, at the beginning, let me mention something about an analogy that I’ve been using (for example, in labeling the excursions the way I have). It’s not very important, but it’s been the way that I’ve been trying to keep my sanity. Whether it worked, well...

As you know, soon after you moved to Florida, your grandmother and I moved south to Nevada. What you probably didn’t know is that one of my major concerns about our move (besides not being able to visit our grandchildren so frequently!) was that I’d be able to find a place to walk. But as you also know, not only did I find a good place to walk, I found several trails – and generally they’re even better than my “northern trail”!

Not that I didn't enjoy walking on my northern trail, in the desert, with its meadowlarks and flowers in season, and (you might remember) its views of the rolling hills. But my "southern trails" are even better: as you know, one of them is along the river (on the irrigation-ditch road, up to the dam) and another is down and then up one of the hills (where, you might recall, the bones of the dead-horses are located). You might also recall that, from both of these southern trails, there are spectacular views of the nearby mountain ranges, whose peaks are sometimes snow-capped and whose jagged precipices are always ruggedly foreboding. Which, as you probably expect, leads me to my analogy.

Up 'til now in this book, I've been pretending that I've been taking you with me for a walk on my northern trail. I've been trying to explain to you my "meditation scheme"; that is, ideas that I review when I'm walking. Starting now, I'm inviting you to walk with me on several of my "southern trails". On my two "regular" southern trails (1. by the river, and 2. down and then up the hill), I'll continue to show you my meditation scheme. On occasion, however, I'll ask you if you want to accompany me on "excursions" from my regular trails.

For example, maybe you recall when you were walking with me "on the hill" and I pointed out that one of the hills, off my regular trail, was covered with something white. I told you that they were bleached bones of horses – and of course, you wanted to take an excursion to see them. Well, Dear, this set of chapters labeled with **Ix** is an excursion to have a closer look at "some bleached bones and skeletons in the graveyard of mistaken ideas".

Later in the book, while I'm pretending to be walking along my southern trail by the river, I'll offer you two other excursions, one down to the mud and guck of the river (there to struggle through "The Quagmire of Revealed Religions" in **Qx**) and the other at least toward the mountains (to explore – or at least get a better view – of "Your Indoctrination in the Mountainous God Lie" in **Yx**). Pushing this analogy maybe too far, in the final excursion, **Ux**, I'll offer you another opportunity to practice your driving, up a road of science that leads through the mountains ("Uncovering Understanding").

And before starting on this excursion to examine the "skeletons of mistaken ideas", let me mention four other points. One is to alert you that, if you don't want to, then you needn't take any of these "excursions". That is, later in this book, I'll try to avoid relying on material presented in these

“excursions” – although I do plan, on occasion, to make reference to such material, in case you desire additional information.

My second point is one to which I’ll repeatedly return, with sadness, amazement, anger, gratitude, and many other feelings. Here, let me just introduce it as follows. Elsewhere in this book, you may find a few original ideas of mine, but “nothing to write home about” – and if it weren’t for the special circumstance of the pollution of my grandchildren with religious garbage, then certainly not worth writing a book about! But in these excursions (with the possible exception of **Ux**), I doubt if you’ll find a single idea that has originated in my mind. Instead, what I’ll be doing, in the main, is just trying to show you a few paths that in many cases have been beautifully blazed by others and now can easily be explored courtesy the wonderful internet. That is, especially for three of the “excursions”, don’t expect me to be an explorer; at most, I’ll try to serve just as a tour guide.

Third, I probably should alert you to what undoubtedly will become abundantly clear: in this book, and especially in these excursions, many times, I’ll “lose my cool” – my writing will become more and more “emotive” – or more bluntly, my anger will “boil over”. I’m sorry about that, Dear, and maybe I would agree with you if you should suggest that I work to suppress my anger at the clerics of the world. But, Dear, please at least consider the view from my perspective: it’s already difficult enough for a “non-writer” to sit down and write (and write and write), without also being careful that I write “delicately”: in **F**, dealing with “Feelings”, I already mentioned that I get angry at stupidity, and I’ll be showing you some stuff that’s so stupid that maybe even you won’t be able to constrain your anger. Further, as I’ll show you in a later chapter, even far-more competent and constrained writers than I (e.g., Thomas Jefferson) couldn’t (or decided not to) constrain their emotions when writing about these topics. So, I don’t plan even to try. Moreover, Dear, think about what’s going on: a bunch of lame-brain and/or power-mongering clerics have caused my grandchildren to be polluted with their god garbage, and if anybody thinks that I can just respond “calmly, coolly, and collectedly” while the damnable clerics damage the minds of my grandchildren, then...

Okay, let me try to calm down and mention my fourth point. Although sometimes on these excursions I’ll be getting angry (as you might detect!), yet I should admit that, otherwise, I’ve had some fun, learning the historical origins of some of the ideas examined. Therefore, Dear, if you become

“bored out of your skull” when I show you some of these historical origins, maybe you can find some consolation by thinking: “Oh well, at least Grampa amused himself by writing this junk – and maybe, for a change, he didn’t cause Gramma so much trouble.” But “the downside risk potential” for you, Dear, is that my opening up the history books opens up a potential Pandora’s box of troubles, causing you to lose track of what I’m trying to explain and causing me so many distractions that I’ll have great difficulty getting to my point – as I’ll now illustrate.

Thus, Dear, do you know the origin of the idea about “Pandora’s box of troubles”? It’s from the “Adam and Eve myth” of the Ancient Greeks – although of course the Greeks didn’t call the first man Adam and the first woman Eve. Instead, the Greeks called the first woman Pandora, and her husband was called Epimetheus (whose name literally means “after-thought”, i.e., “Epi-metheus”).¹ Actually, though (at least according to the myth!), Epimetheus wasn’t a human but a god, who later chose to live among humans. He was brother of the more famous Greek god, Prometheus (whose name literally means “fore-thought”, i.e., Pro-metheus) – the god who, according to Greek mythology, gave humans fire.

As the story goes (which you can find on the internet), the “son god” Zeus (who was the alleged son of the alleged “father god” Cronus) assigned Epimetheus (“after-thought”) the job of passing out characteristics and capabilities to all animals (including humans). This is somewhat similar to the story told in Hebrew mythology, i.e., in the Bible, about Adam naming all the animals. Actually, as I’ll be showing you, this story about what happened “in the beginning” was “borrowed” from both Egyptian and Persian mythology. In the Bible’s version, the “father god”, Jehovah, assigned Adam (or, in the Egyptian myth, not Adam but Atum) the lesser task of naming all the animals; that is, in the Hebrew (Egyptian) version of this story, Adam (Atum) was Epimetheus.²

¹ Dear: As you can find in your dictionary, *epi* is the Greek prefix meaning “on, upon, over, on the outside, anterior, [after], beside, besides, among” (which becomes *ep* before a vowel and *eph* in an “aspirated word” such as ephemeral). Thus, the ‘*epicenter*’ of an earthquake is the area directly *over* its center (beneath the surface), an *epidemic* is *among* the people (*demos*, as in *democracy*), *epidermis* is *upon* the skin (*derma*), and so on. Meanwhile, *metheus* is from the Greek word *mathein*, meaning “to learn”.

² Dear: As I’ll be showing you, there are many similarities in the myths of ancient cultures of the Mediterranean and Mid-Eastern areas. In many cases, only the names of the principal characters are changed. Thus, many of the “god stories” of the Romans are the same as those of the Greeks, but the “son god” Zeus is renamed Jove (or Jupiter, son of the “father god” Saturn, not Cronus) – just as Jesus (aka Jupiter) was alleged to be the son of the Hebrew’s “father god”, Yahweh or Jehovah (aka Saturn). In turn,

Anyway, following Zeus' orders, Epimetheus proceeded to give fish their ability to swim (and, I presume, their ability to breathe underwater), turtles their shells, birds their wings, the land animals their various characteristics, and so on. Finally, Epimetheus (described by Zeus as being "dim witted") got to man, and realized that, basically, he had "blown it": he had already given away all the best characteristics to the other animals! Epimetheus ("after-thought") then sought help from his brother Prometheus ("fore-thought"), who proceeded to solve both his brother's and humanity's problem: he gave humans both the ability to walk on two legs ("like the gods" – although it never was explained how anybody knew that the gods walked on two legs!) and gave them fire.

