

Introduction

Most of us are familiar with the story of Jacob's ladder, wherein the son of Isaac dreamt he saw a ladder extending to heaven. The passage in question has long formed a crux for students of the Old Testament: "And he dreamed, and behold a ladder set up on the earth, and the top of it reached to heaven: and behold the angels of God ascending and descending on it."¹

The passage describing Jacob's ladder appears as if out of thin air, with little regard for context or a commonsense understanding of the natural world. It is as if the story's original background had been lost to the redactors of the Old Testament. Whatever the circumstances behind the decision to include the story in its present minimalist form, it is evident that the tradition of Jacob's ladder was deemed too important to be omitted entirely.

That the Biblical account of Jacob's ladder contains ideas of great antiquity and popularity has long been noted.² Indeed, the ladder-to-heaven motif can be found on all inhabited continents (F52 in Thompson's Index). The present study will offer a cross-cultural analysis of the ladder-to-heaven and discuss its relationship to other well-known mythological motifs. At the conclusion of our survey, an attempt will be made to reconstruct the extraordinary events that inspired the ladder-to-heaven complex, thereby allowing us to better understand its original historical context.

When the sky was near

A seemingly universal belief holds that in primeval times heaven was located fairly close to earth—so close, in fact, that traffic between the two was commonplace. It was in such times, according to the testimony of sacred traditions around the world, that a luminous ladder spanned the sky thereby allowing for ready access to the celestial kingdom. By one calamity or another, the ladder-to-heaven eventually collapsed and the sky was uplifted to its present height, often amidst cataclysmic circumstances.

The continent of Africa offers a wealth of testimony attesting to a ladder-to-heaven in former times. James Frazer summarized West African lore as follows:

"In almost all the series of native traditions there, you will find accounts of a time when there was direct intercourse between the gods or spirits that live in the sky, and men. That intercourse is always said to have been cut off by some human error; for example, the Fernando Po people say that once upon a time there was no trouble of serious disturbance upon earth because there was a ladder, made like the one you get palm-nuts with, only 'long, long'; and this ladder reached from heaven to earth so the gods could go up and down it and attend personally to mundane affairs. But one day a cripple boy started to go up the ladder, and he got a long way up when his mother

¹ *Genesis* 28:12.

² T. Gaster, *Myth, Legend, and Custom in the Old Testament* (New York, 1969), pp. 184-187.

saw him, and went up in pursuit. The gods, horrified at the prospect of having boys and women invading heaven, threw down the ladder, and have since left humanity severely alone.”³

Similar beliefs are conspicuous in South Africa. Witness the following traditions collected by Breutz:

“The concept that the sky is solid and connected to the earth by a ladder, rope or chain, is found mainly in the Niger bend, in Volta, and among the Yoruba in Nigeria. Hoffman...reports that the Mamabolo (Northern Sotho of Rhodesian origin) say that the sky god Modimo went up to heaven on a ladder, from which he removed the rungs. The same...is said of the Lamba god Leza. The sky-ladder myth is also found among the Rotse in Zambia, where their deity is said to have ascended along the thread of a cobweb...In addition the Tsonga and Zulu have a tradition concerning a ladder or rope leading up to the sky.”⁴

The ladder-to-heaven motif is also attested in Aboriginal Australia. Thus, the Milingimbi from Arnhem Land tell the story of Inua’s efforts to construct a ladder from fish vertebrae in the aftermath of his sister’s assault by another man:

“Guessing what was wrong and not wishing to be involved in a domestic quarrel, he ran back to camp, joined the discarded fish vertebrae end on end to make a long ladder and climbed to the sky, pulling the ladder up after him so that no one could follow.”⁵

Catasterized into a star or planet, Inua is said to have lived happily ever after along the banks of a celestial river.

Chinese lore recalls a time when a ladder spanned heaven, thereby allowing regular trafficking between the two worlds. Yuan Ke summarized the various traditions as follows:

“In those days there was a ladder between heaven and earth. The gods and fairies and witches all came and went easily between the two places.”⁶

That the “gods and fairies and witches” employed the ladder-to-heaven in their ascents and descents recalls the Biblical report that “the angels of God” made a practice of ascending and descending Jacob’s ladder.

The Chain of Arrows

³ J. Frazer, *Folklore in the Old Testament* (New York, 1988), pp. 228-229.

⁴ P. Breutz, “Sotho-Tswana Celestial Concepts,” in *Ethnological and Linguistic Studies in Honour of N.J. van Warmelo* (Pretoria, 1969), pp. 199-200.

⁵ C. Mountford, *Arnhem Land: Art, Myth and Symbolism* (Melbourne, 1968), p. 492.

⁶ Y. Ke, *Dragons and Dynasties* (Singapore, 1991), p. 33.

The ladder-to-heaven motif is particularly prominent in the New World. Thus, the pioneering anthropologist Franz Boas observed that “the scaling of heaven is a saga which occurs very often in America.”⁷ An oral tradition collected from the Tlingit Indians of British Columbia relates that, once upon a time, the son of a great chief absentmindedly set about shooting arrows upon the sudden disappearance of his friend:

“He thought, ‘Now I am going to shoot that star next to the moon.’ In that spot was a large and very bright one. He shot an arrow at this star and sat down to watch, when, sure enough, the star darkened. Now he began shooting at that star from the big pile of arrows he and his chum had made, and he was encouraged by seeing that the arrows did not come back. After he had shot for some time he saw something hanging down very near him and, when he shot up another arrow, it stuck to this. The next did likewise, and at last a chain of arrows reached him... Now the youth felt badly for the loss of his friend and, lying down under the arrow chain, he went to sleep. After a while he awoke, found himself sleeping on that hill, remembered the arrows he had shot away, and looked up. Instead of the arrows there was a long ladder reaching right down to him.”⁸

Apparent in the Tlingit oral tradition is the so-called chain of arrows motif (F53 in Thompson’s Index). Here a hero shoots a series of arrows skyward in order to form a ladder upon which to ascend to heaven. Pettazzoni, who devoted a monograph to this widespread motif, offered the following summary:

“Another motive is that of the chain of arrows by which one or more personages of the legend climb from earth to heaven, and sometimes descend again. The hero hurls darts; one embeds itself in the celestial vault, then another embeds itself exactly in the notch of the first, a third in the second, and so on until they form a long chain of arrows upon which the hero mounts as upon a ladder to heaven.”⁹

In a Kwakiutl tale from British Columbia the ascending hero is the notorious trickster Mink, alleged to have been conceived when his mother became impregnated by the rays of the Sun. Mink’s playmates make fun of him for his apparent bastard status and, upon being informed by his mother of his father’s identity, the youth resolves to ascend to the house of the Sun. At that point Mink begins shooting arrows at the sky:

“Then Born-to-be-the-Sun shot one of the arrows upward. It is said it struck our sky. Then he shot another one upward. It struck the nock of the one that he had shot upward first; then again another one, and it hit the end of his arrow. His arrows came down sticking together. Then he shot the last one, and it hit the end of the one he had shot before. They came to the ground. Then the mother of Born-to-be-the-Sun took the end of the arrows and shook them, and they became a rope... Then Born-to-be-

⁷ F. Boas, “Indianische Sagen von der Nordwestküste Amerikas,” *Zeitschrift für Ethnologie* 27 (1895), p. 498.

⁸ S. Thompson, *Tales of the North American Indians* (Bloomington, 1966), p. 132.

⁹ R. Pettazzoni, “The Chain of Arrows: The Diffusion of a Mythical Motive,” *Folklore* 35 (1924), pp. 155-156.

the-Sun climbed, going upward. He went to visit his father. He arrived, and went through to the upper side of the sky.”¹⁰

That the ladder-to-heaven leads to the kingdom of the sun-god is a recurring and widespread belief. This memory will prove to be a key piece of evidence in reconstructing the astronomical background of the mythological imagery in question.

The chain of arrows motif is also to be found on the other side of the globe among the Melanesians of the South Sea Islands. Thus, the natives of Leper’s Island (New Hebrides) relate how the hero Tagaro once attempted to follow his wife and son who had escaped to the sky-world:

“At last he had an idea. Quickly making a powerful bow and a hundred arrows, he shot one of them at the sky. The arrow struck firmly, and he then shot another into the butt of the first, and a third into the butt of the second, and thus, one after another, he sent his arrows, making an arrow-chain, until, when he had sped the last one, the end of the chain reached the earth. Then from the sky a banian-root crept down the arrow-chain and took root in the earth. Tagaro breathed upon it, and it grew larger and stronger, whereupon, taking all his ornaments, he and the bird climbed the banian-root to the sky.”¹¹

Traditions of primeval ascents to heaven along ladders or chains of arrows are common in South America as well. The idea has been documented among the Mataco¹², the Chorote¹³, the Nivalke¹⁴, and the Tupi¹⁵, among other tribes. The Nivalke tell of the time when a reed-like ladder descended from the sky:

“Suddenly, from up there, where the stars come out, a ladder descended. It was made from the same kind of reeds that the Indians used for the shafts of their arrows. Suddenly a ladder made of reeds appeared; it reached from the sky down to the ground.”¹⁶

The Shipaya also envisaged the ladder-to-heaven as composed of reeds. The anthropologist Metraux collected the following tradition:

¹⁰ J. Frazer, “Phaethon and the Sun,” in *Apollodorus: The Library Vol. II* (Cambridge, 1963), p. 392.

