Ix2 – Possible Origins of Ideas about "the Supernatural"

Dear: Of course we can't be certain about how, why, and when our ancient ancestors conceived ideas about "the supernatural" (i.e., ideas about spirits, souls, gods, and so on), but through a combination of many studies in a number of scientific fields (especially archaeology, anthropology, and behavioral sciences)¹ a general picture has emerged. In this chapter, I want to try to sketch at least a little of this "general picture", but at the outset, I should caution you: I'm "way out of my field of expertise". If you want to learn more about possible origins of ideas about the supernatural, then "go for it" – on your own. There are hundreds if not thousands of books written on the subject, as well as hundreds of thousands of relevant websites.

1. EVOLUTION

The scientific theme of the general picture (of the origins of ideas about "supernatural stuff") is that, similar to essentially everything in our universe (including the universe itself!), ideas about the supernatural evolved. In fact, the idea of evolution, itself, evolved. In the case of biological evolution, credit for the idea is generally given to Charles Darwin (1809–1882) and Alfred Wallace (1823–1913) for their 1858 publications, plus for Darwin's 1859 book *On the Origin of Species* and Wallace's 1869 book *The Malay Archipelago*, which was dedicated to Darwin. In reality, though, as I'll show you in **Yx**, the idea of biological evolution was suggested in ancient Greece (e.g., by Anaximander, c.610 − c.545 BCE) and later was promoted by many people, including Erasmus Darwin (1731–1802) who (I think it's relevant to add) was Charles Darwin's grandfather! ©

Similarly, the concept that ideas about the supernatural have evolved (and continue to evolve) is very old. For example, consider the penetrating assessment by the Greek historian Polybius (c.204 – c.122 BCE):

¹ Dear: According to the New Oxford American Dictionary, archaeology is "the study of human history and prehistory through the excavation of sites and the analysis of artifact and other physical remains." The word 'archaeology' is from the Greek words *arkhaios* meaning 'ancient' and *logos* meaning 'logic', 'word', 'reason' or 'study'. Anthropology (from Greek *anthrōpos* meaning "human being") is the study of humankind, with cultural anthropology being the comparative study of human societies and with physical anthropology being the study of human zoology, evolution, and ecology. Behavioral science is "the scientific study of human and animal behavior", which may seem to be a part of anthropology, but in behavioral science, emphasis is on applying the scientific method of testing hypotheses by performing experiments, which is essentially impossible in archaeological and anthropological studies.

Since the masses of the people are inconsistent, full of unruly desires, passionate, and reckless of consequences, they must be filled with fears to keep them in order. The ancients did well, therefore, to invent gods and the belief in punishment after death.

That is, as far as Polybius was concerned, ideas about the supernatural were "invented" by "the ancients", by which Polybius was probably referring to Egyptian clerics at least 2,000 years still earlier.²

Subsequently, evolutions of religions have been investigated by many authors, some of whose assessments I'll review in the "excursion" **Yx**. Illustrative is the penetrating assessment by the historian Edward Gibbon (1737–94) in his 1776 book *The History of the Decline and Fall of the Roman Empire* (Vol. I, Ch. II):³

The various modes of worship which prevailed in the Roman world were all considered by the people as equally true, by the philosopher as equally false, and by the magistrate as equally useful.

Yet, although the idea of the evolution of religions is old (as are the ideas that gods were "invented" and that all religions are "equally false"), there's no doubt that the 1858 Darwin-Wallace theory of biological evolution provided new impetus to the study of evolution of ideas about the supernatural. An important example is the massive two-volume book *Primitive Culture* by Edward Burnett Tylor (1832–1917) who was "the world's first professor of anthropology". In the Preface to the 1873 Second Edition of his book (the First Edition was published in 1871; the Sixth, in 1920), Tylor wrote (apparently somewhat defensively): 5

It may have struck some readers as an omission, that in a work on civilization insisting so strenuously on a theory of development or evolution, mention should scarcely have been made of Mr. Darwin and Mr. Herbert Spencer, whose influence on the whole course of modern thought on such subjects should not be left without

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² Actually, Dear, I've seen this statement by Polybius translated a number of different ways. Another version is: Since the multitude is ever fickle, full of lawless desires, irrational passions and violence, there is no other way to keep them in order but by the fear and terror of the invisible world; on which account our ancestors seem to me to have acted judiciously, when they contrived to bring into the popular belief these notions of the gods, and of the infernal regions.

³ At http://en.wikiquote.org/wiki/Talk:Seneca_the_Younger#.22True.2C_False.2C_Useful.22_Quote is an interesting analysis of the origin of this quotation, commonly but apparently incorrectly attributed to Seneca the Younger.

⁴ See http://en.wikipedia.org/wiki/Edward_Burnett_Tylor.

From http://www.scribd.com/doc/25176004/Primitive-Culture-Tylor-Edward-Burnett-vol-1.

formal recognition. This absence of particular reference is accounted for by the present work, arranged on its own lines, coming scarcely into contact of detail with the previous works of these eminent philosophers.

Later in this chapter, I'll quote extensively from Tylor's book, but before describing any of the proposed hypotheses for the origin(s) of supernatural ideas, perhaps it would be useful if I started more generally.

2. BEHAVIORAL STUDIES

Based on evidence outlined later in this chapter, it appears that the first supernatural idea adopted by our primitive ancestors was that each person possessed a "second self", commonly called a 'soul', which was immortal (i.e., it didn't die); ideas about other spirits and various gods then seem to have followed. Consequently, to try to understand how ideas about the supernatural might have started, it seems appropriate, first, to consider the necessary "ingredients" or "precursors" for ideas about souls and afterlives. These precursors would seem to include: 1) awareness of death, 2) emotional reaction to death, 3) awareness of one's own existence, and 4) sufficient intelligence not only to imagine one's own death but also to imagine what might happen after one dies. As illustrated below, behavioral studies have found that many different animal species (besides humans) seem to possess the first three of those four ingredients.

2.1 Precursors to Ideas about "the Supernatural"

2.1.1 Awareness of death

It's unknown when humans first became aware of death, but almost certainly it occurred almost as soon as "protohumans" first appeared (about 10 million years ago), because many different animals seem to be aware of death. It's unknown, of course, if such animals grieve death (or, e.g., if death simply confuses them), but there's no doubt that such animals as magpies, wolves, dolphins, chimpanzees, etc., do respond to death. For example, chimps seem to attempt to resuscitate dead companions, and as anecdotal evidence quoted below illustrates, elephants famously perform "rituals" associated with dead elephants – and maybe even associated with dead people!

Elephants are the most primitive mammals with placenta (in which the fetus is fed and protected within the womb). According to 2008 analyses of DNA from many species of mammals by Gunter Wagner of Yale University, the

cause of this "crucial step" in the "evolution of pregnancy involved the altered function of protein HoA-11." Evidence from fossil records for when this "crucial step" occurred is debated among paleontologists, but there seems little doubt that it occurred at least 100 million years ago, which is roughly when the huge continent Gondwanaland broke up (and South America drifted away from Africa). But regardless of when elephants first appeared, the following quotation from a Wikipedia article (with references omitted) provides at least anecdotal evidence about how our placental cousins (the elephants!) seem to have developed "awareness" about one of the most fundamental "ideas" dealing with "the supernatural".

Elephants are the only species on Earth other than *Homo sapiens sapiens* and Neanderthals known to have or have had any recognizable ritual around death. They show a keen interest in the bones of their own kind (even unrelated elephants that have died long ago). They are often seen gently investigating the bones with their trunks and feet and remaining very quiet. Sometimes elephants that are completely unrelated to the deceased will still visit their graves. When an elephant is hurt, other elephants (even if they are unrelated) will aid them.

Elephant researcher Martin Meredith recalls an occurrence in his book about a typical elephant death ritual that was witnessed by Anthony Hall-Martin, a South African biologist who had studied elephants in Addo, South Africa, for over eight years. The entire family of a dead matriarch, including her young calf, were all gently touching her body with their trunks, trying to lift her. The elephant herd were all rumbling loudly. The calf was observed to be weeping and made sounds that sounded like a scream, but then the entire herd fell incredibly silent. They then began to throw leaves and dirt over the body and broke off tree branches to cover her. They spent the next two days quietly standing over her body. They sometimes had to leave to get water or food, but they would always return.

Occurrences of elephants behaving this way around human beings are common throughout Africa. On many occasions, they have buried dead or sleeping humans or aided them when they were hurt. Meredith also recalls an event told to him by George Adamson, a Kenyan Game Warden, regarding an old Turkana woman who fell asleep under a tree after losing her way home. When she woke up, there was an elephant standing over her, gently touching her. She kept very still, because she was very frightened. As other elephants arrived, they began to scream loudly and buried her under branches. She was found the next morning by the local herdsmen, unharmed.

⁶ See, e.g., http://www.dailygalaxy.com/my_weblog/2008/09/resurrected-gen.html.

⁷ See, e.g., <u>http://www.macroevolution.net/origin-of-placental-mammals.html</u>.

⁸ Available at http://en.wikipedia.org/wiki/Elephant intelligence.

2.1.2 Emotional reactions to death

A second, necessary ingredient or precursor for the idea of an "afterlife" for one's "immortal soul" would seem to be an emotional reaction to death. Protohumans living about 5 million years ago probably had emotional reactions to death, since again, many animals seem to display emotional reactions to death, especially of close kin (e.g., again read the above quotation from Wikipedia about elephants). As another example, consider the following anecdotal evidence about the emotional reaction of a dolphin to the death of her presumed calf (and recall that dolphins are descendants of terrestrial animals that re-entered the marine environment about 50 million years ago). The following description is from a 19 August 2007 post⁹ at the blog of the Tethys Research Institute.¹⁰

On the 3rd and 4th of July, 2007, one common bottlenose dolphin *Tursiops truncatus* was observed interacting with a dead newborn calf in the semi-closed waters of the Amvrakikos Gulf, Greece.