That's when Zeus went ballistic – not because humans were given legs, but because we got fire. Thus, Zeus (who ruled all the gods on Mount Olympus) was the sky god, the thunder god, the lightning god,... and therefore, fire was his! Further, this wasn't the first time that the "trickster god" Prometheus had angered Zeus (for which Zeus punished him terribly – but that's another story). This time, Zeus concocted a way to punish also man for having accepted his (Zeus') fire: he decided to make a woman, Pandora, whose name literally means "many gifts" (i.e., Pan-dora).

As you probably noticed in this myth, it's quite insulting to all women to suggest that the gods created women to punish men (for having fire). Many women might think that the opposite would be closer to the truth! As I'll be showing you in later chapters, there are many similar and even worse insults to women in Hebrew mythology (and therefore in Judaism, Christianity, Islam, and Mormonism). I suspect that such insults illustrate both that men (rather than women) created these myths and that, as now, men were either reacting to break free from domination by their mothers or (or "and/or"!) envious of the capabilities of women (e.g., to give men pleasure, to give birth to babies, and to be able to provide nourishment to babies from their own bodies). Whatever the cause, men apparently reacted disrespectfully. But let me leave further comments about "male chauvinism" and "women's liberation" until later chapters and return to the Greek myth about the first woman.

as I'll be showing you, essentially all of these gods were just renamed Egyptian gods, e.g., Zeus, Jove, Jupiter, and Jesus are renamings of the Egyptian "son god" Horus. As evidence to support that statement, I'll show you that many of the stories about Jesus are not only similar but identical to the stories about Horus, with only the name changed – to protect the guilty – against charges of plagiarism!

In his anger for Prometheus having given humans fire, Zeus arranged for the other gods and goddesses on Mount Olympus to provide Pandora (“many gifts”) with her “many gifts”. According to the book by Heisod *Works and Days* [which was written in about 700 BCE (about 300 years before the Old Testament was put together by Ezra and co-authors), which you can find on the internet at www.classics.mit.edu, and to which I’ve added the notes in “square brackets”, such as these!], Pandora was created as follows.

“[Zeus] bade famous Hephaestus [one of Zeus’ sons, god of fire and the forge, and known as ‘Vulcan’ in Roman mythology] make haste and mix earth with water and to put in it the voice and strength of human kind, and fashion a sweet, lovely maiden-shape, like to the immortal goddesses in face; and Athena [or ‘Athene’, Zeus’ daughter, after whom Athens was named, the goddess of wisdom, skills, and warfare; called ‘Minerva’ by the Romans and similar to the earlier goddess Isis of the Egyptians] to teach her [Pandora] needlework and the weaving of the varied web; and golden Aphrodite [the goddess of love and beauty; called ‘Venus’ by the Romans] to shed grace upon her head and cruel longing and cares that weary the limbs... And the goddess bright-eyed Athena girded and clothed her, and the divine Graces [the three sister goddesses who had control over pleasure, charm, and beauty in human life and in nature: Aglaia (Brilliance), Euphrosyne (Joy), and Thalia (Bloom)] and queenly Persuasion put necklaces of gold upon her, and the rich-haired Hours [the goddesses of the season, justice, and order] crowned her head with spring flowers. And Pallas Athena [i.e., ‘the goddess Athena’] bedecked her form with all manners of finery...”

I’ll skip reporting all the “nasties” that Zeus ordered to be added to Pandora!

Anyway, Dear, although Prometheus (“fore-thought”) had warned his brother Epimetheus (“after-thought”) about accepting gifts from Zeus (one of many instances that led to the famous “beware of Greeks bearing gifts”!), yet Epimetheus accepted the gift of Pandora. For a time, all seemed to go well enough, but one day, Pandora came across what later became known as “Pandora’s box”, which was actually the box in which Epimetheus kept all the “nasties” that he never got around to passing out, when he was passing out characteristics to all the animals. Unfortunately, Pandora opened the box and let loose among humans: “sorrow and mischief, plagues and famines, and all the ills that befall mankind.”

But, Dear, there is one part of this myth that apparently many people who talk of “opening Pandora’s box” don’t know. According to this myth, not everything escaped when Pandora opened the box. According to Heisod:

“Hope remained there in an unbreakable home within...”

That is, Dear, no matter the evils that were (or are, or will yet be) set loose upon the world, still (according to this myth!) hope remains – just as I hope that you won’t become too discouraged by the Pandora’s box of details that I’ll be opening in these excursions – or be too discouraged by my delays!

For example, Dear, I want to stop a minute here (even before I begin!), to ask you to look at the myth about Pandora from another perspective. Your first glance might be amusement at such a “silly little story” – maybe mixed with a little anger, at the implied insults to women. But, Dear, there’s another view, not silly but terribly serious. Although you may consider the Pandora myth to be “just a silly little story”, the clerics of Ancient Greece treated it (and all their myths) very seriously. As I’ll be showing you in a later chapter, one of the most brilliant humans who ever lived, Socrates, was sentenced to death (forced to drink poison) because of his failure to take the clerics’ myths seriously. The 2400-year old indictment brought against him states: “Socrates is guilty of not believing in the gods in which the state believes, but brings in other new divinities; he also wrongs by corrupting the youth.”

Similarly, if Jewish literature (referenced later) accurately describes what happened (a very dubious assumption!), then Jesus [whose full name may have been Jesus ben Pandera, i.e., Jesus son of the (Roman soldier) Pandera] was executed for his “crime” of not believing that the Jewish god Yahweh (the god of the Bible) was the “good god” who made light, instead believing that Yahweh was the “bad god” who made mass (e.g., flesh). Jesus of course didn’t know that mass and light were related via $E = mc^2$! Because of similar stupidity, hundreds of thousands (if not millions) of people have been tortured, mutilated, and murdered for not “believing” what the controlling con-artist clerics dictated. Therefore, Dear, if you think that the myth about Pandora’s box is “just a silly little story”, then please look at it from this other, horrible perspective: people were murdered for not “believing” such myths, murdered by Jews, Christians, Moslems, Mormons – and similar atrocities continue today.

And now, still another delay! Before starting on the excursion to examine “some bleached bones and skeletons in the graveyard of mistaken ideas (about gods, souls, eternal life, and similar nonsense)”, I want to do something that’s avoided in all religions, namely, define some of the principal words that I plan to use. In general, Dear, I’ll use the definitions as given in my copy of Webster’s dictionary. Thus, with the word ‘soul’, I’ll be focusing on the following two of Webster’s (many!) meanings for the word ‘soul’:

1. an entity which is regarded as being the immortal [that is, with *mort* being the French word for ‘death’, derived from the Latin word *mortis*, then ‘immortal’ means ‘non-dying’] or spiritual part of the person and, though having no physical or material reality, is credited with the functions of thinking and willing, and hence determining all behavior... 8. the spirit of a dead person, thought of as separate from the body and leading an existence of its own...

By ‘spirit’, I’ll especially mean the following three definitions of Webster’s 16 (!) meaning for the word ‘spirit’:

1. **a)** the life principle, especially in man, originally regarded as inherent in the breath [which is then consistent with the possible Indo-European base word (*s)preis*, meaning “to blow”] or as infused by a deity [viz., a god] **b)** same as soul (sense 1)... 4. a supernatural being, especially one thought of as haunting or possessing a person, house, etc., as a ghost, or as inhabiting a certain region... 11. a divine animating influence or inspiration...