¹¹ R. Dixon, “Oceanic Mythology,” in L. Gray ed., *The Mythology of All Races* (Boston, 1916), p. 139.

¹² J. Wilbert & K. Simoneau, *Folk Literature of the Mataco Indians* (Los Angeles, 1982), pp. 38, 41, 44,

¹³ J. Wilbert & K. Simoneau, *Folk Literature of the Chorote Indians* (Los Angeles, 1985), pp. 225-226.

¹⁴ J. Wilbert & K. Simoneau, *Folk Literature of the Nivalke Indians* (Los Angeles, 1987), pp. 55-56; 424-425.

¹⁵ R. Pettazzoni, *op. cit.*, p. 159, writes as follows of the Amazonian traditions: “Along the river Amazon and among the Tupi, particularly those in the east and on the coast, but also among the western branches (Guarayos), is frequently found in the folklore the motive of the chain of arrows.”

¹⁶ J. Wilbert & K. Simoneau, *Folk Literature of the Nivalke Indians* (Los Angeles, 1987), p. 66.

“The Shipaya used for the ascension a ladder of taquara reeds. As the people were about to return to the earth, a storm broke the ladder and some Shipaya were forced to remain in the sky...”¹⁷

According to the Mataco, a towering ladder made a thunderous noise when it fell from heaven. Thus, one narrative describes the primeval occasion whereupon “something fell from above, making a metallic sound. It was an iron ladder that reached from the sky all the way down to the earth.”¹⁸

The Chorote of Gran Chaco identify a hummingbird named Sen as the hero of the primeval ascent. In the early days of the world Sen began shooting arrows one after the other until he had a long chain extending from heaven to earth. Shortly thereafter, a spider came along and spun a web alongside the arrow chain thereby creating a rope-like structure reaching to heaven. It was along this rope that Sen and the other Chorote heroes, as birds, ascended to heaven.¹⁹

In this Chorote tradition, as in the aforementioned Kwakiutl tale involving Mink, the arrow-chain is intimately related to a rope spanning heaven. This will prove to be an important clue when we attempt to visualize and reconstruct the physical structure of the ladder to heaven. In reality the two mythological structures—the chain of arrows and the rope to heaven—are inseparable and trace to the same basic celestial phenomenon. Thus it is that the sacred traditions of various cultures speak of “climbing” up a “rope of arrows.”²⁰

A fascinating example of the ladder-to-heaven motif was preserved by the Sikuani Indians of the tropical savannas along the Orinoco river (in modern Colombia). They describe how the hero Tsamani employed an arrow-ladder in order to scale the heavenly vault. In one version of this myth, the hero implores his comrades to gather their arrows and follow him upward:

“‘The bow and arrows are the path that we are going to use to get to the sky.’ So each took his bow and his quiver of arrows...and began to shoot at the sky, aiming each arrow at the tail end of the one fired before it so that they would form a ladder to the ground...That way they reached the sky, climbing up inside the arrows in the form of termites.”²¹

According to the Sikuani, Tsamani’s ascent was only possible because of the sky’s former close proximity to the earth. Thus, a variant of the aforementioned narrative goes as follows:

¹⁷ A. Metraux, *Myths of the Toba and Pilaga Indians of the Gran Chaco* (Philadelphia, 1946), p. 26.

¹⁸ J. Wilbert & K. Simoneau, *Folk Literature of the Mataco Indians* (Los Angeles, 1982), p. 76.

¹⁹ J. Wilbert & K. Simoneau, *Folk Literature of the Chorote Indians* (Los Angeles, 1985), pp. 225-226.

²⁰ J. Wilbert & K. Simoneau, *Folk Literature of the Nivalke Indians* (Los Angeles, 1987), p. 425. See also the traditions preserved by F. Boas, “Tsimshian Mythology,” *op. cit.*, p. 864.

²¹ J. Wilbert & K. Simoneau, *Folk Literature of the Sikuani Indians* (Los Angeles, 1992), pp. 89-90.

“In those days the firmament was low. The next day they shot an arrow upward, and it stuck in the sky. They shot another arrow into the end of that one, and continued shooting arrows in this way until they had a chain reaching all the way down to the ground.”²²

Tsamani’s arrow-chain is elsewhere said to have had “the shape of a ladder, like a vine,” an idea we have already encountered in Melanesian lore.²³ Alas, after some time and much mischief, the ladder was destroyed.

Yet another variant of this narrative told by the same tribe preserves additional motifs of interest to our study. Upon ascending to heaven along the ladder, Tsamani and the others turned into stars set next to the sun:

“In those days the sky was not as it is now. Mava told them to shoot at one side of the door, the left side, and they did as he said...The older brothers kept shooting at the door, one arrow after another, until the ladder made by the arrows nearly reached the earth, coming as close as a meter from the earth. They asked one another: ‘How are we going to go up that path?’ Pumenerrua [a woman] called her boyfriend and asked him how they would climb up. He told them to turn into termites to ascend. She was the first to do so, and once she had arrived at her boyfriend’s side the path turned into a kind of ladder on which all of them climbed up. They remained in the sky, to one side of the sun.”²⁴

The Sikuni report that the ancient sky was radically different in appearance from that we are accustomed to viewing will be confirmed again and again during the course of this study.

The World Tree

Sacred narratives everywhere describe a previous World Age in which a colossal tree dominated the celestial landscape, joining heaven to earth.²⁵ By climbing this tree primeval heroes were able to visit heaven and converse with the gods. A few examples should suffice to illustrate the fundamental affinity between the World Tree and ladder-to-heaven motifs.

The Polynesians are famous for colonizing a vast area extending from New Zealand to Hawaii. Renowned for their seafaring skills, the Polynesians carried with them a significant body of mythological lore involving the various celestial bodies. More than one group believed it was possible to travel to the celestial kingdom using a ladder or tree. The Fiji Islanders, for example, tell the following story:

²² *Ibid.*, p. 102.

²³ *Ibid.*, p. 90.

²⁴ *Ibid.*, p. 100.

²⁵ M. Eliade, *Patterns in Comparative Religion* (New York, 1958), pp. 265-326.

“The hero of a Fijian legend is a warrior who is the son of Tui-Langi, i.e., of the King of Heaven, or of Heaven itself personified, which at that time was considerably closer to the earth. The warrior climbs up on to a tree, into which his stick had changed itself, and arrives in heaven.”²⁶

As this tradition attests, the Fiji Islanders, together with many other peoples, believed that heaven formerly rested close to earth.

In North America, the Algonquin tell of a hero’s ascent to heaven along a giant tree. There it is the dwarf Tchakabech who makes the primeval ascent in order to reach the kingdom of the sun-god: “He decided to ascend to the Sky and climbed upward on a tree, which grew as he breathed upon it, until he reached the heavens, where he found the loveliest country in the world.”²⁷

The idea of a World Tree serving as a ladder-to-heaven is also found in South America. Thus, the Toba Indians of the Gran Chaco tell the following story:

“There used to be a tree called Latee Na Mapik...It reached all the way up into the sky. Men used to climb that tree to reach the first sky.”²⁸

The Mataco preserve a very similar tradition. They recall the time when, “at the beginning of the world the Indians, by making use of a very tall tree, often climbed up to the sky to gather honey and fish.”²⁹ A related narrative from the same tribe reports:

“Formerly sky and earth were connected by a big tree. The men of this earth climbed up it and went to hunt in the world above.”³⁰

The creation myth of the Makka Indians tells of a giant tree spanning heaven and earth:

“There was once a very tall *lignum vitae* tree, so tall that it reached the heavens. It had huge roots and many branches. People used to climb it until they reached the highest point of the tree, and then the sky...”³¹

Alas, these paradisiacal conditions were not to last. Amidst cataclysmic circumstances, the towering tree collapsed amidst a great conflagration:

“When they returned, the people saw their ladder burning. The tree was like a ladder because it was very tall.”³²

²⁶ L. Fison, *Tales from Old Fiji* (London, 1894), pp. 49ff.