The behavior of the presumed mother was observed by Tethys researchers Joan Gonzalvo Villegas and Zsuzsanna Pereszlenyi and by Earthwatch volunteers for approximately 4.5 hours under an oppressive summer heat, in a dead-calm sea.

Whilst researchers must avoid being driven by their own feelings and mak[ing] arbitrary interpretations, in this case it was quite clear that the mother was mourning. She seemed to be unable to accept the death, and was behaving as if there was... hope of rescuing her calf.

She lifted the little corpse above the surface, in an apparent late attempt to let the calf breath. She also pushed the calf underwater, perhaps hoping that the baby could dive again. These behaviors were repeated over and over again, sometimes frantically, during two days of observation.

The mother never separated from her calf. From the boat, researchers and volunteers could hear heartbreaking cries while she touched her offspring with the rostrum and pectoral fins. Witnessing such desperate behavior was a shocking experience for those on board the research boat.

2.1.3 Awareness of one's existence

A third, necessary precursor to the idea of an "afterlife" for one's "immortal soul" would seem to be an individual's awareness of his or her own existence. It's obviously correct that all animals instinctively seek to try to

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⁹ At http://istitutotethys.blogspot.com/2007/08/mother-bottlenose-dolphin-mourning-her.html.

¹⁰ See http://www.tethys.org/about.htm.

continue to exist (those animals that weren't so "programmed" are now extinct!), but a separate question is: Which animals are "mentally aware" of their own existences? Unfortunately, however, it's difficult to answer that question, since it's difficult to define and comprehend what's meant by being "mentally aware". For example, my current German shepherd, Holly, certainly seems "aware" that she seeks to gain pleasure (especially food and going for walks) and to avoid pain (e.g., a cactus burr in her foot), but she doesn't seem to be aware that the tail that keeps following her is her own!

As you probably know, it's now become standard (although it's not necessarily correct!) to judge the self-awareness of animals from their behaviors when seeing their reflections in mirrors. Some animals (such as most apes and my German shepherd!) see the images as another animal — and potential threats! On the other hand, some animals such as elephants, dolphins, and chimps apparently recognize their images as their own — and will explore, e.g., markings that researchers put on them, or explore parts of their bodies that they haven't seen before (e.g., their teeth). Humans and chimps had a common ancestor about 10 million years ago; therefore, it would seem reasonable to assume that, for at least about 10 million years, protohumans have been aware of their own existences — not necessarily because they noticed their reflections (e.g., in pools of water), but when a protohuman attempted to crack a nut with a rock and, instead, smashed his finger, or when he burned himself when first trying to control fire, then I wouldn't be surprised if he soon came to the conclusion that he existed!

2.1.4 Sufficient intelligence to imagine one's death

About 5 million years ago, an "ecological niche" apparently developed for two-legged creatures "without feathers" (as Plato said) but with more intelligence than our ape-like cousins. In fact, the same ecological niche seems to be still available for even more intelligent beings, and with a lot more mental effort and a little luck, humans may continue to evolve to occupy it – or become extinct!

As you can readily find by searching on the internet, why and how the human brain evolved is still being debated. My own, unknowledgeable view is that it was a "bootstrap approach", i.e., our ancestors lifted themselves up, mentally, by doing so! Thus, during the past five-or-so million years, as protohumans used more tools and weapons than monkeys, learned how to

¹¹ See, e.g., http://en.wikipedia.org/wiki/Mirror test.

control fire, learned how to communicate with progressively more sounds, learned how to cooperate with other humans (e.g., to help in child rearing and to kill animals for food), learned how to domesticate animals, and so on - importantly including children learning from their grandparents what they had learned (②) – then at each step along the way, human intelligence (and brains) expanded.

By about 200,000 years ago (which on a geological or even an evolutionary time-scale is "just yesterday"), the human brain was essentially the same as it is today. As described in detail in a Wikipedia article, ¹²

... the human brain is over three times larger than the brain of a typical mammal with an equivalent body size. Most of the spatial expansion comes from the cerebral cortex, a convoluted layer of neural tissue which covers the surface of the forebrain. Especially expanded are the frontal lobes, which are associated with executive functions such as self-control, planning, reasoning, and abstract thought.

Of course, the bane (!) of such big brains (with the ability for "abstract thought" and foresight) was the ability to foresee one's own death. Equally obvious, however, is that it's unknown how and when such foresight occurred, but below, I'll briefly mention some archaeological and anthropological studies that provide some hints.

3. ARCHEOLOGICAL STUDIES

Archeological evidence suggests that, at least by 100,000 years ago, our ancestors were aware of death and developed associated rituals – presumably preparing the deceased for an "afterlife". As stated in a Wikipedia article entitled "Evolutionary origin of religions": 13

The earliest evidence of religious thought is based on the ritual treatment of the dead. Most animals display only a casual interest in the dead of their own species. Ritual burial thus represents a significant advancement in human behavior. Ritual burials represent an awareness of life and death and a possible belief in the afterlife. Philip Lieberman states "burials with grave goods clearly signify religious practices and concern for the dead that transcends daily life."

The earliest evidence for treatment of the dead comes from Atapuerca in Spain. At this location the bones of 30 individuals believed to be *Homo heidelbergensis* have been found in a pit. Neanderthals are also contenders for the first hominids to

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¹² At http://en.wikipedia.org/wiki/Human brain.

¹³ At http://en.wikipedia.org/wiki/Evolutionary origin of religions.

intentionally bury the dead. They may have placed corpses into shallow graves along with stone tools and animal bones. The presence of these grave goods may indicate an emotional connection with the deceased and possibly a belief in the afterlife. Neanderthal burial sites include Shanidar in Iraq and Krapina in Croatia and Kebara Cave in Israel.

The following timeline has been suggested:¹⁴

- 300,000 years ago First (disputed) evidence of intentional burial of the dead: sites such as Atapuerca in Spain, which has bones of over 32 individuals in a pit within a cave.
- 130,000 years ago Earliest undisputed evidence for intentional burial: Neanderthals bury their dead at sites such as Krapina in Croatia.
- 100,000 years ago The oldest known ritual burial of modern humans at Qafzeh in Israel: a double burial of what is thought to be a mother and child. The bones have been stained with red ochre.
- 100,000 to 50,000 years ago Increased use of red ochre at several Middle Stone Age sites. Red Ochre is thought to have played an important role in ritual.

Although available archaeological interpretations of such "burial rituals" are plausible, it's appropriate to approach these interpretations with a "healthy degree of skepticism": the data show only that our ancient ancestors sometimes buried implements and trinkets with their dead, whose bodies were sometimes placed in peculiar manners and whose skeletons were sometimes stained with red ochre. Proposed reason why our ancient ancestors did so are speculations, which have many limitations.

3.1 Limitations of Archaeological Interpretations

As you can readily appreciate, Dear, most archaeological studies are, unfortunately, both biased and inherently limited. Archaeological data are biased, because on the one hand, unless an ancient civilization was "frozen in time" (e.g., by being buried by an avalanche or volcanic eruption), archaeologists basically rummage through graveyards and garbage dumps – after countless generations have already done so! And on the other hand, archaeologists commonly seek samples from sites that inadequately represent some ancient culture, e.g., Dear, think about what you would infer about our culture from digging up graves and from looking at graffiti on

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¹⁴ From http://en.wikipedia.org/wiki/Paleolithic religion.

subway walls! Similarly, an obvious inherent limitations of archaeology is that, it's essentially impossible to determine what people thought based only on physical evidence, e.g., Dear, how about if I guess what you were thinking about when you painted your picture of a tiger?!

As an example, consider our ancient ancestors' use of red ochre. Ochre (which is also spelled 'ocher') is a "soft stone that contains iron oxides and comes in a range of colors, from light yellow to brown or red." It's tempting to interpret use of red ochre in ancient "burial rituals" to be somehow associated with expected appreciation of the importance of blood and maybe even expectation of life after death, but such interpretations are speculations.

Of course, it's not difficult to imagine that stone-age people were impressed by blood. If, Dear, you try to make a spearhead or arrowhead out of stone, you'll probably soon learn about blood – and the pain of losing some! You would probably experience more blood and pain if you ran over rocks chasing an animal. You'd experience more blood if you hit the animal with your spear and it bled to death. And you'd experience still both more blood and pain if your companion was gored by the animal before you killed it.

It's therefore unsurprising that, as recently as a few thousand years ago, the Old Testament (*Genesis 9, 4*) states: "...but flesh with the life thereof, which is the blood thereof..." That is, it appears that, even relatively recently, people equated blood with life. Consequently, it seems consistent that, if ancient people (tens- and even hundreds-of-thousands of years earlier!) decided that dead people could come back to life, then they'd need more blood, which survivors may have attempted to provide by supplying the corpse with "red ocherous powder". If writing had been invented, maybe they would have added the instruction: "JUST ADD WATER"!

But as plausible as such interpretations of the presence of red ochre in graves seem to be, they're not necessarily correct. For example, there are hints that variously colored ochre rocks were used as long ago as 200,000 years not necessarily for their color (which would suggest the capability of abstract thought), since (according to the referenced news report), ochre was also used "to preserve hides and as a glue to bind stone blades to their shafts." Therefore, our ancient ancestors may have used red ochre, not to

¹⁵ See the news report at http://news.bbc.co.uk/2/hi/science/nature/5329486.stm .

provide "life blood" for "resurrection" in an "afterlife", but merely to glue skeletal bones back together again!

In sum, it's appropriate to be skeptical of interpretations of archaeological data. Illustrative caution is contained in the following quotation from an article by Kevin L. Callahan of the Department of Anthropology at the University of Minnesota.