In addition, by ‘god’, I’ll mean as given by Webster:

1. any of various beings conceived of as supernatural, immortal and having special powers over the lives and affairs of people and the course of nature; deity, especially a male deity 2. an image that is worshipped; idol 3. a person or thing deified or excessively honored and admired.

For ‘God’ (with a capital ‘G’), I’ll use Webster’s:

In monotheistic religions [i.e., in religions in which “theists”, i.e., “believers”, assume there is only one god – and therefore the “mono” –

and in turn, the Greek word *theo* means ‘god’, which may be from the Indo-European base *dhewes* meaning “to storm or breathe”] the creator and ruler of the universe, regarded as eternal, infinite, all-powerful and all-knowing; Supreme Being; Almighty.

Immediately from these definitions, maybe you notice a number of concepts that, if you don’t yet consider them “silly”, you may think that they’re rather suspicious:

- As I mentioned before (in **If**), if a “soul” is just “spirit”, with “no physical or material reality”, then how can such a “non-entity” be credited with “thinking and willing and hence determining all behavior”? That is, what’s the physical-chemical nature of the beast? Even ideas can be traced to electro-chemical interactions in the brain. How could something with “no physical or material reality” manage to interact with something that does? We know how information is transferred between entities with “physical or material reality” (e.g., by modulating acoustical or electromagnetic waves). We know that this information-transfer requires both sender and receiver of the information to be “entities” capable of interacting with material bodies. So how, pray tell, does a non-entity stimulate information transfer – or could it possibly be that the idea of ‘soul’ is a figment of primitive people’s imagination?
- The assumption that gods have “special powers over the lives and affairs of people...” can easily raise questions and doubts. Why would any powerful god [and especially an “eternal, infinite, all-powerful (= omnipotent), and all-knowing (= omniscient)” god] stoop to be concerned with “the lives and affairs” of such puny little creatures as humans? Let me put it this way: if ants or beetles or spiders or similar could think about such things, then no doubt they would conclude that you, Dear, were “an all-powerful god”. But how concerned are you about the “lives and affairs” of ants, beetles, spiders, and similar? Of course, you might be interested in insects if they were a special science project of yours (then are we a science project of some god?!) or you might be interested in insects if they bothered you – in which case I’ve seen you squash them! But wouldn’t you consider it highly egotistical of such insects to think that you cared about them? Or cared for them? Or loved them? Similarly, then, isn’t it highly egotistical of any human to “think” that an all-powerful and all-knowing creator of the universe cares

about such puny little creatures as humans? As a certain grandchild frequently says: “Gimme a break!”

- For this God who monotheists consider to be “eternal, infinite, all-powerful, and all-knowing”, additional questions immediately come to mind. If this God is so “all-powerful” how come, after he made light, the earth, stars, etc., in six days (as it claims in the Bible), he had to take a rest? Further, if this God is “all knowing”, how come he made so many of what obviously were mistakes (which, as I’ll show you later by quoting the Bible, even God allegedly admits were mistakes!)? If he’s powerful enough to create the whole universe, then making Earth should have been a snap (taking no longer than a few nanoseconds), and if he’s so “all knowing”, then why didn’t he know how to do things right? Somethin’ smells fishy!
- And the more you think about it, the “fishier” it smells! For example, Dear, if God is all-powerful (omnipotent) and all knowing (omniscient), then by definition, he can do anything and he knows everything. But, as other people have asked: Can he die? (“Immortal” gods are notorious for being unable to die; yet, even I can die!) As an ancient Roman asked: “Can he make a rock so big that even he is unable to lift it?” If he knows everything, does he know the future – including his own future? If so, then this all-powerful, all-knowing God doesn’t have any “free will” – because everything he’s going to do is already known! And if he knows everything, then he already knows what every person will do. So why, pray tell, does he plan to torture me for eternity in Hell for not believing that he exists, when from the instant that the universe was created, he knew that I was going to conclude that all ideas about him were nonsensical? Does he just “get his jollies” from roasting people? Then, when people are nicely roasted, does he eat them? Now there’s some “food for thought”!
- Further, there’s the old question about this God who monotheists consider to be the “creator and ruler of the universe”: if He created the universe, who [or what] created Him? (And by the way, Dear, the obvious answer is: primitive humans did, in their daydreams and wild speculations!) Further, as I’ll be showing you, there’s now fairly good evidence that the universe created itself – and maybe created itself out of totally nothing.

Finally (for now), there's a more sobering and serious problem with this God: if he's the "ruler of the universe", then that means he rules everything, including people. If this God commands what people must do and then watches us (that is, spies on us) and judges us for everything we do (and will punish us terribly if we don't do what he wants – even though, if he's all-knowing, he already knows what we're gonna do!), then this means that God is the worst slave owner imaginable, that people are total slaves, that we can't even go to the bathroom without his watching us! That is, Dear, please consider what the Russian author Mikhail Bakunin wrote, about 125 years ago:

“A jealous lover of human liberty..., I... say, ‘if God really existed, it would be necessary to abolish him’.”

Dear, I hope you'll think about this powerful idea that Bakunin has added to human consciousness. Stated differently it's this: if your values demand that slavery be abolished, then for the same reason, the idea of God must be abolished.

But let me push aside assessments of the 'value' of "the God idea" for later chapters (e.g., in **J** through **Q**) and, instead, continue with more definitions. In the above definition for god, Webster uses the word 'supernatural', the prime definition of which is given in my dictionary as:

“existing or occurring outside the normal experience or knowledge of man; not explainable by the known forces or laws of nature; specifically, of, involving, or attributed to God or a god.”

With this definition, Dear, perhaps you see why religion and science “part company”: as far as scientists are concerned, when there's something “existing or occurring outside the normal experience or knowledge of man” and “not explainable by the known forces or laws of nature”, then it's not the province of gods but of scientists! That is, upon encountering such unknowns, religious people worship them, but any scientist worth her salt will say: “Let's try to figure them out!”

Further, Dear, if you think about this idea of the “supernatural”, then you can see something that goes beyond silly, to bizarre – or even to crazy! In essence, the realm of the “supernatural” is the realm of the unknown, that is, realms of which “mere humans” are ignorant. Therefore, gods (being “any

of various beings conceived of as supernatural”) are a part of the unknown – they’re even rulers of the unknown! Therefore, Dear, if people (such as various missionaries or priests or other clerics) invite you to “worship” their god, then in essence, they’re inviting you to worship their unknowns, i.e., their ignorance!

What craziness! Why on Earth would anyone want to worship someone else’s ignorance?! Do some people really want to do this? If so, then maybe I can help. Thus, because this book for my grandchildren has taken me so long to write, I find that I’m still ignorant when it comes to programming my computer in *Mathematica*. Oh, I can do a little, but I can justify claiming substantial ignorance. Well, then, I wonder if I should “go on a mission” to try to convert people to join me in worshiping my ignorance: “Hail *Mathematica*, full of grace, the Lord is...” – bizarre!

Yet, there is something in this (otherwise ridiculous) idea of ‘supernatural’ that I expect that Webster (or whoever wrote my dictionary) didn’t realize. First, Dear, I hope that you see that the concept of ‘supernatural’ is meaningless: if the word ‘nature’ (as it’s commonly used) means “everything that exists”; then there’s nothing left to be ‘supernatural’! Similar reasoning led Spinoza to conclude that God is everything (which is what Einstein meant when he said that his God would be similar to Spinoza’s). But, as I wrote before, as a criticism of both Spinoza and Einstein, what’s the point of introducing the separate name ‘God’ when the word ‘everything’ or ‘nature’ is perfectly adequate?

Nonetheless, there is something that exists (at least in our minds), that is ‘supernatural’ [in the sense of being unconstrained by the known laws (or, better, “known principles”) of nature], namely, ideas! No doubt someday, humans will determine principles that govern the formation of ideas, but still the ideas, themselves, needn’t conform to principles of physics. Thus, humans will always have no difficulty in imagining invisible pink elephants – or other totally unrealistic things (such as various souls and gods) – flying around all over the place. Flying elephants (and souls and gods!) may violate established principles of physics, but ideas about them can exist – at least as electrochemical signals in our brains. Stated differently, ideas about the ‘supernatural’ (about souls and spirits and gods) are just that: just ideas!