²⁷ H. Alexander, “North American,” in L. Gray ed., *The Mythology of All Races, Vol. 10* (Boston, 1917), pp. 48-49.

²⁸ J. Wilbert & K. Simoneau, *Folk Literature of the Toba Indians, Vol. 2* (Los Angeles, 1989), p. 69.

²⁹ J. Wilbert & K. Simoneau, *Folk Literature of the Mataco Indians* (Los Angeles, 1982), p. 45.

³⁰ *Ibid.*, p. 46.

³¹ J. Wilbert & K. Simoneau, *Folk Literature of the Makka Indians* (Los Angeles, 1991), p. 193.

³² *Ibid.*, p. 193.

That the Makka themselves likened the World Tree to a “ladder” extending to heaven suggests that they recognized a fundamental affinity between the two celestial forms.

Various tribes believed that the souls of the dead were wont to climb along a giant tree uniting heaven and Earth. This idea is apparent in the following Mocovi narrative:

“The Mocovi imagined a tree, which they called Nalliagdigua, so tall that it reached from the earth to the sky. Climbing up from branch to branch, the souls went fishing in a river.”³³

Analogous ideas are apparent among the Guarani and Carib Indians:

“In the north of South America it is believed that the souls of the dead ascend ‘the tree of heaven’ in a garden, at the top of which they would meet their creator, called Tamoi among the Guarani, or Tamu among the Carib.”³⁴

The idea that souls were wont to climb the World Tree in order to gain their eternal reward naturally recalls the tradition that angels employed Jacob’s ladder as a celestial escalator.

The collapse of the World Tree was remembered as a colossal calamity. A Mocovi narrative attributes its destruction to the gnawing of an angry hag: “She did not stop until she had felled it, causing deep sorrow among the Mocovi and doing them irreparable harm.”³⁵

The Chamacoco also tell of a time when a giant tree spanned the sky. One narrative reports that the Sun and Moon lived on Earth during that primeval period when the sky was nearer than now:

“This story is about the time when the sky was near... There was a tree called eebe... Well, the one which the people used to climb up and down between the sky and the earth was the eebe... It had many leaves which they could climb on like a ladder, and they would climb all the way up to the sky... There was no sun and no stars; all these were living among the people. Sun and Moon lived like human beings... When the insect cut down the tree and it fell, Sun and Moon left and moved up to the sky.”³⁶

According to the Chamacoco, the collapse of the World Tree caused the major heavenly bodies to move away from Earth. As a result of that cataclysmic event, the sky no longer rested on the Earth. The same basic idea is made explicit in the following Sikuani narrative:

³³ J. Wilbert & K. Simoneau, *Folk Literature of the Mocovi Indians* (Los Angeles, 1988), p. 46.

³⁴ R. van der Sluijs, “The Cosmic String of Pearls,” *Aeon* 6:4 (2003), p. 33.

³⁵ *Ibid.*, p. 46.

³⁶ J. Wilbert, *Folk Literature of the Chamacoco Indians* (Los Angeles, 1987), pp. 31-33.

“As the last liana [vine] was severed the tree fell to the ground. The sky moved upward, for previously it had been very low, near the top of the food tree...Then the flood came...Many people drowned. All the survivors gathered on Sibó, the hill that is shaped like the roof of a house. It was the only hill that was above water.”³⁷

That a cataclysmic flood followed close upon the collapse of the World Tree is a mytheme we will encounter again in this study.

For the Makiritare of the Orinoco river region (Venezuela), the destruction of the World Tree marked the end of the world. In their sacred oral tradition, the Watunna, the following memory can be found:

“Kadio cut Marahuaka. He cut it up there in Heaven. It was an upside down tree, with its roots on top. Then the great Marahuaka tree finally fell. It felt like the sky was falling. It was the end of the world.”³⁸

The fact that the Marahuaka tree is elsewhere described as a towering mountain suggests that the Makiritare recognized the structural homology of the World Tree and World Mountain.³⁹

The idea that a World Tree formerly joined heaven and earth is also attested in Australian lore. A giant tree named Warda upheld the sky according to the Aboriginal people of the Great Australian Bight.⁴⁰ A neighboring tribe tells of an ascent to heaven along a World Tree known as Bandara:

“The sacred tree Bandara, the tree of life...It was up the trunk of the Bandara tree that the high being Galalang climbed into the sky, after being killed by men who threw his body into the sea.”⁴¹

Diane Johnson has documented the presence of analogous beliefs all across the Australian continent:

“The sky-world beyond the dome was envisaged as containing a hole, a window or a fissure, through which the traditional healers could gain entry...Among some Victorian groups there was a view that people used to be able to climb up an immense pine tree...up through its branches to the topmost ones which reached the sky...The tree was viewed as ‘a regular highway between earth and the upper regions’. Around the Roper River area, amongst the Alawa people in the Northern Territory, the link was also a tree...In an account of the Boandik people of South Australia, the healer (*pangal*)

³⁷ J. Wilbert & K. Simoneau, *Folk Literature of the Sikuani Indians* (Los Angeles, 1992), p. 214.

³⁸ M. Civrieux, *Watunna: An Orinoco Creation Cycle* (San Francisco, 1980), p. 135.

³⁹ *Ibid.*, p. 78.

⁴⁰ D. Johnson, *Night Skies of Aboriginal Australia* (Sydney, 1998), p. 14.

⁴¹ E. Worms, *Australian Aboriginal Religions* (Richmond, 1986), p. 27.

climbed to the sky-world quite regularly to visit and have social discourse with the sky people.”⁴²

Here, once again, we meet with the idea of the World Tree as road to heaven.

A World Tree spanning heaven is attested in Chinese lore as well, this despite the fact that a series of infamous book-burnings destroyed the vast majority of early mythological texts. In Chinese cosmology, as Michael Loewe documented, the World Tree was associated with the center of the world:

“The concept of the cosmic tree which forms the centre of the world may be traced in Chinese literature from the Chan-kuo period, in various guises. Sometimes it appears as a single tree, such as the Fu-sang or the Jo-mu; later it is known as the beautiful tree whose growth stems from a pair of trunks, the Mu-lien-li. At times the tree is conceived as connecting the three worlds of heaven, earth and the Yellow Springs; and as such it may be compared to the ladder by means of which Fu Hsi and his sister ascended to heaven. As the Fu-sang, the concept embraces the tree up which the sun climbs and descends, once daily.”⁴³

Apparent here is the widespread belief that the daily epiphany of the ancient sun-god occurred in conjunction with a heaven-spanning tree. This is an idea that will not be readily explained by reference to the familiar skies, needless to say. Certainly it is not possible for the current Sun to “climb and descend” the same tree once daily. That said, the fact remains that the very same idea is attested in ancient Egypt, as elsewhere.⁴⁴

Elsewhere in China the World Tree was known as Jianmu. Located at the center of the world, the Jianmu tree formed a ladder reaching to heaven:

“In the wilderness at Dukuang in the southwest was a heavenly ladder coming from a tree called *Jianmu*. *Jianmu*’s tall branches reached into the clouds, and the top branches circled and entwined in the shape of an umbrella. The *Jianmu* heavenly ladder was thought to have been in the center of the world, and it was here that the gods climbed between heaven and earth.”⁴⁵

Aboriginal tribes from Indonesia likewise placed the World Tree at the center of the world. In primeval times it was possible to climb to heaven along this tree:

“The Bataks of Sumatra say that at the middle of the earth there was formerly a rock, of which the top reached up to heaven, and by which certain privileged beings, such as heroes and priests, could mount up to the sky. In heaven there grew a great fig-tree

⁴² D. Johnson, *op. cit.*, pp. 14-15.

⁴³ M. Loewe, *Ways to Paradise* (London, 1979), p. 111.

⁴⁴ See the discussion in I. G.-W., “Heiliger Baum,” *LÄ*, Vol. I (Berlin, 1977), col. 655-660.

⁴⁵ Y. Ke, *op. cit.*, p. 25.