...Presently there is a dispute about the interpretation of clay figurines found at many Neolithic sites in the Old World ['Neo' = new + 'lithic' from the Greek word *lithos* meaning 'stone'; therefore, the Neolithic Age is the New Stone Age]. Instead of viewing them all as "Mother Goddesses", Peter Ucko has argued... that "all over the globe clay models, very similar to those of the Neolithic, are made as children's dolls. Just as in the modern West, most are intended for girls and are themselves female. Another widespread use of such figures is in sympathetic magic, to draw illness or danger from a person... many portray pregnant females, as without modern obstetrics childbirth is one of the greatest dangers women have to face" (Hutton 1993:38). According to Hutton: "Some tribes, like the Baluba, use clay models in mourning rituals" (Hutton 1993:38). None of these figurines have anything to do with portraying a divine mother goddess figure. Hutton indicates that "Ucko concluded that Neolithic figures may have had just as many different functions, and that if they apparently portrayed supernatural beings, there was absolutely no need to interpret them everywhere as the same female or male deity..."

Another example of an issue in archaeological interpretation... is the interpretation of large funeral monuments which, when found, are often cited as evidence of the burial of 'elites'. Awareness of a modern cultural phenomenon casts doubt on this early assumption. Peter Ucko has pointed out that large burial monuments in contemporary cemeteries in Britain are sometimes those of carnival people and not 'elites' or high status individuals.

Perhaps the most frequently encountered example where this needs to be done is the often reported assumption in the popular press that cut marks on prehistoric human bone are clear evidence of 'cannibalism'. Up until the last century, Native Hawaiians defleshed their loved ones to save their bones, which they believed possessed *mana* or sacred power (Handy and Pukui 1958). They did not eat members of their family. The flesh was disposed of in the sea, and the bones were carefully wrapped up and hidden in places such as volcanic lava tubes... The cut marks on their bones had nothing to do with cannibalism.

Therefore, Dear, in considering interpretations of archaeological data, in general you'd be well advised to (modifying a phrase from Shakespeare): "Screw your [skepticism] to the sticking point!"

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¹⁶ At http://www.tc.umn.edu/~call0031/folklore.html.

3.2 Archaeological Interpretations of "the Sacred"

Many archeologists (and anthropologists, too) suggest that the concept of "the sacred" was one of the first "supernatural ideas" conceived by humans. Certainly the aboriginals of America and Australia had (and still have) their "sacred" areas, including burial grounds and selected places in nature, such as special mountains. Putting a date on when such "symbolic thinking" of "the sacred" might first have occurred is, of course, extremely difficult.

Recent discoveries¹⁷ of beads in southern Africa suggest that symbolic thinking started at least 75,000 years ago, "long before the 'creative explosion' of painting and jewelry began 40,000 years ago in Europe." With respect to this "creative explosion" that began in Europe (and Asia) about 40,000 years ago, the following quotation suggests one of the "things" that seems to have been considered "sacred":¹⁸

During the late Paleolithic [Old Stone Age] period niche-like receptacles have been located at numerous cave sites used by early man. These sites have been located over a large area stretching from western France to Central Asia. Some of these niches were naturally occurring crevasses while others were purposely carved into the cave walls. Many researchers believe they were used during ritual worship and even though nothing concrete is known of these ceremonies or the role these niches played, the following scenario has become an accepted part of the attempts to understand the prehistory of this period.

At several of the cave sites where these niches were found, and at other sites as well, small, carved mini-statuettes have been recovered as well. Always depicted in the form of a female with exaggerated sexual features, these idols are believed to represent what has come to be called The Mother Goddess and are believed to be tied to the earliest attempts at religion. This assessment is quite logical, as the woman's body was the giver of life, one of the (if not the most) magical event man could witness. Many archaeologists and pre-historians have suggested these idols were kept in these niches and that these cave sites were not used for occupation but rather were places where special rituals and activities were conducted. Several thousand years later, in the Neolithic [New Stone Age] period, the idea of the sacred niche became more prevalent and the recovery of female idols more widespread. The idea of a prayer arch, perhaps the most obvious physical feature of Islam, was undoubtedly chosen and directly modeled after these sacred niches.

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¹⁷ Quoted from http://www.scienceonline.org/cgi/content/summary/304/5669/369 .

From http://www.weavingartmuseum.org/exh3 4.htm.

In addition, paintings on the walls of some caves suggest that they were prehistoric "sacred spaces". This is suggested in the following quotation from an article by Philip Coppens entitled "Cave paintings: entrancing the Otherworld". In addition, the article suggests that the shamans (or witch doctors) leading the "spiritual life" of each tribe were "into drugs".

Visions & spirit guides

Lewis-Williams is a firm believer that the artwork of the caves [depicts] what our ancestors witnessed in their visions: enigmatic lines, strange patterns, followed by animals. They form a logical sequence of what anyone today still sees in their own hallucinogenic experiences. Such patterns are known from anthropological studies of shamanic cultures, [in which] hallucinogenic substances [are often used] to enter the Otherworld.

He further argues that many paintings seem to "rise" out of the rock. The paintings

"transform" the natural shape of the rock, in the same way that our observation would be transformed under the influence of hallucinogenic substances. The act of painting was therefore bringing the visions of the Otherworld into this reality: creating the Otherworld here, in the deepest reaches of the Underworld.

The shaman creating the paintings would use the natural contours of the rock and "exteriorize" what his visions had allowed him to see. In this example [to the right], the rock transformed into an animal's head [or human's head?], simply by drawing two eyes.



Most of the animals depicted in the scenes were healthy. Many anthropologists have identified that the shaman, in his voyage to the Otherworld is either transformed in or aided by an animal, often totemic in nature. This animal acts as his "spirit guide", or his "power animal". Animals were often chosen for a particular quality, such as the ability of flight for birds. By Egyptian times, the gods would become identified with totemic animals, such as Thoth's ibis, or Sekhmet's lion...

Gateway to another dimension

The walls of the caves were portal[s] into another dimension. The Otherworld was located behind, or inside, the rocks. Our cave painting ancestors felt this, and our shamanic cultures, whether past or present, feel the same. The figures painted on these walls had escaped that reality – bridged the divide, like the shamans. These

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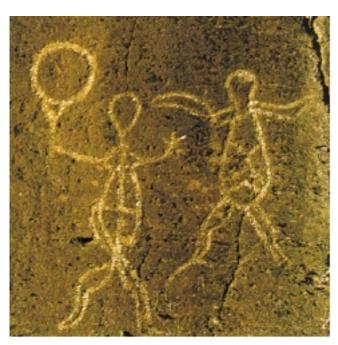
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¹⁹ From http://www.philipcoppens.com/cavepaintings.html.

were the mediators between our reality and our needs and the Otherworld, the home of the gods who had been identified as responsible for the creation of this world. The cave was therefore the first temple, where sacred space was created to allow contact with the divine. It was in its innermost recesses, in the belly of Mother Earth, that the Otherworld was closest – and where the darkness of the cave created a silence and solitude everyday reality did not offer.

Apart from animal depictions, humans were also drawn. This being [shown at the right] has a drum, an instrument that is uniquely identified with the shaman.

Confronted with these cave paintings, we are staring at the birth of the physical representation of a belief in "another world", which would evolve into a dedicated cult – and in the end, organized religion. It would lead to the building of the Egyptian pyramids, artificial tombs trying to reflect natural caves, the *Book*



of the Dead being the written account of the shamanic visions experienced in the Otherworld. On the Greek island of Crete, the prehistoric caves would be places where the Greek gods were born and were buried, maintaining their focus of worship from prehistoric into Minoan times. In the end, Lewis-Williams' observations are in line with the work of Rudgley. He also argues that civilization did not begin overnight, but developed gradually along with the evolution of Mankind...

In sum, most of the relevant archaeological data (e.g., paraphernalia found with skeletons in 100,000-year-old graves, the ~75,000-year-old set of beads recently found at the Blombos cave in South Africa, the ~40,000-year-old European cave paintings of animals, and the ~4,000-year-old paintings of people and animals at rock-shelters throughout the Pecos River region of southwest Texas and northern Mexico that seem to include drawings of the hallucinatory parts of the jimson weed and the peyote cactus, etc.) seem to fit into a consistent picture of primitive people with vivid imaginations, possibly stimulated with hallucinogens, "hooked on the supernatural".

4. ANTHROPOLOGICAL STUDIES

Toward the goals of understanding when, how, and why primitive people became "hooked on the supernatural", relevant archeological studies (such as those briefly illustrated above) suggest when and some ideas about how but little-to-zero information about why. In principle, anthropological studies can yield answers to this "why question", but in practice, huge complications arise.

Thus, to try to determine the origins of ideas about "the supernatural", a more direct approach than *via* archaeological studies would be (if possible!) to conduct anthropological studies of primitive people, i.e., live with them, observe what they do, and learn from them their reasons for what they do and (if they know) the origins of their ideas. In fact, many anthropological studies of primitive tribes have been undertaken to try to learn their "religious" ideas, but unfortunately, such studies can be severely biased.

Probably the most serious bias is from "cross-cultural contamination"; i.e., ideas held by a particular tribe may have been adopted from other cultures. Such contamination is particularly acute in the case of ideas about "the supernatural" as a result of (usually) Christian missionaries spreading their speculations, distorting a tribe's original ideas. Consequently, when reading about anthropological studies of primitive tribes, the reader is well advised to heed the admonishment, not "Caveat emptor!" (i.e., "Buyer beware!"), but "Caveat lector!" (i.e., "Reader beware!").