Which then brings me back to some obvious questions: How did such ideas start? What data were the speculators trying to summarize? What if any

* Go to other chapters *via*

data support these (silly) ideas? Are these ideas logical? And the big question: Why are these silly god ideas still promoted? I plan to leave the question listed last (dealing with the “value” of the god idea) until later chapters (starting with **J**). In prior chapters (in **Ia** through **Ii**), I’ve tried to show you some of the weakness of the database for and some of the illogic in “the god idea”. In this **Ix**, therefore, my emphasis will be on examining evidence about the origin of such crazy ideas.

Let me try to make my point more clearly. Dear: whenever you’re considering adopting or rejecting any idea (e.g., the idea of any god, whether democracy is a good idea, the possibility that momentum is conserved in collisions, whatever!), then I hope that you’ll learn to address the following series of questions, in the indicated order of importance:

1. What data support the idea?
2. Is the idea consistent with well-established principles (such as logic)?
3. How reliable are the idea’s predictions?
4. What’s the idea’s origin?

Applied to “the god idea”, I’ve generally been following the above order, and in this excursion, my goal is to show you something about its origin.

I trust you agree, Dear, that before you decide to agree or disagree with any idea, generally it’s useful to know something about the idea! For example, I trust that, before you decide to adopt or reject any idea, you agree that generally it could be useful to know something about its origin. Further, although we should be careful to avoid prejudging an idea that’s new to us, it can be useful to know something not only about its origin but also about the mental competence of its advocates. For example, as I mentioned before, if someone were to tell you that the world will end tomorrow, then no doubt it would influence your opinion about this idea to learn that its advocate was diagnosed as mentally ill.

As a “happier example”, Dear, I hope that someday you’ll invest time not only to learn more science but also to learn about the origins of various scientific ideas and about the mental competences of the advocates of these ideas. As one of hundreds of astounding ideas on which our society is based, there are the ideas about electricity and magnetism summarized in what we now call “Maxwell’s equation”, which were given to the world by the brilliant physicist James Clerk Maxwell and which form the base of all

electronic communications. I mention Maxwell, in particular, because on page xi of the *Preface* to his 1873 book *A Treatise on Electricity and Magnetism*, he wrote something similar to what I'm trying to say: "It is of great advantage to the student of any subject to read the original memoirs on that subject..."

Similarly, in the case of ideas about gods and souls, I hope you agree that, before you adopt such ideas, it would be wise to try to dig out their origins and assess the mental competences of their originators. That's what I plan to do in this in **Ix** – at least a little (in total, it's an overwhelmingly huge task). Unfortunately, though, ideas about gods and souls are so old (originating long before writing developed, which in turn was about 5,000 years ago) that it's very difficult (if not impossible) to determine their origins. Therefore, we can't "read the original memoirs"! As a result, the best that we're able to do is determine *possible* origins of ideas about gods and souls. Yet, already from the realization that such ideas are very old, there is available an obvious and important point: the people who created ideas about gods and souls were very primitive.

The adjective 'primitive' contains a host of similar ideas or synonyms, including (as you can find in any Thesaurus): "naive, ingenuous, impulsive, ignorant, unknowledgeable, believing, and childlike." Consequently, ideas about gods and souls apparently developed "in the childhood" or even "in the infancy" of humanity. Therefore, again, given the fact that people whom modern adults would consider less competent than modern children conceived ideas about gods and souls, it should cause people to question the reliability of any ideas about "immortal gods" and "immortal souls".

In the previous sentence, I modified both the words 'gods' and 'souls' with the adjective 'immortal', to emphasize that the concept of immortality (i.e., "not mortal" or "non-dying") is the assumed common (and unique and astounding!) characteristic of both gods and souls. In olden days, however, the concept of immortality was not unique to gods and souls, because even as recently as a few hundred years ago, it was commonly assumed that also stars were "immortal". Thereby, as I'll show you in detail in later chapters of this "excursion", in earlier times many (if not all) gods were assumed to be (or to be represented by) various stars – as well as other "heavenly bodies", including gods of each of the visible planets, the moon god, and of course the sun god. In addition, as I'll be showing you, some primitive

people apparently thought that each of the huge number of “other stars” was the soul of some “good” person who had “departed” from the Earth.

Be that as it seems to have been, the concepts of “immortal gods” and “immortal souls” have obviously persisted in primitive minds, even though it’s now known that even the stars aren’t “immortal”. Whether the universe, itself, is “immortal”, remains to be seen! As you may know, recent theories of “dark matter” in the universe suggest it won’t! Further, and turning back to the question of the possible origins of ideas about gods and souls, it may be that these ideas were stimulated by the concept of mortality (i.e., ‘death’), itself. Certainly one of the concepts that most stimulates humans (maybe the single most stimulating concept!) is the idea of our own death. And actually, maybe the realization of death is what separated us from the rest of the animal kingdom! In fact, the concept of death is so stimulating that, even today, a large number of people choose to “put it out of their minds” by believing in their own “immortality”.

That is, maybe the origin of the idea of “immortal soul” was similar to the following argument, which could have occurred in some primitive’s mind:

“Other things die but not me; I’m gonna live forever; maybe my body will disintegrate when I’m dead, just like all the dead bodies I’ve seen, but the essence of me will live on; that essence of me is my soul; my soul is immortal!”

If thoughts similar to the above were the origin of the idea of an “immortal soul”, then it wouldn’t have been much of an extrapolation to assume that “other, similar, great people” (similar to the person who had the above thoughts!) also were immortal, an extrapolation that could then easily lead to believing in the existence of various gods.

But the above speculation about a possible origin of ideas about gods and souls is mostly illustrative of the point that I was trying to make in an earlier paragraph: it’s difficult (if not impossible) to determine, reliably, the history of ideas about gods and souls. As I’ll be trying to show you, it’s difficult even to trace the history of ideas that emerged after writing became available (e.g., tracing the idea, seen in Homer’s books and then repeated in the New Testament, that somebody could be the son of a god, or tracing the idea used by Persian priests and then repeated in the New Testament, that the world was about to end, that the “righteous” would then go to heaven while others

went to hell, and so on). About all that's known for certain about the ideas of souls and gods is that no one knows for certain how they began! Therefore, Dear, please be skeptical of all speculations that I'll be showing you.

In later chapters of this excursion, I'll be showing you other authors' speculations about possible origins of the ideas of gods and souls. Generally speaking, I would encourage you to pay more attention to their speculations than mine, Dear, because these authors spent much more time trying to identify these origins, digging as best they could into archeological and anthropological data (from the Greek words *archaeo* meaning 'ancient' and *anthropos* meaning 'man' or 'human'). Nonetheless, please permit your old grandfather to mention his own speculations about possible origins of the ideas of gods and souls (at least here, in this introductory chapter), because recently he's been collecting his own data, watching grandchildren!

Thus, Dear, try to imagine how it must have been for humans, tens and even hundreds of thousands of years ago, when the human brain was "in its infancy". Maybe the easiest way to appreciate how mental capabilities developed in primitive humans is to observe how children still react when they begin to become aware of themselves and their environment. For example, I can clearly remember how a certain baby would stop crying (at least temporarily!) when I'd show you "the other baby" who was crying in the mirror. That is, as for other animals, early in the development of our brains, we humans respond to what we see in our environment – and as I'll show you in the next chapter, there are suggestions that perhaps the first ideas of human "souls" was stimulated by primitive people seeing their own shadows on the ground (following them everywhere!) and seeing their own reflections in pools of water.