(*waringin*) which sent down its roots to meet the rock, thus enabling mortals to swarm up it to the mansions on high.”⁴⁶

The location of the Tree-ladder at the “center of the world” confirms its intimate relationship to ancient conceptions of the *axis mundi*, the latter believed to connect heaven, earth, and the underworld.⁴⁷ The scholar who has done the most to elucidate the complex symbolism associated with the *axis mundi* is Mircea Eliade:

“If we try to achieve a general view of all the myths and rites just briefly reviewed, we are struck by the fact that they have a dominant idea in common: communication between heaven and earth can be brought about—or could be in *illo tempore*—by some physical means (rainbow, bridge, stairs, ladder, vine, cord, ‘chain of arrows’, mountain, etc., etc.). All of these symbolic images of the connection between heaven and earth are merely variants of the World Tree or the *axis mundi*...the myth and symbolism of the Cosmic Tree imply the idea of a ‘Center of the World,’ of a point where earth, sky, and underworld meet.”⁴⁸

In his discussion of the symbolism attached to the World Tree, Eliade concedes that it has hitherto eluded all attempts at a systematic classification: “There is a considerable amount of material; but it takes such a variety of forms as to baffle any attempt at systematic classification.”⁴⁹ The same scholar went on to pose the following question: “One wonders what mental synthesis, and from what special characteristics of trees as such enabled primitive mankind to produce so vast and so coherent a symbolism.”⁵⁰

Ruling out a naturalistic explanation of the symbolism in question, Eliade sought a celestial prototype for the World Tree. Citing evidence from ancient Mesopotamia, Eliade offered the following observation:

“None of the emblems attached to trees can be interpreted in a naturalist sense for the simple reason that nature itself was something quite different in Mesopotamian thought from what it is in modern thought and experience. We need only remind ourselves that to the Mesopotamians, as to primitive man in general, no being, no action that *means* anything has any effectiveness except in so far as the being has a heavenly prototype, or the action reproduces a primeval cosmological one.”⁵¹

Overlooked by Eliade—and by virtually every other comparativist of note—is the possibility that, in their traditions of the World Tree, the ancients were accurately describing (albeit in figurative language) their experience of a heavenly prototype, one no longer present. How else are we to explain the fact that descriptions of the World Tree

⁴⁶ T. Gaster, *op. cit.*, p. 185.

⁴⁷ See the extensive discussion of this theme in M. Eliade, *Shamanism* (Princeton, 1964), pp. 259ff.

⁴⁸ *Ibid.*, pp. 492-493.

⁴⁹ M. Eliade, *Patterns in Comparative Religion* (New York, 1958), p. 265.

⁵⁰ *Ibid.*, p. 268.

⁵¹ *Ibid.*, p. 273.

are so similar around the world and yet so at odds with the appearance of the modern heavens? As we intend to document in this study, there is only one hypothesis that offers a logical explanation of the evidence at hand: In primeval times a luminous tree-like apparition once dominated the skies overhead, albeit in a solar system differently configured than at present.

The Separation of Heaven and Earth

In order to understand the ladder-to-heaven motif it is necessary to establish its proper mytho-historical context. The ladder-to-heaven, as we have seen, was said to have existed during that primordial period when heaven was closer to the earth than at present. This apparently universal belief in an Age marked by the close proximity (or union) of heaven and earth is intimately related to a correlate belief—namely, that the gods formerly lived on earth and only departed with its separation from heaven. The primeval gods, in turn, are explicitly identified with the most prominent celestial bodies. We have already encountered this idea amongst the Chamacoco of South America, who held that “before the sky moved upward, when the sky was very near, Sun and Moon were still people.”⁵²

Virtually identical beliefs will be found around the world. The following tradition from aboriginal Australia may be taken as representative in this regard:

“All over Australia, it is believed that the stars and planets were once men, women and animals in Creation times, who flew up to the sky as a result of some mishap on earth and took refuge there in their present form.”⁵³

Fundamental to this constellation of interrelated mythological motifs is the belief that an epoch-ending catastrophe marked the rupture of the idyllic relations that formerly prevailed between gods and men, an event often linked directly to the collapse of the ladder-to-heaven. Until that catastrophe a veritable Golden Age had prevailed. According to the Chamacoco, it will be remembered, the celestial bodies only moved to heaven with the destruction of the World Tree:

“This story is about the time when the sky was near... There was a tree called eebe... It had many leaves which they could climb on like a ladder, and they would climb all the way up to the sky... There was no sun and no stars; all these were living among the people. Sun and Moon lived like human beings... When the insect cut down the tree and it fell, Sun and Moon left and moved up to the sky.”⁵⁴

So tragic and lamentable were the spectacular events remembered as the “departure of the gods” that ancient peoples everywhere sought to recreate or re-experience the Eden-like conditions that prevailed during the Golden Age. Indeed, countless rites were conducted

⁵² J. Wilbert & K. Simoneau, *Folk Literature of the Chamacoco Indians* (Los Angeles, 1987), p. 74.

⁵³ J. Isaacs, *Australian Dreaming, 40,000 years of Australian History* (Sydney, 1980), p. 141.

⁵⁴ J. Wilbert & K. Simoneau, *Folk Literature of the Chamacoco Indians* (Los Angeles, 1987), pp. 31-33.

with the express purpose of commemorating and reenacting the glorious time of the beginnings. Recall again the conclusion of Mircea Eliade, quoted earlier:

“If we try to achieve a general view of all the myths and rites just briefly reviewed, we are struck by the fact that they have a dominant idea in common: communication between heaven and earth can be brought about—or could be in *illo tempore*—by some physical means (rainbow, bridge, stairs, ladder, vine, cord, ‘chain of arrows’, mountain, etc., etc.). All of these symbolic images of the connection between heaven and earth are merely variants of the World Tree or the *axis mundi*...the myth and symbolism of the Cosmic Tree imply the idea of a ‘Center of the World,’ of a point where earth, sky, and underworld meet...The symbolism of the ‘Center of the World’ is also indissolubly connected with the myth of a primordial time when communications between heaven and earth, gods and mortals, were not merely possible but easy and within reach of all mankind. The myths we have just reviewed generally refer to this primordial *illud tempus*, but some of them tell of a celestial ascent performed by a hero or sovereign or sorcerer *after* communication was broken off; in other words, they imply the possibility, for certain privileged or elect persons, of returning to the origin of time, of recovering the mythical and paradisaical moment before the ‘fall,’ that is, before the break in communications between heaven and earth.”⁵⁵

Several volumes would be required in order to document the extraordinary popularity and influence of this belief-system. A great deal of evidence, in any case, has already been compiled by Eliade and other scholars influenced by his writings. For our purposes here a few representative examples must suffice. The following tradition from the Papagos of Southwestern Arizona captures the essence of the primordial *illud tempus* motif:

“Those first days of the world were happy and peaceful. The sun was then nearer the earth than he is now: his rays made all the seasons equable and clothing superfluous. Men and animals talked together: a common language united them in bonds of brotherhood. But a terrible catastrophe put an end to those golden days. A great flood destroyed all flesh wherein was the breath of life.”⁵⁶

Recognizable in the Papagoan account are the archetypal mythological motifs of the Golden Age, the Deluge, and apocalyptic cataclysm. Also prominent is the widespread belief that the Sun stood nearer to the Earth in primeval times than at present.

Like countless other aboriginal cultures, the Maya harkened back to a time when communication between heaven and earth was rendered easy by a “rope” suspended in the sky. Thus, a Yucatecan account of the Creation tells of a celestial road allowing ready trafficking between the two worlds:

⁵⁵ M. Eliade, *Shamanism* (Princeton, 1964), pp. 492-493.

⁵⁶ J. Frazer, *Folklore in the Old Testament* (New York, 1988), p. 110.

“There was a road suspended in the sky, stretching from Tuloom and Coba to Chich’en Itza and Uxmal. This pathway was called the *kuxan sum* or *sakbe*. It was in the nature of a large rope [*sum*] supposed to be living [*kuxan*] and in the middle flowed blood. It was by this rope that the food was sent to the ancient rulers who lived in the structures in ruins. For some reason this rope vanished forever. This first epoch was separated from the second by a flood called *Halyokokab*.”⁵⁷

A primeval deluge, it will be noted, is said to have followed the “vanishing” of the celestial rope. This tradition mirrors the Papagoan report that a flood accompanied the catastrophe that marked the end of the Golden Age. It also recalls the Sikuani narrative wherein a flood followed the collapse of the World Tree.

The Mayan belief that a giant rope served as a “road” to heaven finds a close parallel in the Old World. Thus it is that, in Manchuria, Tungus shamans refer to the celestial rope as a “road” to heaven.⁵⁸

Analogous beliefs are attested from aboriginal Australia. “Ropes” descending from the planet Venus, according to the Ringa-Ringaroo, allowed for extraterrestrial visits:

“The Ringa-Ringaroo call the star Venus *mimungoona*, or *big-eye*, and believe that it is a fertile country covered with *bappa*, the name of a sort of grass, the seeds of which the tribes here on earth convert into flour, and is inhabited by blacks. It appears, however, that no water exists in the star, but there are ropes which hang from its surface to the earth, by means of which the dwellers visit our planet from time to time, and assuage their thirst.”⁵⁹

In Africa sacred traditions tell of a “path” that formerly connected heaven and earth. It was upon this path that men used to ascend to heaven to converse with the gods: “According to traditions of the Dinkas, heaven and earth were once connected by a path upon which men mounted to heaven at their pleasure.”⁶⁰

The path to heaven, alternately described as a road or rope, was likened to a ladder-like structure. The collapse of the ladder-to-heaven, in Africa as in South America, was intimately related to the separation of heaven and earth in primeval times:

“The Heaven-ladder as rope or chain is the means of communication that connects the heavenly world with the earth; it was accidentally destroyed in primeval times. Heaven was separated from earth as a result, and in reality one could understand this myth as a variant of the myth of the separation of heaven and earth of the purest kind

⁵⁷ D. Freidel, L. Schele, J. Parker, *Maya Cosmos* (New York, 1993), p. 106.