When reading anthropological reports, *Caveat lector* seems especially appropriate, because more than most scientists (but similar to most archaeologists) anthropologists are "story tellers". That assessment may seem insulting, but actually, rather than being a comment on the researchers, I mean it to be an assessment of anthropology. Thus, whereas it's extremely difficult if not impossible to experimentally test hypotheses in archaeology and anthropology (the latter, because scientific experiments on people are considered unethical), the normal method used by researchers in these fields to promote their hypotheses is therefore, not by providing readers with the results of experiments (and letting the data "speak for itself"), but by presenting readers with convincing arguments; i.e., "stories". So, Dear, when reading such stories, *Caveat lector!*

If you'll dig deeper than what I'll be able to show you in this chapter, you'll discover illustrations of distortions caused (inadvertently) by competent anthropologists telling their "stories" about the evolution of ideas about "the supernatural". Their stories (or "theories") were their best interpretations of the data available to them, but subsequently, more data or reinterpretations of old data, led to revised stories. A brief survey of the first 50-or-so years of "the evolution" of such stories is available in Chapter II of Joseph McCabe's excellent, 1921 book *The Story of Religious Controversy;* immediately below, I'll quote a little of it, from which you may gain some appreciation for the breadth and history of such studies:²⁰

In the nineteenth century, when evolution again became a living thought, many speculations were published about the origin of religion. Much discussed at one time was a theory of the great expert on languages, Max Muller, that religion was due to a sort of "disease" or decay of language. The early Hindus, he said, talked much in their poetry of the sun and moon, of fire and water, and so on. They regarded them merely as elements of nature, but later Hindus misunderstood the meaning of their fathers. They took these conspicuous elements of nature to be deities and worshiped them. This theory rests on too narrow a basis and is not now followed by any man.

Next Herbert Spencer, the great evolutionary philosopher, published a theory of the origin of religion. It began, be said, with a belief that a man's shade survived the death of the body, and, as the chief remains a chief or ruler even in the world of shades, famous chiefs came to be honored, flattered, and appeased as gods. Grant Allen, in his work, *The Evolution of the Idea of God*, follows much the same theory, and he quotes a very large amount of material from the life of African tribes to prove it.

But before Grant Allen took up the theory, it had been generally displaced by a new theory conceived by one of the most famous anthropologists, Sir E.B. Tylor (*Primitive Culture*, 1877). This theory is known as Animism. Just as stars are only gradually formed out of loose, diffused cosmic dust, or "fire-mist", so, Tylor thought, the belief in definite spiritual persons, souls and gods, must have been preceded by a vaguer and more nebulous belief. Nature generally must have been supposed by primitive man to have an animating spirit. This vague general animation was in the course of time gathered into separate and definite personalities: the gods and goddesses of sky and sun and moon, of fire and water, the spirits of the trees, the fountains, the animals, and so on.

More recent writers think that Tylor's general Animism was not the first stage. There was, they say, a vaguer and earlier stage which they call Pre-Animism. The germ of religious belief was man's awe in presence of the mighty and mysterious movements surrounding him in nature. He did not at first personify these forces, and did not even

²⁰ It's available, e.g., at http://www.infidels.org/library/historical/joseph mccabe/religious controversy/.

think of a general animation of nature, or world-soul (as Dr. Brinton supposes in his *Religions of Primitive Peoples*). It was just an emotional attitude or reaction, without reasoning.

The best books presenting this theory of religion, which is widely held, are, perhaps, R.R. Morett's *Threshold of Religion* and Professor J.T. Shotwell's *Religious Revolution of Today*. The feeling of the Melanesian natives seems to correspond with this theory, and is much quoted in support of it. Irving King (*The Development of Religion*) points out that the American Indians had a corresponding feeling, and be supports the theory from that side.

This is the general trend of speculation on the origin of religion, though there are various separate theories. The phallic theory, that it arose out of sex emotions, will be considered in a later chapter [of McCabe's book]. Dr. L.R. Farnell, a distinguished authority on the science, thinks that primitive man's horror of bloodshed and death led on to religion (*Evolution of Religion*). M.E. Crawley, another authority, thinks that it sprang rather from man's general attitude toward life (*The Tree of Life*). Others start from early Greek religion, and think "mother earth" the first to inspire religious feeling. Some, in fine, like Professor Leuba, one of the leading American experts on religion, think that there were many different roots of religion, not one, and combine all the theories (*The Psychological Study of Religion*).

4.1 Ubiquity of the "Soul Model"

In the above quotation, McCabe discounted Tylor's "theory" (or story) that animism was the first stage in the evolution of religion; yet, as shown in the following (long!) quotation, Tylor's analysis was impressive. As I already mentioned, Edward Burnett Tylor (1832–1917) was "the world's first anthropology professor" (but not the world's first anthropologist!), and as demonstrated in the following quotation (with references omitted)²¹ from Volume I, Chapter XI entitled "Animism", p. 428 *et seq.* of his two-volume book *Primitive Culture* (first published in 1871), Tylor documented the ubiquity of the primitive, ancient idea that people have "immortal souls".

THE DOCTRINE OF THE SOUL

The first branch of the subject to be considered is the doctrine of human and other souls, an examination of which will occupy the rest of the present chapter...

It seems as though thinking men, as yet at a low level of culture, were deeply impressed by two groups of biological problems. In the first place, what is it that makes the difference between a living body and a dead one; what causes waking,

²¹ From http://www.scribd.com/doc/25176004/Primitive-Culture-Tylor-Edward-Burnett-vol-1.

sleep, trance, disease, death? In the second place, what are those human shapes which appear in dreams and visions?

Looking at these two groups of phenomena, the ancient savage philosophers probably made their first step by the obvious inference that every man has two things belonging to him, namely, a life and a phantom. These two are evidently in close connection with the body: the life as enabling it to feel and think and act, the phantom as being its image or second self; both, also, are perceived to be things separable from the body: the life as able to go away and leave it insensible or dead, the phantom as appearing to people at a distance from it.

The second step would seem also easy for savages to make, seeing how extremely difficult civilized men have found it to unmake [!]. It is merely to combine the life and the phantom. As both belong to the body, why should they not also belong to one another, and be manifestations of one and the same soul? Let them then be considered as united, and the result is that well-known conception which may be described as an apparitional-soul, a ghost-soul.

This, at any rate, corresponds with the actual conception of the personal soul or spirit among the lower races, ²² which may be defined as follows: it is a thin unsubstantial human image, in its nature a sort of vapor, film, or shadow; the cause of life and thought in the individual it animates; independently possessing the personal consciousness and volition of its corporeal owner, past or present; capable of leaving the body far behind, to flash swiftly from place to place; mostly impalpable and invisible, yet also manifesting physical power, and especially appearing to men waking or asleep as a phantasm separate from the body of which it bears the likeness; continuing to exist and appear to men after the death of that body; able to enter into, possess, and act in the bodies of other men, of animals, and even of things.

Though this definition is by no means of universal application, it has sufficient generality to be taken as a standard, modified by more or less divergence among any particular people. Far from these worldwide opinions being arbitrary or conventional products, it is seldom even justifiable to consider their uniformity among distant races as proving communication of any sort. They are doctrines answering in the most forcible way to the plain evidence of men's senses, as interpreted by a fairly consistent and rational primitive philosophy...

SOUL = SHADE, SHADOW, IMAGE, ECHO

Out of the vast mass of evidence, collected among the most various and distant races of mankind, typical details may now be selected to display the earlier theory of the soul, the relation of the parts of this theory, and the manner in which these parts have been abandoned, modified, or kept up, along the course of culture.

Here and elsewhere, Dear, Tylor unfortunately uses the term "lower races" (or similar), not recognizing that there's only one "human race", when he meant something similar to "less technologically developed groups of people".

To understand the popular conceptions of the human soul or spirit, it is instructive to notice the words which have been found suitable to express it. The ghost or phantasm seen by the dreamer or the visionary is an unsubstantial form, like a shadow or reflection, and thus the familiar term of the *shade* comes in to express the soul. Thus the Tasmanian word for the shadow is also that for the spirit; the Algonquians describe a man's soul as *otahchuk*, "his shadow"; the Quiché language uses *natub* for "shadow, soul"; the Arawak *ueja* means "shadow, soul, image"; the Abipones made the one word *loakal* serve for "shadow, soul, echo, image".

The Zulus not only use the word *tunzi* for "shadow, spirit, ghost", but they consider that at death the shadow of a man will in some way depart from the corpse, to become an ancestral spirit. The Basutos not only call the spirit remaining after death the *seriti* or "shadow", but they think that if a man walks on the river bank, a crocodile may seize his shadow in the water and draw him in; while in Old Calabar there is found the same identification of the spirit with the *ukpon* or "shadow", for a man to lose which is fatal.

There are thus found among the lower races not only the types of those familiar classic terms, the *skia* and *umbra*, but also what seems the fundamental thought of the stories of shadowless men still current in the folklore of Europe, and familiar to modern readers in Chamisso's tale of Peter Schlemihl. Thus the dead in Purgatory knew that Dante was alive when they saw that, unlike theirs, his figure cast a shadow on the ground.

SOUL = LIFE, HEART

Other attributes are taken into notion of soul or spirit, with especial regard to its being cause of life. Thus the Caribs, connecting the pulses with spiritual beings and especially considering that in the heart dwells man's chief soul, destined to a future heavenly life, could reasonably use the one word *iouanni* for "soul, life, heart". The Tongans supposed the soul to exist throughout the whole extension of the body, but particularly in the heart. On one occasion, the natives were declaring to a European that a man buried months ago was nevertheless still alive.

"And one, endeavoring to make me understand what he meant, took hold of my hand, and squeezing it, said, 'This will die, but the life that is within you will never die'; with his other hand pointing to my heart."

So the Basutos say of a dead man that his heart is gone out, and of one recovering from sickness that his heart is coming back. This corresponds to the familiar Old World view of the heart as the prime mover in life, thought, and passion. The connection of soul and blood, familiar to the Karens and Papuas, appears prominently in Jewish and Arabic philosophy.

To educated moderns the idea of the Macusi Indians of Guiana may seem quaint, that although the body will decay, "the man in our eyes" will not die, but wander about. Yet the association of personal animation with the pupil of the eye is familiar to

European folklore, which not unreasonably discerned a sign of bewitchment or approaching death in the disappearance of the image, pupil, or baby, from the dim eveballs of the sick man.