In addition, as with other animals, early in the development of our brains, we respond to what we hear in our environment. The survival value (and therefore the resulting natural selection) of the ability of all animals to conceptualize things and processes based only on sounds is obvious. And though I would be amazed when you would dash off as fast as your little hands and knees would transport you when I asked you "Where's your mommy?", if I were less of a proud grandfather and more of a disinterested observer, I probably should have concluded that your reaction really wasn't that much more impressive than the reaction of my old German shepherd

(whom your grandmother named “Zeus”) when I would ask him: “Where’s the ball?”

Soon thereafter, however, came the amazing capabilities of your (and your ancestors’) vocal chords, which maybe more than anything else distinguishes humans from the rest of the animals. When you were a baby, of course you made many sounds, but when you were still less than one year old (!), you began to make sounds that mimicked words that you heard. And when you were only about one year old, your brain clearly had developed the astonishing capability not only to conceptualize things and processes (that you had previously experienced in your environment), based only on sounds, but to control your vocal chords to make appropriate sounds.

For example, when you were thirsty, your body told you to drink, maybe your right brain pictured a drink, and your left-brain had learned an appropriate word. And then, stimulating anybody’s attention in whatever way you considered appropriate (from tugging on your mother’s leg, to confronting me with the authority of a commander-in-chief), you would strain your vocal chords to their utmost and demand: “Juice!” Maybe some other animals can accomplish similar feats with some sounds, maybe dolphins and apes can communicate with a limited vocabulary, but the Bible’s myth notwithstanding, certainly no snake ever talked to Eve (because a snake doesn’t have a “voice box”!) and certainly no other animal has the capabilities to conceptualize and vocalize the way humans can.

When this capability (of humans to make so many sounds) developed is unknown. I suggest, Dear, that you search on the internet for more recent information, but as I write this, data support the following statements:

- The first human-like species evolved about five million years ago,
- The size of the “hypoglossal nerve canal” for these first human-like species suggests that they could “speak” no better than modern apes,
- By about 500,000 years ago, “humans” could “control their tongues” as well as we can – or maybe I should say “as well as we are capable of doing”!

Then, what a time it must have been, half-a-million-or-so years ago, when humans went around naming things, associating any sound someone cared to

make with whatever the first “sounder” said. If you watch the similar process in children just learning to speak, I expect that you can see the same strange process. An example that I’ve already mentioned is when you were less than two years old: you named our sets of nested, wooden, Russian dolls “outrageous”? Did someone say that it was “outrageous” that you should be playing with them? What was outrageously funny was, when you visited, almost as soon as you entered our house, you’d announce what you’d want: “outrageous!” Similarly, our first son (your uncle) called trucks “dubwea” (however he might have spelled it!), we think because it meant “the big one”, and he called milk “ogg”, possibly because when he drank it all, we’d praise him by saying: “all gone”.

Perhaps it was amazement (or wonderment!) with how things (and processes) obtained their names that led to the inclusion of stories, in so many myths, about how things were first named by “the first human” (e.g., in the Hebrew myth about the “first man” Adam or in the earlier Egyptian myth about the “first man” Atum). In fact, one of the oldest (if not the oldest) myths that has survived without modification in written form (for nearly 5,000 years, approximately for twice as long as the myths in the Bible!), illustrates the awe that people felt about the power of names.

Here, let me show you just the first few paragraphs of this Egyptian myth, known as the story of (the sun god) Re (also spelled Ra) – and which, even if incorrect, I pronounce as “ray”! To this quotation (which you can find on the internet), I’ve added the italics (for emphasis) and some comments in “square brackets” [such as these!].

In the beginning, before there was any land of Egypt, all was *darkness*, and there was nothing but a great waste of *water* called Nun. [And I hope, Dear, that you already notice the similarity of this description of what occurred “in the beginning”, with what’s described in the much-more recent Bible’s Genesis myth: “*In the beginning...* with *darkness* over the face of the abyss, and a mighty wind that swept over the surface of the *waters...*”] The power of Nun was such that there arose out of the darkness a great shining egg, and this was Re.

Now, Re was all-powerful, and he could take many forms. His power and the secret of it lay in his hidden name... [By the way, Dear, later in this myth the goddess *Isis* tricks *Re* to reveal his secret name, which turned out to be the same “secret name” of all gods that have ever been invented: “Power”!...*if he [Re] spoke other names, that which he named came into being.* [That is, Dear, how powerful it must have seemed to primitive people to give things names!]

“I am *Khepera* at the dawn, and *Re* at noon, and *Tem* in the evening,” he said. And the sun rose and passed across the sky and set for the first time. [Notice, Dear, that just by naming motion, motion occurred! – and compare this (Egyptian priest’s) speculation with that of the Hebrew-Persian cleric who wrote the Bible’s Genesis myth: “God said, ‘Let there be light’, and there was light; and God saw that the light was good, and he separated light from darkness. He called the light day, and the darkness night. So evening came, and morning came, the first day.”]

Then he named *Shu*, and the first winds blew; he named *Tefnut*, the spitter, and the first rain fell. Next he named *Geb*, and the earth came into being; he named the goddess *Nut*, and she was the sky arched over the earth with her feet on one horizon and her hands on the other; he named *Hapi*, and the great River Nile flowed through Egypt and made it fruitful.

After this *Re* named all things that are upon the earth, and they grew. Last of all he named mankind, and there were men and women in the land of Egypt.

You can see the same primitive fascination with the power of naming things in one of the oldest (if not the oldest) genesis myth of the Mesopotamians, called *The Enuma Elish* (which means “when on high”, named for the first three words in the myth). I’ll show you more of this myth in a later chapter in this “excursion”; the version from ~4,000-year-old clay tablets starts as follows (I’ll provide internet references later). In what follows, someone else has added the notes in “squiggly brackets” {such as these!}; I’ve added the notes in “square brackets” [such as these].

WHEN on high the Heavens had not been named
 [Notice again, Dear, that the key is to name things!]
 Firm ground below had not been called by name,
 Nothing but ‘Primordial *Apsu*’, the Begetter, {Fresh Water}
 and ‘Mummu *Tiamat*’, She Who Bore them All {Salt Water} –
 their waters commingling as a single body.

[Notice again, Dear, that (just as in the Egyptian genesis myth and of course in the much later Bible’s genesis myth) in the beginning, somehow-or-other there was water and somehow-or-other ‘water’ had already been named (fresh-water and sea-water even had separate names!).]

No reed hut had been matted, no marsh land had appeared,
 Uncalled by name, their destinies undetermined –
 [If it didn’t have a name, it didn’t have even a destiny – but then, if reed huts, for example, had neither names nor existence, how could anyone talk about them?!]

THEN it was that the Gods were formed within them.
Lahmu {‘mud’} and *Lahamu* {‘Mrs. Mud’} were brought forth,
 by name they were called

Before they had grown in age and stature.

[Notice, Dear, that the people who created and listened to this myth were obviously familiar and comfortable with the idea of marriage, but also, notice the incoherency: if even the gods didn't exist before they were named, then who named the first namer?!!]

Anyway, Dear, returning to my speculations about what might have occurred tens or even hundreds of thousands of years earlier, it's no wonder that so many languages developed. Even if originally there were only a single group of humans who had the ability to make so many sounds, when this group subsequently prospered (with their prosperity no doubt enhanced by the ability to speak, because there's substantial survival value in being able to communicate verbally), the members would have needed to separate (pressured by resource constraints). Subsequently, if various subgroups drifted away from the original group at a rate of only one to ten miles per year (not "per day", Dear, "per year"!), then in, say, 250,000 years, with a walking distance around the world of about 25,000 miles, the meanders could have been able to encircle the globe 10 to 100 times – if they could have found a way to get across the Atlantic Ocean! As they meandered, no doubt they encountered new things to name and maybe they decided to describe the old things differently (or forget the old names). As a result, after (say) another 25,000-year stroll from Africa to Asia and maybe even to America, and then back to Africa, no wonder that the groups could no longer communicate with one another – just as when my daughter returns to visit and expresses differently something that is familiar and confuses me with words describing something that is unfamiliar!