⁵⁸ M. Eliade, *op. cit.*, p. 112.

⁵⁹ E.M. Curr, *The Australian Race, Vol. II* (Melbourne, 1886), p. 351.

⁶⁰ R. Pettazoni, *op. cit.*, p. 155.

(the raising of heaven from earth and so on). The Pangwe, Vili and Hausa even link the Heaven-ladder together with the myth of the separation of heaven and earth.”⁶¹

The aboriginal peoples of Indochina tell of a navel-string that once connected heaven to earth. With the severing of the celestial *umbilicus* heaven moved away:

“In olden days, when the earth was very young, they say that heaven and earth were very near to one another, because the navel-string of heaven drew the earth very close to it. This navel-string of heaven, resembling flesh, linked a hill near Sumer with heaven. At that time all the subjects of the Siem of Myllem throughout his kingdom came to one decision, i. e. to sever the navel-string from that hill. After they had cut it, the navel-string became short; and, as soon as it shortened, heaven then ascended high. It was since that time that heaven became so high.”⁶²

The report that the heavenly navel-string resembled flesh recalls the “living” rope uniting heaven and earth in Maya lore. Indeed, the belief that the *axis mundi* was “flesh-like” in nature is attested around the globe. In ancient Mesopotamia, for example, the World Tree uniting heaven and earth was identified as the “flesh of the gods”:

“Where is the Mesu tree, the flesh of the gods, the ornament of the king of the universe? That pure tree...whose roots reached as deep down as the bottom of the underworld...whose top reached as high as the sky of Anum?”⁶³

Sumerian texts allude to a sacred “bond”—Duranki—stretching between heaven (An) and earth (Ki). The fact that the Sumerian word *dur* signifies “umbilical cord” as well as “bond” is only to be expected in light of the traditions from Indonesia and Mesoamerica.

In a Sumerian account of the Creation, the god Enlil resolves to separate heaven from earth by establishing the *axis mundi* at Duranki. Significantly, the cosmic site associated with this seminal event was known as “Where Flesh Came Forth”:

“Not only did the lord make the world appear in its correct form...Enlil, who will make the human seed of the land come [forth] from the [earth]—and not only did he hasten to separate heaven from earth, and hasten to separate earth from heaven, but, in order to make it possible for humans to grow in [Where Flesh Came Forth] (two manuscripts have

⁶¹H. Baumann, *Schopfung und Urzeit des Menschen im Mythos der africanischen Völker* (Berlin, 1936), p. 209 reads as follows: “Die Himmelsleiter als Strick oder Kette ist das Verbindungsmittel, das die Welt der Himmlischen mit der Erde verbindet und in der Urzeit durch irgendeinen Zufall zerschnitten wurde. So wurde die Himmelskugel von der Erde getrennt, und tatsächlich konnte man diese Mythos als Varianten der Himmel-Erde-Trennungsmysen echter Art (Emporheben des Himmels und so weiter) auffassen. Bei den Pangwe, Vili und Hausa kommen sogar Himmelsleiter und Himmel-Erde-Trennungsmysen zusammen vor.”

⁶²W. Staudacher, *Die Trennung von Himmel und Erde* (Darmstadt, 1968), p. 26.

⁶³L. Cagni, *The Poem of Erra* (Malibu, 1977), p. 32.

instead ‘Where Flesh Grew’, the name of a cosmic location) he first suspended the axis of the world at Dur-an-ki.”⁶⁴

As for how we are to understand this “bond” uniting heaven and earth in naturalistic terms, scholars confess their ignorance. In a discussion of the difficulty in distinguishing between history and metaphor in these early texts, Bruschweiler asked the following all-important question:

“How was that which we regard as myths experienced by peoples who conveyed them and were perhaps their inventors?...The name Duranki, ‘bond between heaven and earth’: is it only a symbolic image or do we have to imagine a time when, in spite of what we think is possible, the Earth was linked with the sky and men kept company with the gods?”⁶⁵

Bruschweiler is one of the few scholars to even pose this seemingly obvious question. That said, no reputable scholar, to the best of my knowledge, has ever seriously considered the possibility that “heaven” and “earth” were formerly linked by a “bond,” Tree, or ladder. Yet as we will argue, this is not only the most logical explanation for such widespread traditions, it is the one explanation consistent with the evidence.

Creation

The Egyptian Pyramid Texts represent the world’s oldest body of religious texts. Several passages tell of a former Age wherein heaven and earth were closer together than at present. One hymn recalls the occasion “when the sky was separated from the earth, when the gods ascended to heaven.”⁶⁶ This memorable event, in turn, was a hallmark of Creation and was associated with a great cataclysm shaking the universe.⁶⁷

The same events seem to be referred to in the Coffin Texts. There it is the god Horus who takes credit for separating the firmament:

“There is tumult in the sky, and we see something new, say the primeval gods...I have taken possession of the sky, I have divided the firmament, I will show the paths of Khopri, and the dwellers in the Netherworld will follow me. I shine and am seen in the east of the sky, I go to rest in eternity, and I have acclaim when I have taken possession of the horizon.”⁶⁸

⁶⁴ J. Black et al, “The Song of the Hoe,” *The Electronic Text Corpus of Sumerian Literature* (<http://www-etcsl.orient.ox.ac.uk/>) (Oxford, 1998), lines 1-7.

⁶⁵ F. Bruschweiler, *Inanna* (Leuven, 1988), p. 155.

⁶⁶ 1208 C as quoted in R. Faulkner, *The Ancient Egyptian Pyramid Texts* (Oxford, 1969), p. 192.

⁶⁷ J. Allen, “The Cosmology of the Pyramid Texts,” in J. Allen et al eds., *Religion and Philosophy in Ancient Egypt* (New Haven, 1989), p. 13.

⁶⁸ Spell 326 as translated in R. Faulkner, *The Ancient Egyptian Coffin Texts, Vol. 1* (Warminster, 1977), p. 253.

The sacred literature of ancient India likewise recalls a time when heaven and earth were joined. Thus, in the *Aitareya Brahmana* it is said that Dyaus and Prithivi, “originally one, were afterwards separated.”⁶⁹

In the *Rig Veda*, it is the divine champion Indra who is credited with separating heaven from earth. The following hymn alludes to this heroic feat:

“Indra hath evermore possessed surpassing power: he forced, far from each other, heaven and earth apart.”⁷⁰

The separation of heaven and earth is said to have occurred shortly after Indra’s birth amidst cataclysmic circumstances:

“Before the High God, at his birth, heaven trembled, earth, many floods and all the precipices. The Strong One bringeth nigh the Bull’s two parents.”⁷¹

The translator of the *Rig Veda*, Ralph Griffith, offered the following commentary with regards to this passage: “The meaning of the second line is, Indra brings near, but holds apart, the heaven and the earth, the parents of the mighty Sun.”⁷²

After separating heaven from earth Indra comes to serve as a sort of Vedic Atlas, offering the tottering heaven support. As in the Egyptian account of the separation of heaven and earth, the Vedic texts describe a period of great tumult:

“He who, just born, chief God of lofty spirit by power and might became the God’s protector. Before whose breath through greatness of his valor the two worlds trembled, He, O men, is Indra...He who fixed fast and firm the earth that staggered, and set at rest the agitated mountains, Who measured out the air’s wide middle region and gave the heaven support, He, men, is Indra.”⁷³

Indra’s role as the support of heaven was much celebrated in Indian ritual. One rite saw the Vedic war-god being identified with a May-pole like structure known as the Indra-tree. Jan Gonda offered the following summary of this symbolism: “The pole is explicitly identified with Indra himself who in one of the earliest references to these ceremonies (*MBH* 1, 57, 22ff.) is said to have promised his worshippers aid and support.”⁷⁴

That Indra’s pole/tree symbolizes the World Tree has long been acknowledged. Its mythical prototype, according to Gonda, was to be found in heaven: “It should however be borne in mind that the Indra tree like the sacrificial post (*yupa*) and

⁶⁹ IV. 4. 27 as quoted by R. Pettazoni, *op. cit.*, p. 154.

⁷⁰ X:113:5.