SOUL = BREATH

The act of breathing, so characteristic of the higher animals during life, and coinciding so closely with life in its departure, has been repeatedly and naturally identified with the life or soul itself... It is thus that West Australians used one word, waug, for "breath, spirit, soul"; that in the Netela language of California, piuts means "life, breath, soul"; that certain Greenlanders reckoned two souls to man, namely his shadow and his breath; that the Malays say the soul of the dying man escapes through his nostrils, and in Java use the same word *nawa* for "breath, life, soul."

How the notions of life, heart, breath, and phantom unite in the one conception of a soul or spirit, and at the same time, how loose and vague such ideas are among barbaric races, is well brought into view in the answers to a religious inquest held in 1528 among the natives of Nicaragua. "When they die, there comes out of their mouth something that resembles a person, and is called *julio* [Aztec *vuli* = to live]. This being goes to the place where the man and woman are. It is like a person, but does not die, and the body remains here." Question: "Do those who go up-on-high keep the same body, the same face, and the same limbs, as here below?" Answer: "No; there is only the heart." Question: "But since they tear out their hearts [i.e. when a captive was sacrificed], what happens then?" Answer: "It is not precisely the heart, but that in them which makes them live, and that guits the body when they die." Or, as stated in another interrogatory: "It is not their heart that goes up above, but what makes them live, that is to say, the breath that issues from their mouth and is called *julio*."

The conception of the soul as breath may be followed up through Semitic and Aryan etymology, and thus into the main streams of the philosophy of the world. Hebrew shows *nephesh*, 'breath', passing into all the meanings of "life, soul, mind, animal", while *ruach* and *neshamah* make the like transition from 'breath' to 'spirit'; and to these the Arabic *nefs* and *ruh* correspond. The same is the history of Sanskrit âtman and prâna, of Greek psyche and pneuma, of Latin animus, anima, spiritus. So, Slavonic *duch* has developed the meaning of 'breath' into that of soul or spirit... German geist and English ghost, too, may possibly have the same original sense of breath.

And if any should think such expressions due to mere metaphor, they may judge the strength of the implied connection between breath and spirit by cases of most unequivocal significance. Among the Seminoles of Florida, when a woman died in childbirth, the infant was held over her face to receive her parting spirit, and thus acquire strength and knowledge for its future use. These Indians could have well understood why at the deathbed of an ancient Roman, the nearest kinsman leant over to inhale the last breath of the departing... Their state of mind is kept up to this day

among Tyrolese peasants, who can still fancy a good man's soul to issue from his mouth at death like a little white cloud.

MULTIPLE SOULS

It will be shown that men, in their composite and confused notions of the soul, have brought into connection a list of manifestations of life and thought even more multifarious than this. But also, seeking to avoid such perplexity of combination, they have sometimes endeavored to define and classify more closely, especially by the theory that man has a combination of several kinds of spirit, soul, or image, to which different functions belong.

Already in the barbaric world such classification has been invented or adopted. Thus the Fijians distinguished between a man's "dark spirit" or shadow, which goes to Hades, and his "light spirit" or reflection in water or a mirror, which stays near where he dies. The Malagasy say that the *saina* or mind vanishes at death, the *aina* or life becomes mere air, but the *matoatoa* or ghost hovers round the tomb. In North America, the duality of the soul is a strongly marked Algonquin belief: one soul goes out and sees dreams while the other remains behind; at death one of the two abides with the body, and for this the survivors leave offerings of food, while the other departs to the land of the dead.

A division into three souls is also known, and the Dakotas say that man has four souls, one remaining with the corpse, one staying in the village, one going in the air, and one to the land of spirits. The Karens distinguish between the $l\dot{a}$ or kelah, the personal life-phantom, and the thah, the responsible moral soul. More or less under Hindu influence, the Khonds have a fourfold division, as follows: the first soul is that capable of beatification or restoration to Boora the Good Deity; the second is attached to a Khond tribe on earth and is reborn generation after generation, so that at the birth of each child the priest asks, "Who has returned?"; the third goes out to hold spiritual intercourse, leaving the body in a languid state, and it is this soul which can pass for a time into a tiger, and transmigrates for punishment after death; the fourth dies on the dissolution of the body...

Not attempting to follow up the details of such psychical division into the elaborate systems of literary nations, I shall not discuss the distinction which the ancient Egyptians seem to have made in the Ritual of the Dead between the man's ba, akh, ka, khaba, translated by Dr. Birch as his 'soul', 'mind', 'image', [and] 'shade' [respectively?] or the Rabbinical division into what may be roughly described as the bodily, spiritual, and celestial souls, or the distinction between the emanative and genetic souls in Hindu philosophy, or the distribution life, apparition, ancestral spirit, among the three souls of the Chinese, or the demarcations of the nous, psyche, and pneuma, or of the anima and animus, or the famous classic and mediaeval theories of the vegetal, sensitive, and rational souls. Suffice it to point out here that such speculation dates back to the barbaric condition of our race, in a state fairly comparing as to scientific value with much that gained esteem within the precincts of higher culture.

OVERALL UNITY OF THE "SOUL THEORY" (viz., ANIMISM)

It would be a difficult task to treat such classification on a consistent logical basis. Terms corresponding with those of life, mind, soul, spirit, ghost, and so forth, are not thought as describing really separate entities, so much as the several forms and functions of one individual being. Thus the confusion which here prevails in our own thought and language, in a manner typical of the thought and language of mankind in general, is in fact due not merely to vagueness of terms, but to an ancient theory of substantial unity which underlies them. Such ambiguity of language, however, will be found to interfere little with the present enquiry, for the details given of the nature and action of spirits, souls, phantoms, will themselves define the exact sense such words are to be taken in.

The early animistic theory of vitality, regarding the functions of life as caused by the soul, offers to the savage mind an explanation of several bodily and mental conditions, as being effects of a departure of the soul or some of its constituent spirits. This theory holds a wide and strong position in savage biology. The South Australians express it when they say of one insensible or unconscious, that he is wilyamarraba, i.e., "without soul". Among the Algonquin Indians of North America, we hear of sickness being accounted for by the patient's 'shadow' being unsettled or detached from his body, and of the convalescent being reproached for exposing himself before his shadow was safely settled down in him; where we should say that a man was ill and recovered, they would consider that he died, but came again. Another account from among the same race explains the condition of men lying in lethargy or trance: their souls have traveled to the banks of the River of Death, but have been driven back and return to reanimate their bodies.

Among the Fijians, when any one faints or dies, their spirit, it is said, may sometimes be brought back by calling after it; and occasionally the ludicrous scene is witnessed of a stout man lying at full length, and bawling out lustily for the return of his own soul. To the negroes of North Guinea, derangement or dotage is caused by the patient being prematurely deserted by his soul, sleep being a more temporary withdrawal. Thus, in various countries, the bringing back of lost souls becomes a regular part of the sorcerer's or priest's profession. The Salish Indians of Oregon regard the spirit as distinct from the vital principle, and capable of quitting the body for a short time without the patient being conscious of its absence; but to avoid fatal consequences it must be restored as soon as possible, and accordingly the medicine-man in solemn form replaces it down through the patient's head.

The Turanian or Tatar races of Northern Asia strongly hold the theory of the soul's departure in disease, and among the Buddhist tribes the Lamas carry out the ceremony of soul-restoration in most elaborate form. When a man has been robbed by a demon of his rational soul, and has only his animal soul left, his senses and memory grow weak and he falls into a dismal state. Then the Lama undertakes to cure him, and with quaint rites exorcises the evil demon. But if this fails, then it is the patient's soul itself that cannot or will not find its way back. So, the sick man is

laid out in his best attire and surrounded with his most attractive possessions, the friends and relatives go thrice round the dwelling, affectionately calling back the soul by name, while as a further inducement the Lama reads from his book descriptions of the pains of hell, and the dangers incurred by a soul which willfully abandons its body, and then at last the whole assembly declare with one voice that the wandering spirit has returned and the patient will recover.

The Karens of Burma will run about pretending to catch a sick man's wandering soul, or as they say with the Greeks and Slavs, his 'butterfly' (leip-pya), and at last, drop it down upon his head. The Karen doctrine of the $l\hat{a}$ is indeed a perfect and wellmarked vitalistic system. This la, soul, ghost, or genius, may be separated from the body it belongs to, and it is a matter of the deepest interest to the Karen to keep his là with him, by calling it, making offerings of food to it, and so forth. It is especially when the body is asleep, that the soul goes out and wanders; if it is detained beyond a certain time, disease ensues, and if permanently, then its owner dies. When the wee or spirit-doctor is employed to call back the departed shade or life of a Karen, if he cannot recover it from the region of the dead, he will sometimes take the shade of a living man and transfer it to the dead, while its proper owner, whose soul has ventured out in a dream, sickens and dies. Or when a Karen becomes sick, languid and pining from his là having left him, his friends will perform a ceremony with a garment of the invalid's and a fowl which is cooked and offered with rice, invoking the spirit with formal prayers to come back to the patient. This ceremony is perhaps ethnologically connected, though it is not easy to say by what manner of diffusion or when, with a rite still practiced in China.

When a Chinese is at the point of death, and his soul is supposed to be already out of his body, a relative may be seen holding up the patient's coat on a long bamboo, to which a white cock is often fastened, while a Tauist priest by incantations brings the departed spirit into the coat, in order to put it back into the sick man. If the bamboo after a time turns round slowly in the holder's hands, this shows that the spirit is inside the garment.

Such temporary exit of the soul has a worldwide application to the proceedings of the sorcerer, priest, or seer himself. He professes to send forth his spirit on distant journeys, and probably often believes his soul released for a time from its bodily prison, as in the case of that remarkable dreamer and visionary Jerome Cardan, who describes himself as having the faculty of passing out of his senses as into ecstasy whenever he will, feeling when he goes into this state a sort of separation near the heart as if his soul were departing, this state beginning from his brain and passing down his spine, and he then feeling only that he is out of himself.