Giving names to people must have been a particularly astonishing step: sounds with the ability to evoke conceptualizations of even people. And at the same time, when people were choosing names for things in their environment (such as the sun, the moon, the wind, thunder, and so on), maybe they "conceptualized" something similar to a person – a god – who was being identified by the name chosen for things and processes in their environment (a sun god, a moon god, a wind god, and so on). But there is something else, here, that's even more amazing – and for which I think that our ancient ancestors deserve enormous praise.

I expect that this amazing development (which may have been the source of our primitive ancestors' ideas about gods) was similar to the intellectual development that can easily be seen in little children. Similar to animals, children learn that things have causes: dogs hear a noise, "know" it has a

cause, and many times begin to bark; children hear a noise near the door and scream “Daddy’s home!” But beyond the capabilities of animals (at least I guess it’s beyond their capabilities), somewhere around the age of two (or so) children make the astounding generalization from all their experiences to conclude: “Ah come off it, Grampa, everything has a cause.”

Similar awareness must have arisen in our ancient ancestors, soon after (or maybe even before) they learned that ideas could be stimulated even just by sounds. I then wonder, Dear, if you see why I think that our ancient ancestors deserve substantial praise for creating even the stupid idea of gods! Their “belief” in gods actually demonstrates an astoundingly impressive and important human development: “belief” in (or better: discovery of, understanding of, and trust in) the principle of causality. That is, somewhere in our distant past, humans developed an unflinching trust that all observed effects have causes. They learned that shaking a tree can cause ripe fruit to fall, rubbing two dry sticks together can cause fire, hitting someone in the head with a rock can cause death, and so on. Thus, there were ample “reality checks” – ample data – to support the idea that all effects had causes.

From all such “reality checks”, from all such particulars, our ancient ancestors then made the astounding generalization (in a process that we now call “induction”) to one of the most “sacred” general principles that stands as firm today as it did tens (or even hundreds) of thousands of years ago: all effects have causes, i.e., the principle of causality. Consequently, when strange new effects were observed (such as the spontaneous “fire” of lightning, the crack and reverberation of thunder – as well as rain, drought, famine, disease, death, and so on), our ancient ancestors “naturally” assumed that that these “strange effects” also had their causes (illustrating what we now call “deduction”, i.e., applying the general principle that everything has a cause to deduce that a particular effect must have a cause). Thereby, each ‘culture’ would ‘conceptualize’ a huge number of gods: one god for essentially every effect that was assumed to have an independent cause.

And incidentally, Dear, if you ever have a grandchild who asks you why you don’t believe in God, then to be “politically correct”, you should respond: “which god?”! Even today, the Hindus, alone, “believe” in millions of gods: as someone else said, there are roughly as many Hindu gods and there are Hindus!

Anyway, if this is something similar to what occurred, then after our primitive ancestors “identified” all their gods (a thunder god, a rain god, a sky god, a moon god, and on and on), then the fun must have begun! Just as little kids do today, our primitive ancestors concocted stories to “explain” how the observed effects were related to the assumed causes; we call these stories “myths”. If you’ll observe little kids do the same, today, it can be great entertainment (as the wonderful comedian Bill Cosby illustrates on a TV series in which he “interviews” children). For example, Dear, if you ask a kid of four (or so) how the sun comes up every day, where the rain comes from, and so on, you can receive some amazing “explanations”. I still remember the story that my mother (your great grandmother) would retell: when my nearest-age older-brother first saw the stars, maybe when he was about three, he said: “Look at all the peep holes in the sky, so the wee-Godie can spy on us!”

It’s therefore roughly about here, Dear, with first abilities of human brains to conceptualize from sounds and to identify causal relationships, where the analogy between our ancient ancestors and modern children should be discontinued. In the “terrible twos”, when children first begin to affirm their independence and seem never to tire of asking “Why?”, “How come?”, and so on, modern children have an almost endless supply of information that can promote (but unfortunately, many times can hinder) their development. They receive answers to “Why is the sky blue?”, “How come it rains?”, “What causes lightning?”, and even to “Where did I come from?” It is unfortunately the case that many of the answers they receive are misleading or wrong – but at least they receive answers!

In contrast, imagine how it must have been for our ancient ancestors, when it wasn’t infants but adults who were asking such questions – and no one was available to provide answers. Back then, no doubt, primitive people were frightened (and, in some cases, possibly awed) by thunder, lightning, fire, volcanic eruptions, birth, death, etc., and no doubt, they wanted to understand the associated causes. In time, no doubt someone speculated about these causes, these speculations were repeated, and eventually these speculations developed into stories (i.e., myths) to “explain away” such unknowns. That primitive people would invent such myths seems quite consistent with the human brain’s “need to know”, which in turn seems quite consistent with our animal-based dual survival goals (of ourselves and our families).

There's no doubt that all animals (including humans) have always found survival value in minimizing unknowns, for example, by identifying sources of strange noises and, if possible, by scaring them away (e.g., by barking or by banging on logs with sticks). And if the "explanations" for the unknowns didn't generate additional threats to survival (e.g., if assuming that the sound of thunder was caused by "gods applauding the rain" didn't significantly influence a group's survival), then the "explanations" were accepted – allowing early humans to then focus on more immediate survival needs (water, food, shelter, protection from predators, and so on). I can imagine some wise old woman (the myth maker?) saying: "Never mind the lightning god; I'll take care of him; just get out of the cave and get us some meat!"

In several later chapters of this "excursion", I'll show you some of the "wild and wooley" myths that primitive people dreamt up to try to answer questions that must have puzzled them. In fact, primitive humans must have been almost overwhelmed by an enormous number of unanswered questions. Every-which-way they turned, no matter what they considered, there were unanswered questions. Probably greater intellect gave a continuous advantage for survival (and therefore for the survival of intelligent offspring), but the more intellectually competent the people became, the more unanswered questions they had: what causes the lightning, why does it rain, what is this earth, what are the stars, how was everything created?

Let me again quote M.M. Mangasarian's 1909 book *The Truth About Jesus: Is He A Myth?*

What is a myth? A myth is a fanciful explanation of a given phenomenon. Observing the sun, the moon, and the stars overhead, the primitive man wished to account for them. This was natural. The mind craves for knowledge. The child asks questions because of an inborn desire to know. Man feels ill at ease with a sense of a mental vacuum, until his questions are answered.

Before the days of science, a fanciful answer was all that could be given to man's questions about the physical world. The primitive man guessed where knowledge failed him – what else could he do? A myth, then, is a guess, a story, a speculation, or a fanciful explanation of a phenomenon, in the absence of accurate information.

Many are the myths about the heavenly bodies, which (while we call them myths, because we know better) were to the ancients truths. The Sun and Moon were once brother and sister, thought the child-man; but there arose a dispute between them; the woman ran away, and the man ran after her, until they came to the end of the earth where land and sky met. The woman jumped into the sky, and the man after her,

where they kept chasing each other forever, as Sun and Moon. Now and then they came close enough to snap at each other. That was their explanation of an eclipse... With this myth, the primitive man was satisfied, until his developing intelligence realized its inadequacy. Science was born of that realization.

Some idea about how perplexed our primitive ancestors must have been (and why they turned to “gods” for “explanations”) can be obtained from reading even the relatively recent (about 2500-year old) Bible. For example, consider the Bible’s *Book of Job* – which is one of the few places in the Bible that anything beyond laughable scientific questions are addressed.³

In the passage that I’ll quote below, the myth makers have their imagined god speaking with Job. It appears that these myth makers were trying to demonstrate how ignorant the people were compared to the myth makers’ god, but what they actually demonstrated is how ignorant they were – and

³ Dear, I certainly make no claim to know the Bible well (in fact, I’m pleased to report that I’ve never wasted much time reading it!). Therefore, I was surprised to read the following from Thomas Paine’s *The Age of Reason*:

“The book of Job differs in character from all [other books of the Bible]... Treachery and murder make no part of this book; it is the meditations of a mind strongly impressed with the vicissitudes of human life, and by turns sinking under, and struggling against the pressure. It is a highly-wrought composition, between willing submission and involuntary discontent, and shows man, as he sometimes is, more disposed to be resigned than he is capable of being. Patience has but a small share in the character of the person of whom the book treats; on the contrary, his grief is often impetuous, but he still endeavors to keep a guard upon it, and seems determined in the midst of accumulating ills, to impose upon himself the hard duty of contentment.