⁷¹ IV:22:4

⁷² R. Griffith, *op. cit.*, p. 216.

⁷³ II:12:1-4

⁷⁴ J. Gonda, “The Indra Festival According to the Atharvavedins,” *JAOS* 87 (1967), p. 414.

similar stakes and other objects might be considered a representative of the great cosmic tree, and of the *axis mundi*.”⁷⁵

In a wide-ranging survey of Indian cosmogonical traditions, Kuiper noted that Indra’s tree was inseparable from the *axis mundi*. The origin of the tree, in turn, could be traced to the events surrounding the separation of heaven and earth:

“This tree belonged to the dual cosmos, since it was identical with the cosmic pillar which, in the center of the world, kept heaven and earth apart. It must accordingly have arisen when the sky was separated from the earth. The obvious conclusion is that Indra, *at the moment* when he ‘propped up’ the sky, must have been identical with the tree.”⁷⁶

The birth of Indra, as we have elsewhere documented, was intimately related to the cataclysmic events recalled as Creation.⁷⁷ Creation itself, as Coomaraswamy and other scholars have noted, involved a “pillaring apart of heaven and earth.”⁷⁸ As unusual as these cosmogonical traditions appear at first sight, strikingly similar traditions are to be found around the globe.

In the New World, a Maya name for the World Tree was *Wakah-Chan*, signifying “raised up sky.”⁷⁹ The Maya, like the Olmec before them, believed that Creation was initiated by the erection of the World Tree, the latter event marking the separation of heaven and earth: “The classic texts at Palenque tell us that the central axis of the cosmos was called the ‘raised-up sky’ because the First Father had raised it at the beginning of creation in order to separate the sky from the earth.”⁸⁰

Doubtless it is no coincidence that prominent cultures in the New World as well as the Old report that the erection of the World Tree was coincident with the separation of heaven and earth, the latter a signature of Creation.

Similar conceptions are apparent in ancient China. In a review of Chinese cosmogonical traditions, John Major points to a “coherent body of myths of great antiquity.” Extrapolating from the findings of Giorgio de Santillana and Hertha von Dechend, Major summarizes the primary motifs as follows:

“The Grand Origin Myth described by de Santillana and von Dechend exists in many local versions, of course, but all share the following essential points: (a) a concept of a time before heaven and earth were separated, when men and gods communicated without hindrance; (b) an *axis mundi*—described variously as a mountain, a tree, or an axle—associated with streams or a whirl-pool draining and recirculating the waters; (c) an account of the destructive drawing apart of heaven and earth, usually associated with (d)

⁷⁵ *Ibid.*, p. 417.

⁷⁶ F. Kuiper, *Ancient Indian Cosmogony* (Leuven, 1983), pp. 12-13.

⁷⁷ E. Cochrane, *Martian Metamorphoses* (Ames, 1997), pp. 81-87.

⁷⁸ A. Coomaraswamy, *Symbolism of Indian Architecture* (Jaipur, 1983), p. 47.

⁷⁹ D. Freidel, L. Schele, J. Parker, *Maya Cosmos* (New York, 1993), p. 53.

⁸⁰ *Ibid.*, p. 53.

the breaking of communication between gods and men, expressed in an expulsion myth. The same cosmic separation produces (e) a catastrophic, world-engulfing flood, finally conquered by a hero who renders the earth fit for renewed habitation, opening the era of human history.”⁸¹

Like de Santillana and von Dechend before him, Major assigns the planets a prominent role in ancient myth. Most significantly, perhaps, Major postulates that the aforementioned mythological motifs likely go back to Neolithic times:

“Thus it is clear that all of the elements of the Grand Origin Myth described by de Santillana and von Dechend are present in Chinese mythology, and that it is probably more reasonable to accept than to reject the unproven (and perhaps unprovable) hypothesis that those Chinese myths greatly predate their first appearances in texts and indeed describe a cosmological view that goes back to the earliest levels of Chinese culture. This is to say that the ancient Chinese shared a coherent and well-articulated protoscientific world-view that was the common property of Late Neolithic and early Bronze Age peoples throughout the ancient civilized world.”⁸²

It will be noted that Major recognizes the central importance of primeval catastrophe in Chinese myth and cosmogony. Yet at no point does he inquire whether there was a historical dimension to the archetypal mythological motifs in question. In this he follows the example set by the authors of *Hamlet's Mill*, who likewise turned a deaf ear to the ancients' explicit testimony vis a vis the catastrophic origins of the present world.

Summary

Granted the apparent universality of the ladder-to-heaven motif, how are we to explain its origin? Why would disparate cultures around the world describe a primeval ladder-to-heaven along which gods and souls were wont to ascend and descend?

Astronomers have speculated that this or that asterism inspired these widespread beliefs. Ed Krupp, for example, pointed to the Milky Way as the celestial prototype for the ladder-to-heaven:

“So the Milky Way connects heaven with Earth and provides a path for the journey. Although its light seems faint compared with the focused brilliance of single stars, it is huge. It belts the entire sky and completely embraces the Earth. It moves with a delicate grandeur that suggests that somehow it, too, controls the decorum of heaven and affairs below.”⁸³

⁸¹ J. Major, “Myth and Origins of Chinese Science,” *Journal of Chinese Philosophy* 5 (1978), p. 3.

⁸² *Ibid.*, p. 8.

⁸³ E. Krupp, “Negotiating the Highwire of Heaven: The Milky Way and the Itinerary of the Soul,” *Vistas in Astronomy* 39 (1995), p. 413.

That a “Milky Way” in the sky was often compared to a ladder or path leading to heaven there can be no doubt, although we would dispute whether it had anything to do with the band of stars that currently bears that name.⁸⁴ That said, it is far from obvious how Krupp’s thesis helps us to understand the various motifs we have found attached to the ladder-to-heaven. How are we to account for the traditions reporting that the ladder was destroyed in a primeval cataclysm and is thus no longer available to gods (or souls) in their attempt to scale the Olympian heights? If shamans have always viewed the Milky Way as a ladder leading to heaven, why is it deemed necessary to periodically re-create the idyllic conditions surrounding the prototypical ladder in modern rites? One would assume that modern shamans, like their forebears, could simply mount the familiar Milky Way and climb away.

Other traditions are equally difficult to reconcile with Krupp’s hypothesis. Why would a ladder centered on the Milky Way be associated with the Sun? How are we to understand the mythical heroes or “souls” who made a habit of ascending the ladder? Indeed, a systematic analysis of the various mythological themes associated with the ladder-to-heaven will show that nary a one can be explained by reference to the band of stars currently known as the Milky Way.

Mircea Eliade offered a more esoteric interpretation of the aforementioned myths and rituals associated with the ladder-to-heaven. It was his view that the symbolic ascents expressed ancient man’s desire for absolute freedom:

“What is the meaning of all these shamanic myths of ascent to Heaven...? They all express a break with the universe of daily life. The twofold purpose of this break is obvious: it is the transcendence and the freedom that are obtained, for example, through ascent, flight, invisibility, incombustibility of the body...The desire for absolute freedom—that is, the desire to break the bonds that keep him tied to earth, and to free himself from his limitations—is one of man’s essential nostalgias. And the break from plane to plane effected by flight or ascent similarly signifies an act of transcendence;...Indeed, all the myths, rituals, and the legends that we have just reviewed can be translated as the longing to see the human body act after the manner of a spirit, to transmute man’s corporeal modality into the spirit’s modality.”⁸⁵

Eliade’s hypothesis, like that of Krupp, fails to explain virtually every mytheme associated with the ascent to heaven. Why is the ladder-to-heaven compared to a tree, vine, or rope? Why is the Sun, rather than the Moon, the favored destination of departed souls? How are we to understand the cataclysmic elements of the ladder-to-heaven myth—the tragic collapse of the ladder, the concomitant flood, the departure of the celestial bodies? An explanation that ignores such fundamental elements of the story is no explanation at all.

The ladder-to-heaven itself, according to Eliade, is simply a variation upon the widespread theme of the *axis mundi*. By *axis mundi*, Eliade—following Holmberg—

⁸⁴ E. Cochrane, “The Milky Way,” *Aeon* IV:4 (1996), pp. 39-66.