Thus the Australian native doctor is alleged to obtain his initiation by visiting the world of spirits, in a trance of two or three days' duration; the Khond priest authenticates his claim to office by remaining from one to fourteen days in a languid and dreamy state, caused by one of his souls being away in the divine presence; the Greenland angekok's soul goes forth from his body to fetch his familiar demon; the

Turanian shaman lies in lethargy while his soul departs to bring hidden wisdom from the land of spirits. The literature of more progressive races supplies similar accounts...

ANIMISTIC THEORY OF DREAMS

This same doctrine forms one side of the theory of dreams prevalent among the lower races. Certain of the Greenlanders... consider that the soul guits the body in the night and goes out hunting, dancing, and visiting; their dreams, which are frequent and lively, having brought them to this opinion. Among the Indians of North America, we hear of the dreamer's soul leaving his body and wandering in quest of things attractive to it. These things the waking man must endeavor to obtain, lest his soul be troubled, and quit the body altogether...

This opinion, however, only constitutes one of several parts of the theory of dreams in savage psychology. Another part has also a place here, the view that human souls come from without to visit the sleeper, who sees them as dreams. These two views are by no means incompatible. The North American Indians allowed themselves the alternative of supposing a dream to be either a visit from the soul of the person or object dreamt of, or a sight seen by the rational soul, gone out for an excursion while the sensitive soul remains in the body...

A modern observer's description of the state of mind of the negroes of West Africa in this respect is extremely characteristic and instructive:

"All their dreams are construed into visits from the spirits of their deceased friends. The cautions, hints, and warnings which come to them through this source are received with the most serious and deferential attention, and are always acted upon in their waking hours. The habit of relating their dreams, which is universal, greatly promotes the habit of dreaming itself, and hence their sleeping hours are characterized by almost as much intercourse with the dead as their waking are with the living. This is, no doubt, one of the reasons of their excessive superstitiousness. Their imaginations become so lively that they can scarcely distinguish between their dreams and their waking thoughts, between the real and the ideal, and they consequently utter falsehood without intending, and profess to see things which never existed..."

As we survey the immense series of dream-stories of similar types in patristic, mediaeval, and modern literature, we may find it difficult enough to decide which are truth and which are fiction. But along the course of these myriad narratives of human phantoms appearing in dreams to cheer or torment, to warn or inform, or to demand fulfillment of their own desires, the problem of dream-apparitions may be traced in progress of gradual determination, from the earlier conviction that a disembodied soul really comes into the presence of the sleeper, toward the later opinion that such a phantasm is produced in the dreamer's mind without the perception of any external objective figure.

VISIONS

The evidence of visions corresponds with the evidence of dreams in their bearing on primitive theories of the soul, and the two classes of phenomena substantiate and supplement one another. Even in healthy waking life, the savage or barbarian has never learnt to make that rigid distinction between subjective and objective, between imagination and reality, to enforce which is one of the main results of scientific education. Still less, when disordered in body and mind he sees around him phantom human forms, can he distrust the evidence of his very senses. Thus it comes to pass that, throughout the lower civilization, men believe (with the most vivid and intense belief) in the objective reality of the human specters which they see in sickness, exhaustion, or excitement. As will be hereafter noticed, one main reason of the practices of fasting, penance, narcotizing by drugs, and other means of bringing on morbid exaltation, is that the patients may obtain the sight of spectral beings, from whom they look to gain spiritual knowledge and even worldly power...

SUMMARY

It remains to sum up in few words the doctrine of souls, in the various phases it has assumed from first to last among mankind. In the attempt to trace its main course through the successive grades of man's intellectual history, the evidence seems to accord best with a theory of its development, somewhat to the following effect.

At the lowest levels of culture of which we have clear knowledge, the notion of a ghost-soul animating man while in the body, and appearing in dream and vision out of the body, is found deeply ingrained. There is no reason to think that this belief was learnt by savage tribes from contact with higher races, nor that it is a relic of higher culture from which the savage tribes have degenerated; for what is here treated as the primitive animistic doctrine is thoroughly at home among savages, who appear to hold it on the very evidence of their senses, interpreted on the biological principle which seems to them most reasonable.

Well, Dear, I'm sorry to quote so much from Tylor, but I wonder if you've already become similarly impressed by the thoroughness with which he "tells his tale" – and with the ubiquity of "the soul model". Soon, I'll return to this "soul model" (which Tylor aptly describes as the world's first, widely accepted metaphysical "theory"), but first, I want to show you a little more about its possible origin.

4.2 Possible Origin of Ideas about "Souls"

Although Tylor documented the ubiquity of "the soul model", apparently he didn't directly address the question: "How did such a model begin?" In the above summary, Tylor states:

At the lowest levels of culture of which we have clear knowledge, the notion of a ghost-soul animating man while in the body, and appearing in dream and vision out of the body, is found deeply ingrained.

The obvious question, then, is: how did such an idea start? Addressing that question in his 1921 book *The Story of Religious Controversy*, McCabe first makes the obvious and important point that, for anthropological studies to yield a realistic picture of the origin of ideas about "the supernatural", it's critical to focus on the most primitive tribes:

Evolution does not in the least mean that every living thing goes on evolving. It is only when their conditions of life change that animals or plants need to change. It is the same with human beings. Put a race of men in an island like Australia, and keep out all higher competitors, and there is no need for them to make progress. There is no stimulation to advance. And from the beginning of its history the human race has been throwing off these side-branches into isolated regions. There they generally remain unprogressive, and we pick them up today, and so learn what the race was like when they fell out of the march – ten, fifty, or a hundred thousand years ago.

This method of obtaining information will be important in more than one of these chapters [of McCabe's book], and I will illustrate it from the population of America. On the whole, before the Spaniards came, it was a Red Indian (or Amerind) population. But there were exceptions, like the very lowly Yahgans in the island of Tierra del Fuego and certain tribes in the forests of Brazil.

So, there were two waves of migration, an earlier and a later, from Asia into America. The Indians, with their superior weapons, pushed the crude earlier population south, or into the forests, just as the arrivals from Europe displaced the Indian. The first invaders were part of the human family of tens of thousands of years ago, to put it very moderately, and they show us what primitive man was like, and how he thought and felt and behaved. The Indians show us man at a much later date. The European shows a still higher stage.

Evolution has thus thrown a light, for the first time, on what we call savage races and their great variety of degrees of culture. We study them all over the world, and we arrange them in the order of their culture and intelligence. As we pass up this order, from the lowest to the highest, we get almost the whole story of the development of man's ideas and institutions. It enables us to study the evolution of moral and religious and political ideas, just as it shows us the development of weapons, from stone to bronze and iron, of art, of clothing, of houses, and so on.

That is how we find a basis of positive fact for a study of the origin of religion. What the savage is thinking today... the entire race thought long ago... Let us see what light this throws on the origin of religion. It began in something very different from a revelation [as claimed in essentially all religions].

For details, Dear, I encourage you, first, to read McCabe's Chapter 2 and then, if you have time, read his original book on the subject, *The Growth of Religion*, which you can find on the internet. Immediately below is his summary (from his book *The Story of Religious Controversy*) of anthropological studies of primitive tribes that had been found in Tierra del Fuego (off the Southern tip of South America), in Tasmania (off the Southern tip of Australia), and in Central Brazil:

1. For the primitive tribe in Tierra del Fuego.

They have neither hope nor fear beyond the grave. For them there is neither God, nor good, nor evil, nor spirits to fear – apart from the "phantoms" that may injure them in this world. Death is the end of existence...

2. For the primitive tribe in Tasmania:

No trace can be found of any religious usage, or even sentiment, among them; unless indeed we may call by that name the dread of a malignant and destructive spirit that seems to have been their predominant, if not their only feeling on the subject.

3. For the primitive tribe in Central Brazil:

They merely regard the Sun as a good principle (but do not worship it), and the Moon as a maleficent agent, and the Storm as full of evil spirits. Beyond that, they have no religion.

Next, I'll quote McCabe's conclusions [in which I've added some italics and some notes in brackets] about these and other primitive people; in the first paragraph of this quotation, McCabe specifically rejects the speculation that I proposed in the previous chapter:

Before I [McCabe] made this investigation into the beliefs of the lowest peoples, I considered that it was probably the sun and moon, the fire and the storm, that first impressed the imagination of early man and begot a religious feeling. It is clear that this is not so. Before man got wit enough to speculate on the cause of movements in nature, he believed in his own soul.

Then we get important clues as to the origin of this belief in a soul. Let us be careful, in using the words soul and spirit and immortality, to remember that these dull-brained humans had no ideas corresponding to ours. The part of a man that survived death was material, though generally (after death) invisible. Whether it lived

forever... They never ask the question. They reply vaguely to it. All that they know is that it lives on.

And we get a very clear idea why they suppose that there is a part of a man that lives on. Their word for it [what our culture calls a 'soul'] is commonly 'shadow,' or it is a 'little red thing,' like a man's shadow on water. Of the nine peoples I have described [in his book], three plainly have no idea of survival [beyond death], two are very doubtful, four (the higher in culture) have an intense belief in it. Of the four who do definitely believe in survival, two call the surviving part of a man 'shadow', and the other two say that it is a red object, though I cannot find the translation of their name for it. We shall see that even at higher levels *tribes still give the name 'shadow' to the soul*.

So it appears that there is more meaning than we thought in the phrase "shades of our ancestors"! I do not wish to press any particular theory of the origin as an exclusive and universal fact, but these lowly peoples very clearly suggest that *religion began* with a crude speculation of primitive man about his own shadow...

Primitive man at this level had not the slightest idea of the sun's share in the matter. No sun, no shadow, of course; but he had only to look into a pool or river to see it again, an exact duplicate of himself. It drew back into himself, spread out from himself, went with him everywhere. *He must really be two beings: a body and a shadow. This gave him a clue to death. The shadow-part had gone away.*

But it seems likely that dreams intervened here. While he slept on the ground, some part of him was out in the forest or on the river: the shadow-part. We saw that the Brazilians who believed most intensely in spirits were great dreamers; though their word for the soul was 'shadow.' The shadow-part wandered at night. When a man was found dead, his shadow-part had not returned to the body. It still wandered, especially at night, when everybody's shadow wandered. The world of the savage became peopled with shadows. So many men died.