“I have spoken in a respectful manner of the book of Job in the former part of *the Age of Reason* [Part I] but without knowing at that time what I have learned since, which is that, from all the evidence that can be collected, the book of Job does not belong to the Bible.

“I have seen the opinion of two Hebrew commentators, Abenezra and Spinoza, upon this subject. They both say that the book of Job carries no internal evidence of being a Hebrew book; that the genius of the composition and the drama of the piece are not Hebrew; that it has been translated from another language into Hebrew, and that the author of the book was a Gentile; that the character represented under the name of Satan (which is the first and only time this name is mentioned in the Bible) does not correspond to any Hebrew idea, and that the two convocations which the Deity is supposed to have made of those whom the poem calls sons of God, and the familiarity which this supposed Satan is stated to have with the Deity, are in the same case.

“It may also be observed that the book shows itself to be the production of a mind cultivated in science, which the Jews, so far from being famous for, were very ignorant of. The allusions to objects of natural philosophy are frequent and strong, and are of a different cast to anything in the books known to be Hebrew. The astronomical names, Pleiades, Orion, and Arcturus, are Greek and not Hebrew names, and it does not appear from anything that is to be found in the Bible, that the Jews knew anything of astronomy or that they studied it; they had no translation of those names into their own language, but adopted the names as they found them in the poem [i.e., in the Book of Job].”

therefore how ignorant their imagined god was! In this quotation, I've added the comments in square brackets.

Job 38, 3: “Brace yourself and stand up like a man [God reportedly said to Job]; I [God] will ask questions, and you shall answer them.”

“God” then asks some questions about the earth, the sea, and light and darkness, but these questions are so poorly posed, they're not even worth trying to answer! For example, the old shepherding myth makers have their imagined god ask: “Have you descended to the springs of the sea?” This question suggests that the myth makers thought that a spring fed the oceans (instead, almost certainly, the source of ocean water is from hydrated rocks, with the water released during intense volcanic activity of the early Earth).

Similarly, the myth makers have their god ask “Which is the way to the home of light and where does darkness dwell?”, which is cute but rather silly. The “home” of visible light, that is (I guess!), its source, is the energy released when some energy level at its source is reduced (e.g., an electron dropping to a lower level). And “where darkness dwells” is also cute but also rather silly. If the question is What's the sink for light? it's wherever photons are absorbed by some material, increasing its energy level, eventually dissipating into heat (which can be released as lower energy, infrared radiation, not visible with our unaided eyes).

But, besides these poorly posed questions, look at some of the other questions that the old shepherders imagined that their god would ask.

Job 38, 22: “Have you visited the storehouse of the snow or seen the arsenal where hail is stored...?”

The answer to that question is definitely in the affirmative: anyone who has flown through a cloud in an aircraft has “visited the storehouse of the snow”. As for the “arsenal where hail is stored” (which is strange wording, as if someone thought the hail was stored somewhere!), hail is created in the region of highest water content of a cumulonimbus cloud, and although some scientists have “visited... the arsenal where hail is stored” (by flying into the region in an armored aircraft), it's not recommended for the faint of heart! For the rest of us, it's easy to see “the arsenal where hail is stored” by tuning into the TV's Weather Channel and seeing regions in convective storms with the most intense radar echo.

Job 38, 25: “Who has cut channels for the downpour and cleared a passage for the thunderstorm...?”

Well, again the myth makers didn't have their god pose the question very well, but if they'd like to have their god ask if we humans can now modify rainfall, then there's no question that the correct answer is yes: if we seed the right clouds in the right place with the right cloud-particle nuclei (e.g., silver-iodide particles), then we can “cut channels for the downpour”. Also, if we “overseed” thunderstorms (by creating a large number of ice crystals at the right time and place), there's fairly good evidence that we can “[clear] a passage for the thunderstorm” – by blowing it away. And actually, there's also fairly good evidence that we can modify the paths of thunderstorms by creating large lakes (e.g., behind dams) and probably with large urban areas (whose asphalt absorbs more sunlight, warming the air near the surface) and with large irrigation projects (which provide more moisture for the clouds).

Job 38, 28: “Has the rain a father? Who sired the drops of dew? Whose womb gave birth to the ice, and who was the mother of the frost from heaven?”

Well, again, the shepherders' poor-old god seems rather lost, not knowing enough to ask questions using reasonable concepts. But if we wanted to accommodate God's (i.e., the myth makers') lack of understanding, then we could answer as follows: rain potentially has many “fathers”, such as surface heating and associated updrafts, surface moisture leading to saturated air, and cloud condensation nuclei (which in turn are particles from the land and sea and other sources, and which also are created in the atmosphere, from gases such as dimethyl sulfide that are oxidized and then condense to form particles). Dew is commonly “sired” by radiational cooling of the surface sufficient so that the adjacent air becomes saturated. Ice is “born” by cooling water to its freezing point. The “mother” of frost is similar to the “father” of dew, with the added factor that the surface is cold enough for the dew to freeze.

As for the rest of your question, God, here is a quick response. When the temperature falls (especially near the earth's surface at night, because the ground cover is a much better radiator of infrared energy than is air), then the air can hold less water as vapor, so some of the vapor will condense. If the vapor condenses on object at the ground, the resulting liquid water is called dew; if the ground is below freezing, the result is called frost; if this condensation on the surface is insufficient to keep the air from being supersaturated, then the moisture will condense on particles in the air,

causing fog (whether a water fog or an ice fog depends on the air's temperature). And as for "whose womb gave birth to the ice", the point really is that water has three phases, and whether it's vapor (steam), liquid water, or ice (or agglomerates of ice in the air, called snow) mainly depends on the temperature. Perhaps what you should do, God, is enroll in even just a few elementary science classes, so that at least your questions could be posed more intelligently!

Job 38, 34-38: "Can you command the dense clouds to cover you with their weight of waters?... Who is wise enough to marshal the rain-clouds and empty the cisterns of heaven...?"

Well, God, you certainly seemed to be curious about weather modification. As for who can do these things: we humans can. If you want further details, I suggest you send an e-mail to the American Meteorological Society, who can put you in touch with specific people to whom you should talk.

And so on it goes. This old shepherders' god asks (*Job 39, 1*): "Do you know when the mountain-goats are born...?" [Yes, God, we know that.] Then, the old shepherders' God brags about "the chief of God's works", the crocodile (*Job 40*): "Who has ever attacked him unscathed? Not a man under the wide heaven." [Sorry, God, wrong again!]

But again, Dear, all of the above (from the Bible) illustrated the questions and uncertainties during relatively recent times (a few thousand years ago). Imagine the questions and uncertainties tens of thousands of years ago, imagine the setting for the first speculations about "the gods", and therefore imagine the backgrounds for the first myths.

Further, Dear, both from the Bible (and all other "holy books") and from all other myths, you can see that our primitive ancestors made a terrible mistake – and that they were almost forced into it! After making the brilliant generalization that all effects had causes, they failed to determine the links between causes and their effects. And I wrote that they were almost forced into this mistake, simply because they had neither the time nor the tools necessary to permit them to perform the investigations. Consequently, if some old "Joe of the Jungle" proclaimed that the nearby volcano was erupting because... [whatever], and if this old "Joe of the Jungle" generally seemed to know what was going on, the people apparently accepted his speculation for how the observed effect was caused.