⁸⁵ M. Eliade, *Rites and Symbols of Initiation* (New York, 1958), p. 101.

has in mind the World Axis associated with the celestial Pole. Thus, it is well known that the North Pole offers the one place where the stars never rise or set but remain ever visible, revolving about the pole. For the terrestrial skywatcher in the northern hemisphere, the Pole Star forms the “center” of the sky. That is, of course, until precession displaces the Pole star and its stellar neighbors to the point at which they are no longer perpetually visible. Holmberg summarized this idea as follows:

“The regular diurnal movement of the stars round an axis at the North Star, the reasons for which neverending rotation were earlier unknown, gave birth to an idea that their apparent center of the universe was formed by some object which could be represented in concrete forms, and which was, in addition, believed to support the roof of the sky.”⁸⁶

Holmberg’s hypothesis has a good deal of merit: the *axis mundi* does have reference to the north celestial axis. But this is only part of the story. How does the hypothesis defended by Holmberg and Eliade help us to understand the origin of the countless stories of a hero’s ascent to heaven along a ladder or tree? Even if it is granted that primitive peoples were cognizant of the invisible and abstract axis that extends from Earth to the Pole Star—a most unlikely proposition—how probable is it that they would all imagine an ascent to heaven could occur by means of this ethereal pillar?

It must also be questioned whether it is likely that cultures around the world would localize the transmigration of souls along this same invisible axis, the latter always ascribed a tangible form. Is it conceivable that such ideas would everywhere occur spontaneously to peoples gazing up at the dark region centered on the Pole Star?

Although the hypotheses of Krupp and Eliade fail to explain the unique constellation of traditions associated with the ladder-to-heaven, we can agree that they were right to seek a celestial prototype. How, then, are we to understand the ladder-to-heaven if not by reference to the familiar polar axis or Milky Way?

The Ladder to the Sun

Traditions reporting that ascent along the ladder led to the house of the Sun are of paramount importance in understanding the nature of the mythical motif in question. We have already encountered this belief in South America yet it is hardly confined to that continent. Similar traditions will be found around the globe. Thus, a Wasco narrative (Oregon) locates the ladder of arrows near the sun: “A boy shoots arrows up in the air, makes a chain, which he climbs; he then follows a trail which leads him to the Sun’s house.”⁸⁷

Boas records a similar tradition among the Tsimshian Indians of the Northwest coastal region:

⁸⁶ U. Holmberg, “Finno-Ugric, Siberian,” in L. Gray ed., *The Mythology of All Races, Vol. IV* (Boston, 1927), p. 333.

⁸⁷ F. Boas, “Tsimshian Mythology,” *ARBAE* 31 (1916), p. 866.

“Two brothers, Kumsla’ aqs and Siaxum, go out in their canoe to hunt birds. The second brother is sent to get water; and when he returns, they notice that the sun is low. They shoot their arrows at the sky, form a chain, and shake it. The elder brother climbs up, and when he reaches the sky shakes the chain. Then the younger brother follows. Up above they meet the Sun, who at first is angry, but then welcomes them.”⁸⁸

A Zuni tradition, cited earlier, makes the ascent to heaven occur in the context of a great war. There the ascending hero is identified with the “Morning Star”:

“Morning Star, looking on, saw that they were losing the battle. He called to his younger brother and said, ‘Let us go to our sun father and see if he can tell us how to help our friends.’ They took corn meal and turquoise and put it upon their arrows. They shot toward the sun making a road to the sun of the dust. They climbed this.”⁸⁹

Here the arrow-chain is described as a “road to the sun,” a situation which naturally recalls the aforementioned traditions describing the World Tree as the “road to the sky.” Indeed, peoples around the globe claimed that there formerly existed a “road” in heaven that led to the sacred kingdom of the sun. An early example of this motif appears in “The Gilgamesh Epic,” wherein the Sumerian strongman is said to have followed the “road of Shamash” during his ill-fated attempt to find the plant of life and thereby secure immortality.

The idea that the ancient sun-god was formerly associated with a ladder-like structure is surprisingly widespread. Of the structure depicted in figure one, the anthropologist Robert Zingg quotes a native Huichol informant to the effect that it had reference to an ancient myth and “represented the ladder on which the Sun-father came out of the sea when he was born.”⁹⁰

⁸⁸ F. Boas, “Tsimshian Mythology,” *ARBAE* 31 (1916), p. 865.

⁸⁹ A. Risser, “Seven Zuni Folk Tales,” *El Palacio* 48 (1941), p. 224.

⁹⁰ R. Zingg, *The Huichols: Primitive Artists* (New York, 1938), p. 595.

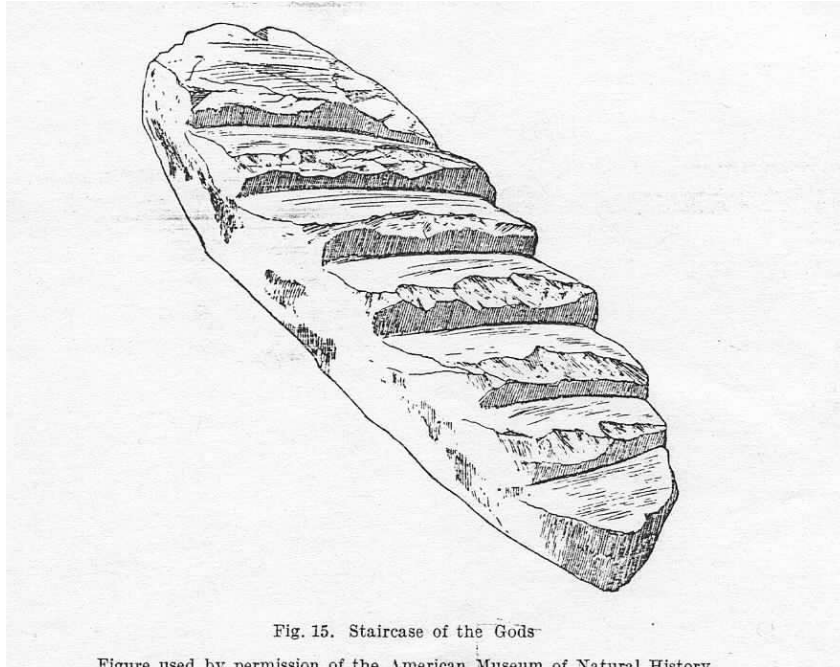


Figure one

This Huichol tradition finds a striking parallel in ancient Mesopotamia. There, too, a luminous “staircase” or ladder is mentioned in connection with the ancient sun-god’s epiphany. Witness the following Akkadian hymn:

“Samas, you have opened the bolts of the doors of heaven. You have ascended the staircase of pure lapis lazuli.”⁹¹

The current Sun, needless to say, does not regularly appear in conjunction with a luminous staircase. Hence the glaring anomaly presented by such widespread traditions, attested in the New World and Old World alike.

In order to understand the traditions of a ladder associated with the ancient sun-god it is instructive to consider the evidence from rock art. Witness the image represented in figure two, from prehistoric California: Here a ladder-like form distends downwards from a so-called sun image. Inasmuch as this image has no obvious reference in the current skies, scholars might be inclined to overlook its possible relevance to the mythological motif under discussion here. Yet once consider the possibility, however remote, that this image commemorates a former configuration in the sky—one centered on the ancient sun-god—and it is obvious that it immediately clarifies the universal belief in a ladder-to-heaven. For if such a configuration was once prominent in the sky, can there be any doubt but that traditions of a ladder leading to the sun would be sure to follow?

⁹¹ W. Heimpel, “The Sun at night and the doors of heaven,” *Journal of Cuneiform Studies* 28:2 (1986), p. 133.

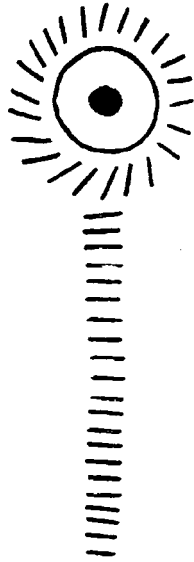


Figure two

Far from being confined to the New World, similar images will be found around the globe. Witness the examples depicted in figure three. In this scene, carved into a rock face in Yorkshire England, the solar “ladders” come to predominate. Particularly notable is the fact that the English “suns,” like their Californian counterpart, are represented as a circle or disk with a dark dot in the middle. This will prove to be a valuable clue as to the original identity of the “sun” in question.



Figure three

As it turns out, analogous images will be found around the world, often in apparent prehistoric contexts. Yet such artworks have received virtually no attention from

students of ancient myth, this despite the fact that it would seem obvious they offer a perfect complement to the aforementioned mythological traditions. Indeed, it is our opinion that such scenes—however they are to be understood from an astronomical standpoint—represent realistic illustrations of the ladder-to-heaven.

The extraordinary diffusion of ladder-like forms in the world's rock art points to the conclusion that the mythical ladder-to-heaven was an objective celestial apparition, albeit one that has long since disappeared from the polar heavens. The question is how to understand this “polar configuration” from an astronomical standpoint? (Note: The discussion that follows owes much to conversations with Anthony Peratt, Dave Talbott, and Wal Thornhill).