Now, Dear, permit me to repeat an obvious point: the great difficulty of attempting to apply the scientific method to such studies is that it's extremely difficult (if not impossible) to test hypotheses. For example, unless a new primitive tribe is discovered, I don't know how to test the hypothesis that ideas about "immortal souls" originated from primitive people's ideas about their own shadows, optical reflections, and dreams. And although I readily admit that McCabe's hypothesis is more defensible than the speculation that I proposed in the prior chapter (related to the principle of causality), because McCabe's hypothesis is based on more data, yet as I'll briefly address near the end of this chapter, recent studies in behavioral science suggest that it's not defensible to so quickly dismiss (as McCabe did) primitive people's reliance on the principle of causality.

Before showing you what I mean, however, I want to return to the idea that "the soul model" was the world's first, widely accepted "metaphysical theory" and show you some of McCabe's conclusions about the origin of "the god idea".

4.3 Animism: The World's First, Widespread "Metaphysical Theory"

It appears that, once primitive people adopted the idea that they possessed souls, the idea "took off" – leading to speculations that essentially everything has a soul, a "metaphysical theory" called 'animism'. Before describing a few features of animism, however, I should mention different meanings for the word 'theory', to explain why I put "Metaphysical Theory" in quotation marks.

Originally, the word 'theory' (from Greek *theōria* meaning "contemplation, speculation", from *theōros*, meaning 'spectator') meant 'speculation', and the colloquial use of the word 'theory' preserves this meaning, e.g., my theory is that you wish I'd "get on with it"! In science, however, 'theory' has a different meaning. Thus, when we speak of the *theory* of evolution, the *theory* of relativity, quantum *theory*, etc., we mean a set of principles that have been so thoroughly tested that essentially all scientists are convinced that "the theory" is "true" (i.e., that its predictions are reliable). Meanwhile, even from it's Greek roots, 'metaphysics' means "beyond physics" or "beyond nature" or even "supernatural"; consequently, predictions of any "metaphysical theory" (being "beyond physics") are untestable, e.g., "metaphysical theories" (better "metaphysical speculations") about "life after death". Therefore, when I use the colloquial expression "metaphysical theory" I put it in quotation marks, because as a scientist, I would prefer to use the term "metaphysical speculation".

It seems quite possible that the world's first "metaphysical theory" was that humans had a "second self" (a soul) that continued to exist after a person's death. This "theory" may have been conceived more than 100,000 years ago! By about 40,000 years ago, this "theory" seems to have expanded to include the speculation that everything (from brooks to trees and from waterfalls to the world) has a soul; this "theory" is now called 'animism'. As described in a Wikipedia article:²³

²³ At http://en.wikipedia.org/wiki/Animism.

Animism (from Latin *anima* "soul, life") refers to the belief that non-human entities are spiritual beings, or at least embody some kind of life-principle.

Animism encompasses the beliefs that there is no separation between the spiritual and physical (or material) worlds, and souls or spirits exist, not only in humans, but also in all other animals, plants, rocks, natural phenomena such as thunder, geographic features such as mountains or rivers, or other entities of the natural environment. Animism may further attribute souls to abstract concepts such as words, true names, or metaphors in mythology. Animism is particularly widely found in the religions of indigenous peoples, perhaps most interestingly in Shinto and Sererism, and some forms of Hinduism, Sikhism, Buddhism, Pantheism, Christianity and Neopaganism.

Throughout European history, philosophers such as Aristotle and Thomas Aquinas, among others, contemplated the possibility that souls exist in animals, plants, and people; however, the currently accepted definition of animism was only developed in the 19th Century by Sir Edward Tylor, who created it as "one of anthropology's earliest concepts, if not the first".

While having similarities to totemism, animism differs in that it, according to the anthropologist Tim Ingold, focuses on individual spirit beings, which help to perpetuate life, whereas totemism more typically holds that there is a primary source, such as the land itself, or the ancestors, who provide the basis to life. Certain indigenous religious groups, such as that of the Australian Aborigines, are more typically totemic, whereas others, like the Inuit, are more typically animistic in their worldview.

If McCabe is right, animism (or more specifically, the concept of a soul) probably originated from prehistoric people's speculations about their shadows, their optical reflections, and especially their dreams. Thus, when people dreamt, it's as if "they" left their bodies, the "they" thereby conceived to be "souls". In dreams, people could seemingly become involved in various fanciful activities, and yet, all evidence suggested that each dreamer's body stayed behind. Apparently, the idea then evolved that people had "souls", which were usually constrained by their bodies but which could be released in dreams – and in death.

By this reasoning (based on misinterpretations of the data!), it then followed that "souls" lived forever – and much of all religions deals with (and has always dealt with) preparing one's "soul" for its next journey, after it breaks free of the confines of its current body – although why anyone would want one's subconscious mind to continue, without one's conscious mind, has always perplexed me! Anyway, Dear, 'animism' ("the doctrine that all life

is produce by a spiritual force separate from matter") can therefore be described as the basic premiss of all organized religions.

In each tribe, animism was led/promoted by what we call "witch doctors" or shamans. As for 'shamanism', there are many definitions. As I mentioned in an earlier chapter, you can find on the internet the definition that shamanism is whatever shamans do – but that's not a very revealing definition! What a shaman (or shamaness) did (and still does) is attempt to communicate with the "souls" or "spirits" – assumed to exist everywhere in the environment, from the "spirits" of physical features and phenomena (from lakes to mountains to thunderstorms) to the "souls" of the dead (an activity called necromancy, derived from the Greek words *nekros*, meaning 'corpse' and *manicia*, meaning 'divination').

In general, animism (or shamanism) is the belief that gods or spirits or souls are everywhere. An extreme of such silliness was Plato's metaphysical speculation, possibly adopted from Zoroastrian priests (as I'll sketch later, in the "excursion" **Yx**) that the entire world has a soul. This "soul of the world" was called Jupiter (and symbolized by the planet Jupiter), a word that, in his book *The Ruins*, Volney points out was originally pronounced 'Youpiter' and means "existence itself, which is the signification of the word 'you'." As I'll also review in **Yx**, the Greek Stoics and then (a few hundred years later) the Christians adopted Plato's idea that Jupiter represented the world's soul, and as I'll show you in a later chapter in this excursion (**Ix**), the New Testament contains the claim that Jesus is Jupiter.

In summary, animism could justifiably be described as the original religion of all humans and shamans could justifiably be described as the original priests. By about 10,000 years ago, the promoters of such "metaphysical soul-theories" began to develop into priesthoods. During the subsequent 10,000 years (to the present time and to their own great profit), priesthoods have been promoting "refined" versions of such "soul models" (e.g., in Hinduism, Christianity, Islam, Mormonism, etc.) – all apparently derived from misinterpretations of shadows, images, and dreams!

4.4 Possible Origins of Ideas about "Gods"

Although it seems reasonable that speculations about souls led to today's major religions (Hinduism, Judaism, Christianity, Islam, etc.), questions remain about the origin (or origins) of ideas about gods. As might be

expected, many possible origins have been proposed, but I think that one of the most compelling arguments is the one advanced by McCabe, which is probably best presented in his own words (again from his book *The Story of Religious Controversy* and to which I've again added the italics):

An ounce of fact is worth a ton of argument, and there is, perhaps, no subject in connection with which it is more useful to remember this proverbial advice than the origin of religion.

I have now put before the reader a collection of facts of the greatest importance and instructiveness. These facts are given us by men [viz., anthropologists] of the highest authority, men who personally and scientifically studied the peoples in question. There is, moreover, no dispute about the position of these [primitive] peoples. They are the lowest fragments of the living human family. I have not space here to describe their life, their ideas, and their physique in detail, though a good deal of this is given in one of my books, but on every test these lowly peoples are marked off from the rest of humanity as an earlier and lower stratum. They are surviving fragments, not of the earliest human family, by any means, but of a race far lower than the Australian black: a race corresponding to man of the early Stone Age, the man of more than a hundred thousand years ago. From the cradle of the race they wandered along the lines we have indicated, and higher tribes have driven them into the islands and forests.

They afford us a fascinating glimpse of early man just at the time when he was becoming religious. They show us religion in the making. There is no trace of primitive revelation or of a religious instinct. There is no trace of Animism or Pre-Animism, and magic seems amongst them to develop equally with, not to precede, their rudimentary religion.

What do they teach us? *First, that there is originally no belief in a god.* It is only amongst the higher of these lowly peoples or those who have been most in contact with higher tribes, that any sort of being stands out as particularly powerful, like 'Kaang or Puluga. It is a stage, perhaps, in the making of a god, but there is nothing like worship. He is a strong man about whom they tell stories, as Britons once did about "King Arthur", or the Hebrews about Samson, or the Babylonians about Gilgamesh.

Some of these peoples cannot be said to have any religion at all, but they are all on the threshold of it. And it makes its first appearance as a belief that a part of man survives the death and decay of the body. I defined religion as a belief in a worship of gods. In that sense none of these primitive peoples have any religion, but I would here extend the meaning of the word to include a belief in spirits. The first religious idea, not preceded by any sort of speculation about the animation of nature or awe of the powers of nature, is a belief in what we today call soul or spirit...

And this seems to me quite the most probable course which the mind of early man would take. Sex-life does not count in the earliest form of religion. Primitive man takes sex as a fact, like food. We leave the phallic theory to a later stage. On the other hand, nature worship, or the animation of nature, is not one of the earliest stages. Some of these peoples are said to have an "awe" of the sun and moon. This is certainly a germ of a religious feeling, but religion as a belief in personal human spirits or doubles clearly comes first.