That is, again: it seems totally understandable why the vast majority of our primitive ancestors failed to test hypothesized links between causes and effects. Without the huge body of knowledge that science has developed during the past 500-or-so years, it would be essentially impossible to understand the causes of birth, illness, and death, the cause of winds (i.e., temperature differences), the cause of thunderstorms (e.g., cold, dry and therefore dense air aloft, unstably atop warm, moist air), the cause of sunlight (fusion of nuclei), and on and on. On the other hand, that modern humans persist in “believing” in mythical relations between cause and effect (such as are described in the Bible and similar “holy books”) is nothing short of a dangerous disgrace: a disgrace because it’s through laziness, through lack of perseverance, that modern humans fail to learn linkages between causes and effects, and that this disgrace is dangerous is attested to all the religious wars that have occurred, that are occurring, and that may yet occur (e.g., between Christians and Muslims).

In a later chapters, I’ll dig deeper into this “dangerous disgrace” (also known as “religion”), but let me set it aside for now and, instead, let me mention another important step that our ancient ancestors took (besides adopting their unflinching confidence in the principle of causality, for which they deserve enormous credit). Thus, as the famous psychoanalyst Sigmund Freud (1856-1939) suggested:

A great deal is already gained with the first step: the humanization of nature. Impersonal forces and destinies cannot be approached... [but] if everywhere in nature there are Beings around us of a kind that we know in our own society... we can apply the same methods against these violent supermen, outside, that we employ in our own society: we can try to adjure them, to appease them, to bribe them, and, by so influencing them, we may rob them of a part of their power.

Actually, Dear, recently (courtesy the wonderful internet and the contributions of so many people), I found that essentially the same idea was described approximately 100 years earlier than Freud by Constantin Francois de Volney (1757 – 1820) in his 1789 book *The Ruins, or, Meditation on the Revolution of Empires and the Law of Nature*. You can find this book on the internet (e.g., at David Hart’s Home Page), apparently courtesy “Project Gutenberg” (which is a glorious project to make “classic books” available on the internet). Specifically in Part 3 of *The Ruins*, Chapter XXII (entitled “Origin and Filiation of Religious Ideas”), Section 1 (entitled “Origin of the idea of God...”), Volney states:

It was not till after having overcome these obstacles, and gone through a long career in the night of history, that man, reflecting on his condition, began to perceive that he was subjected to forces superior to his own, and independent of his will. The sun enlightened and warmed him, the fire burned him, the thunder terrified him, the wind beat upon him, the water overwhelmed him. All beings acted upon him powerfully and irresistibly. He sustained this action for a long time, like a machine, without enquiring the cause; but the moment he began his enquiries, he fell into astonishment; and, passing from the surprise of his first reflections to the reverie of curiosity, he began a chain of reasoning.

First, considering the action of the elements on him, he conceived an idea of weakness and subjection on his part, and of power and domination on theirs; and this idea of power was the primitive and fundamental type of every idea of God. [Recall, Dear, that the “secret name” of the Egyptian sun god, Re, was “power”!]

Secondly, the action of these natural existences excited in him sensations of pleasure or pain, of good or evil; and by a natural effect of his organization, he conceived for them love or aversion; he desired or dreaded their presence; and fear or hope gave rise to the first idea of religion.

Then, judging everything by comparison, and remarking in these beings a spontaneous movement like his own, he supposed this movement directed by a will – an intelligence of the nature of his own; and hence, by induction, he formed a new reasoning. Having experienced that certain practices towards his fellow creatures had the effect to modify their affections and direct their conduct to his advantage, he resorted to the same practices towards these powerful beings of the universe. He reasoned thus with himself: when my fellow creature, stronger than I, is disposed to do me injury, I abase myself before him, and my prayer has the art to calm him. I will pray to these powerful beings who strike me. I will supplicate the intelligences of the winds, of the stars, of the waters, and they will hear me. I will conjure them to avert the evil and give me the good that is at their disposal, I will move them by my tears, I will soften them by offerings, and I shall be happy.

Thus simple man, in the infancy of his reason, spoke to the sun and to the moon; he animated with his own understanding and passions the great agents of nature; he thought by vain sounds, and vain actions, to change their inflexible laws. Fatal error!...

And let me add, Dear, how disappointed I am with Bartlett’s *Familiar Quotations*: in the edition that I am using (the Fifteenth), Volney’s work is referenced only in a single footnote! In later chapters, I’ll show you many more of Volney’s amazing ideas – including his suggestion to create a United Nations General Assembly, approximately 150 years in advance of

the event. In fact, I'll be encouraging you – even urging you – to read Volney's book, *The Ruins*, by yourself.

In any event, I find the idea stimulating: maybe primitive people accepted the concept that “the causes” of an enormous number of effects were gods, because thereby, the people saw a potential way to influence or even gain control of their environment, by robbing the gods of some of their powers! In fact, billions of humans still try to apply this trick – it's called praying – even though, if you think about it, it's an astoundingly insulting thing to do, trying to trick a god out of some of his powers! Yet, I want to smile at the cleverness of our ancient ancestors: first, they correctly identified the fundamental principle of causality; then they searched for ways to influence the assumed causes, by bribing or otherwise appeasing the gods!

But what a terrible mistake our ancient ancestors made – and so many primitive people still make. As Volney wrote: “Fatal error!” Seeking to survive, all animals seek to control their environment. By assuming that gods controlled the environment, our primitive ancestors then sought to control (or at least influence) the gods – as many primitive people still do. The result was an absolutely astounding waste of effort, resources, and in many cases of people: push young virgins into mountain craters to try to appease the volcano god, slaughter unknown thousands of people so that their blood would appease the earth or rain god, divert a large fraction of the resources of an entire civilization to build pyramids so that the pharaoh god would be well supplied in his afterlife, and divert a substantial fraction of the wealth of all groups to support the clerics, who were worse than useless in helping the people control their environment.

By understandably failing to determine the true cause of various effects, i.e., by misidentifying causes (calling natural causes “gods”) and then attempting to appease these gods (to rob them of some of their powers), our ancestors became vulnerable to con artists. No doubt, one of the first problems encountered by our ancient ancestors was the same as is encountered today: simple appeasements (such as praying) didn't work any better than chance. Therefore, greater appeasements were apparently tried (such as pushing helpless young girls into volcanoes or slaughtering new-born children or ...). And as if nothing worse than that could be imagined, yet something worse happened: a class of con-artists developed (with the successful ones clever enough to play the laws of probability to their advantage) who were able to convince the group that they – the con artists – the “holy men” – were the

gods' personal representatives. Thereby, the con artists gained power, and one of the few rules about human behavior that has sufficient validity to be remembered is: power usually corrupts.

The major problem, therefore, was not in the idea of gods but in the actions of those who claimed to be the gods' representatives, i.e., the problem was (and still is) the clerics. Our ancient ancestors made (at least) three (understandable and I would say not only "forgivable" but "commendable") mistakes: mistakes in identifying causes (but not in assuming that there were causes), mistakes in how to alleviate the causes (but not in trying to regain control over their environments), and mistakes in choosing the people who might help them (but not in adopting the general concept that people should help one another). But in contrast – in horrible contrast – it's the clerics (shamans, pastors, priests, rabbis, bishops, imams, ayatollahs, popes, or whatever-other name they use) that have been and continue to be the evil ones: either they are lunatics who "think" that they truly are representatives of the gods, or (more likely) they are liars who know that they aren't but love the power that goes with the position.

But, as you can probably tell, my "anger juices" are starting to flow, and I'd better try to stop them, at least for now. What I was really trying to get to is just that all ideas about all gods and souls are just ideas, possibly derived from misidentification of causes, deduced from erroneous and illogical interpretation of the data. I'll dig into all of this in more detail in subsequent chapters, but first, in the next chapter, let me show you some speculations by others (who have studied the matter in more depth) about the possible origins of the ideas of gods and souls.