As we have argued elsewhere, myths of a World Pillar or *axis mundi* commemorate a specific phase in the history of the polar configuration, one intimately related to the separation of heaven and earth and the mythical “birth” of the warrior-hero (Mars). This spectacular series of events saw Mars move away from the center of Venus and descend along the shared polar axis towards Earth, the red planet eventually descending to a position visually beneath Saturn's massive disc. As Mars descended from Saturn/Venus, it grew larger in form. At the same time a cloud of ethereal material became spread out between Mars and Earth, thereby giving rise to the appearance of a fiery pillar spanning the heavens.

The luminous pillar associated with the polar configuration was a dynamic phenomenon, alternately presenting evolving phases or forms, an apparent signature of a plasma-generated structure (plasmas are defined as “quasi-neutral assemblies of charged particles.”⁹² Familiar examples of plasma include the solar wind, lightning, and auroras, the latter produced when the solar wind plasmas filter through the Earth's atmosphere, interacting with and exciting the molecules in the upper atmosphere⁹³). If, during one particularly memorable phase, the plasma column stood erect like a giant pillar—a veritable *universalis columna*—during other phases it took on a helical or zigzagging form, resembling a giant rope or vine. The undulating rope-like form, in turn, seems to have metamorphosized into a double-helix or chain-like structure, thereby inspiring traditions of a colossal ladder spanning heaven.

As is apparent from our survey of ancient myth, there is reason to believe that the prehistoric skywatchers understood that the ladder-to-heaven, arrow-chain, and celestial rope were related morphologically; hence the various statements to the effect that the chain of arrows morphed into a “rope” leading to heaven. That the respective structures were fundamentally analogous is also suggested by ancient rock art. Witness the juxtaposition of images from prehistoric California depicted in figure four: here a helical form is placed alongside a ladder-like form. It is as if the ancient artist was trying to convey the idea that these particular forms are variations upon a common structural prototype.

⁹² P. Sturrock, *Plasma Physics* (Cambridge, 1994), p. 6.

⁹³ *Ibid.*, p. 2.

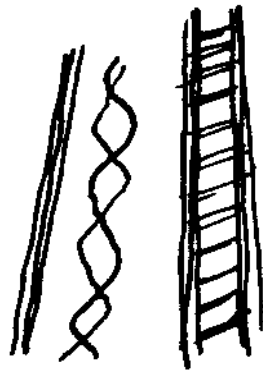


Figure four

A similar juxtaposition of imagery occurs in the sacred art of the Desana from the Amazonian rain forest. Thus, in figure five helical forms are set alongside ladder-like structures.

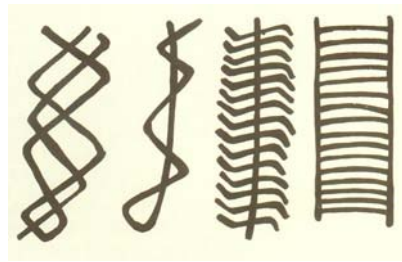


Figure five

Particularly noteworthy are the forms illustrated on the rock face depicted in figure six, whence we extracted our figure two.⁹⁴ Here the solar ladder is placed alongside other ladder-like structures and chains of arrows. The astral nature of the imagery is apparent at once.



Figure six

It is significant that such forms are consistent with what we know about the evolution of plasma structures in the laboratory. Only recently, in fact, a pioneer in the field of plasma physics—Anthony Peratt—published an article demonstrating an astonishing

⁹⁴ R. Heitzer & C. Clewlow, *Prehistoric Rock Art of California, Vol. 2* (Ramona, 1973), figure 253.

accord between ladder-like forms in ancient rock art and plasma structures produced in high-energy-density experiments.⁹⁵ Briefly, Peratt produced a Z-pinch effect by applying high-voltage pulses to gas-puffs in order to simulate an aurora-like plasma inflow.⁹⁶ The well-known effects of a Z-pinch include the generation of Birkeland currents (see figure seven) and the development of toroidal forms along the polar axis. With a sufficient increase in current the toroids tend to flatten out, thereby presenting the appearance of “rungs” or “steps.”

Figure eight, adapted from Peratt’s article, offers an example of the ladder-like structures generated by high-energy-density experiments. Comparing the forms produced in his laboratory with the peculiar images recorded in petroglyphs around the globe, Peratt discovered a remarkable correspondence:

“The petroglyph carvers have managed to capture all of the phases of the Z-pinch instability seen in the laboratory. These phases include the ladder and enclosed ellipsoidal top-most toroids.”⁹⁷

With a further increase of current, the toroids begin to curl inwards, displaying branch-like forms (see figure nine). Here, too, the ancient artists recorded the curling of the “rungs” or “branches” in their petroglyphs. Upon finding a correspondence that extended to the finest details of structure, Peratt was forced to consider the possibility that the prehistoric rock art constituted remarkably accurate recordings of spectacular auroral effects:

“Perhaps the most important feature depicted in the petroglyph shown in Figure 27 is the curling of the edges of the flat-bottomed toroids. This feature is exact enough so that a time-motion representation of the curling can be made and directly compared to its experimental counterpart...Figure 28 provides the first direct evidence of the exactness to which petroglyphs were carved in spite of cultural influences in interpretation. The ladder rungs (stacked medium current toroids) are shown to fold and bend as do the laboratory photographs. Subtle changes in the petroglyphs corresponding to the plasma instability morphologies have been reproduced with precise accuracy, even including, in proper order, the admixture of toroid types.

In all cases, the top-most toroid, the terminus in an electrical discharge, is indeed at the top of the petroglyphs and shows the transition of the pincher type shape associated with so-called scorpion petroglyphs into a folded petal as the top toroids fold up and close on themselves.”⁹⁸

⁹⁵ A. Peratt, “Characteristics for the Occurrence of a High-Current, Z-Pinch Aurora as Recorded in Antiquity,” *IEEE Transactions on Plasma Science* 31 (2003), pp. 1-22.

⁹⁶ *Ibid.*, p. 3. Peratt used wire arrays to simulate filamentation dynamics and concentric plasma sheets formed by nested cylindrical foils to produce high velocity shock waves.

⁹⁷ *Ibid.*, p. 11.

⁹⁸ *Ibid.*, p. 11.

Peratt's analysis is breathtaking in its implications. If he is right, prehistoric man recorded the recent history of the solar system in living color and in great detail. To quote from Peratt's conclusion:

“A discovery that the basic petroglyph morphologies are the same as those recorded in extremely high-energy-density discharges has opened up a means to unravel the origin of these apparently crude, misdrawn, and jumbled figures found in uncounted numbers around the Earth...Many petroglyphs, apparently recorded several millennia ago, have a plasma discharge or instability counterpart, some on a one-to-one or overlay basis. More striking is that the images recorded on rock are the only images found in extreme energy density experiments; no other morphology types or patterns are observed.”⁹⁹

To summarize our discussion to this point: It is patently obvious that Peratt's findings are of fundamental importance with regard to the quest to elucidate the origin and *raison d'être* of ancient myth and symbolism. If the ethereal column uniting the various planets participating in the polar configuration consisted of Birkeland currents, it stands to reason that the ancients might compare the ladder-to-heaven to a “rope.” For Birkeland currents routinely present the appearance of rope-like forms, the individual filaments presenting a *braided* structure. How fitting, then, that the Yarralin from Australia claimed the primeval ascent to heaven took place by means of “lightning strings.”¹⁰⁰ This tradition finds a remarkable parallel amongst the Pima of the American Southwest, who compared the ladder-to-heaven to zigzagging lightning.¹⁰¹

If the *axis mundi* was indeed a plasma-based phenomenon, it stands to reason that it might be compared to a living structure or “flesh,” since plasmas often produce self-generated and evolving forms (Irving Langmuir chose the word plasma to describe such electro-magnetic phenomena because they closely imitated organic forms and processes). The *cosmic umbilicus* uniting heaven and earth, in this sense, was very much a “living rope,” as reported by the Maya and other aboriginal peoples.

The World Tree, compared to the “flesh of the gods” by the scribes of ancient Mesopotamia, finds a striking analogue in the recent discovery of the unique (and *characteristic*) behavior of plasma-generated structures (Peratt's figure 28). As the “steps” or “arms” of the ladder curl upwards the result is a tree-like image. Thus it is that countless mythical images, long since considered fantastic in nature and unsusceptible to scientific analysis, find immediate clarification courtesy of Peratt's elegant hypothesis. It is no exaggeration to say that a revolution is at hand in our ability to understand, model, and reconstruct the recent history of the solar system.

⁹⁹ *Ibid.*, p. 19.

¹⁰⁰ D. Johnson, *op. cit.*, p. 14.

¹⁰¹ F. Russell, *The Pima Indians* (Washington, 1908), p. 339.