If we try to put ourselves in the mental atmosphere of a very lowly savage, we can understand it. *He is incapable of abstract ideas*. His mind is thoroughly concrete. A vague general animation of nature is quite beyond him. He does not speculate on causes of movements. But definite concrete things begin to prick his curiosity. The sun and moon are too conspicuous, too solitary in the sky, too striking in their daily movements across it, to be ignored. He begins to have a feeling of wonder about them, though not a definite opinion or speculation, but his own shadow is so near to him hourly, so weird in its movements, so plainly a double of himself, that it would be likely enough to be the first thing in nature be speculated about...

The clue to the evolution of gods is... the rise of man to tribal organizations under chiefs. When men become hunters and fighters, the strong or cunning man gets chosen as leader. He becomes a chief. The leadership becomes hereditary. And, as the spirit-world is a duplicate of the living world, there are more powerful spirits in the world beyond the grave. Famous ancestors or former members of the tribe rise in the memory above all the ordinary spirits, who are individually forgotten. They are on the way to become gods. But it is a very gradual process, with all sorts of shades of belief, all degrees of "godness", so to say.

So far, Herbert Spencer and Grant Allen seem to be right. Gods are at first deified (glorified) chiefs or ancestors. But we must not suppose that religion evolved in precisely the same way everywhere. The glorification or deification of the sun and moon and other elements of nature was proceeding at the same time. It seems, however, that men got a definite belief in human spirits, some of which towered above others, before they imagined corresponding spirits in nature. The "awe" they sometimes show of the powers in nature, the sun, the moon, and the storm, is not far removed from the feeling you can sometimes deduce from the expression of a dog watching a storm or a lion shrinking from fire. It is a very long way from this to the speculation that the visible storm or fire must have an invisible cause. The definite belief in spirits has to come first...

We see the rise from a crowd of spirits to a few outstanding spirits which, under the fostering influences of the priests, became what we may call gods. We see the naturegods gradually... rising to importance above deified ancestors. We see rude huts over chief's remains or fetishes growing into carved temples. We see priesthoods gaining in power, wealth, and organization. We see the departed spirits gradually acquiring a home, at first in the forest or beyond the hills or in some other vague place, then underground, then with the great spirits in the sky. We see, in fine, a strong tendency

everywhere for one great spirit, and it is very commonly the sky-god, to predominate. The whole story of man's religious evolution lies before us, not in a dead and speculative chronicle, but in living remnants of the various ages through which the race has passed...

The facts give no indication whatever of a religious instinct, an inner sense or urge, or whatever new name one invented. From beginning to end it is a question "of drawing wrong inferences from observed facts" – the shadow, the dream, the nightmare, disease, death, the movements of wind and river, the rain, the sun and moon, the annual birth and death of vegetation. The only urge beyond the subtle urge of priesthoods [to gain power] ... is the curiosity of man. He itches to explain things. From beginning to end religion is an explanation or interpretation of obscure and dark things.

5. SOME PERSONAL VIEWS OF A COMPOSITE PICTURE

In my opinion, McCabe's final paragraph quoted above is a good overview, but I think that some additional features should be recognized. Below, I'll list brief comments on five of these suggested, additional features.

- 1. The Goal of Survival Should Be Explicitly Recognized McCabe wrote: "[Man] itches to explain things." Aristotle wrote similar: "Man by nature desires to know." Both those assessments, however, fail to include recognition of why humans desire to know, namely, because possessing knowledge almost invariably increases one's chance for survival. Thus, primitive people probably adopted ideas about gods because they thought that adopting such ideas increased their chances of survival.
- 2. The Value of Identifying "False Positives" Should be Recognized Recent studies (to be outlined later, in Chapter X2, entitled "EXamining Reasons for Religion") have emphasized an important point: when seeking our survival (e.g., through trying to increase our knowledge) there is value even in identifying what are called "false positives". For example, if an ancient animal falsely identified a shape or pattern behind some bushes as a threat to its survival, then even such a "false positive" would have more value than a "false negative", e.g., concluding that there was no survival threat behind the bushes when there was! Therefore, since there's survival value even in identifying false positives (e.g., in patterns), then natural selection (viz., evolution) has "programmed" all animals (such as we humans) not only to look for patterns (and seek to identify causes) but also to err on the side of safety.

3. The Role of Causality Should be Recognized

In an earlier paragraph of the above quotations from McCabe, he stated: "Before man got wit enough to speculate on the cause of movements in nature, he believed in his own soul." I doubt that claim, because for at least the past 100 million years, animals have been "speculat[ing] on the cause of movements in nature", e.g., when such a movement occurs, dogs commonly bark! Describing the result using "computer lingo", we can say that evolution has "hard wired" our brains to try to identify causes.

I therefore expect that primitive humans, also, sought causes of observed effects. In particular, McCabe's quoted claim could be challenged, because if primitive people hadn't first learned to rely on the principle of causality, they wouldn't have sought a "cause" of their shadows, reflections, and dreams! McCabe may be correct that primitive humans didn't speculate on the causes of the Sun and Moon (for example), and more generally, they might not have speculated about causes of nonthreatening effects, but I suspect that they sought the causes of anything that threatened their survival.

4. The Role of Fear Should be Recognized

Of course I'm not sure if the Roman poet Lucretius (c.94 – c.55 BCE) was correct when he said: "Fear was the first thing on earth to make gods." Yet, even casual observations of most animals in their natural settings reveal that they are amazingly fearful. For example, while walking in the desert I've never seen a rabbit that didn't run from me or seen a raven that wouldn't fly away from me (even when I just reached down to pick up a stone, as if I were planning to throw it). Coyotes seem similarly fearful, although in at least in a couple of cases, they've just watched me – provided I was at least several hundred feet away.

Extrapolating, it seems reasonable to conclude that, in many if not most environments, primitive humans were similarly fearful. Consequently, I suspect that those primitives who lived in particularly threatening environments would have identified the cause of the threat to have been some god (e.g., a volcano god, an earthquake god, a god who controlled frequent floods, and so on) even before they developed the idea that they possessed "souls". Therefore, I would have preferred if McCabe had written his sentence with the indicated insertions: "From beginning to end, religion is an [attempted] explanation or interpretation of obscure and dark [and fearful] things."

5. The Possibility of Different Origins of Ideas about Gods In sum, I think it's likely that "religion" didn't have just a single origin, e.g., McCabe's proposal that the beginning of all religions was from primitive people's conclusion that they possessed a "second self" (a "soul") apparent

people's conclusion that they possessed a "second self" (a "soul"), apparent in their shadows, images, and dreams. Instead, I wouldn't be surprised if ideas about gods arose differently in different tribes.

For example, primitive people living on an island with an active volcano quite likely skipped speculating about their own souls and proceeded directly to attempts to placate "the volcano god". Meanwhile, instead of dealing with some fearful god, the first "religion" of primitive people living in benign locations (such as America's Pacific Northwest, with bountiful game, including salmon, and few natural threats) may have been associated with "the web of life" (represented, e.g., in totem poles). As another example, tribes more dependent on vegetation may have discovered hallucinogens and, as a result, their first religion emphasized "the spirit world." Still other tribes presumably took different routes to arrive at "the god idea", e.g., by speculating about the meanings of their dreams (leading to the idea of souls, animism, etc.) or by "deifying" a particularly important tribal leader (maybe who had saved the tribe from slaughter by another tribe), and so on.

6. SUMMARY, SURVEY & SUGGESTIONS

But even if the question of the origin of ideas about "the supernatural" has been poorly posed (because there may have been many origins), one feature seems clear: such ideas are tens of thousands of years old, i.e., concocted when humanity was in its infancy and childhood. And although our primitive ancestors deserve credit for developing their models attempting to explain various causes and to alleviate their fears *via* metaphysical speculations about "souls" (to which women might have been especially susceptible, since they had additional reasons to be fearful, e.g., of brutish men and childbirth), yet it's embarrassing (to say the least) that modern-day adults still give credence to such simplistic, childish, mistaken ideas as "souls" and "gods". In contrast:

• At least by the time you were two-years old, Dear, you recognized that your reflection in the mirror wasn't "a second self" but a reflection of your single self!

- When you were three, we would have fun trying to step on each other's shadow, and I know that you quickly learned that your shadow had something to do with the light source, because you'd run to get in shade!
- Throughout your childhood, never once did you complain to me that, when I took your picture, your "soul" had been captured!
- By the time you were ten, you knew that earthquakes were caused by slippages of the Earth's crust and that volcanoes result when the magma beneath the Earth's crust finds a pathway to the surface; i.e., never once did I hear you talk about a volcano god!
- By now, you should know (and if your Church had not intervened in your schooling, you would know) that humans evolved from simpler life forms and that rules of behavior ("morality") don't have a supernatural source but are simply ways that humans have found to live together productively; and
- During your lifetime, I suspect that knowledge will become quite firm about how life on Earth started (e.g., *via* autocatalytic, self-replicating molecules that encode information about their environment) and how our universe came into existence (e.g., *via* a symmetry-breaking, quantum-like fluctuation in the original vacuum or "total nothingness").

Consequently, Dear, I think you'd be well advised to consider the assessment and heed the advice of the famous psychologist Sigmund Freud (1856–1939):

While the different religions wrangle with one another as to which of them is in possession of the truth, in our view the truth of religion may be altogether disregarded. Religion is an attempt to get control over the sensory world, in which we are placed, by means of the wish-world, which we have developed inside us as a result of biological and psychological necessities. But it cannot achieve its end. Its doctrines carry with them the stamp of the times in which they originated, the ignorant childhood days of the human race. Its consolations deserve no trust... Experience teaches us that the world is not a nursery... If one attempts to assign to religion its place in man's evolution, it seems not so much to be a lasting acquisition, as a parallel to the neurosis which the civilized individual must pass through on his way from childhood to maturity.

In the next chapter, I'll show you some of the "nursery rhymes" (better known as 'myths') that humanity concocted in its "childhood" to flesh-out details about their gods, details that some adults still consider to be "true"! But before turning to them, Dear, why don't you get some exercise?!