Retainment of Native Practices in Central America Through Symbolic Substitution With the World Tree

Katherine Morales

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Background Information

Preceding the European invasion, in the early sixteenth century, there were a number of advanced societies, including a developing empire, in Mesoamerica. Upon arrival, the Spanish, as the rest of the Europeans, had two main ethnocentric objectives in mind. The first was to obtain all the gold and other valuable natural resources from the ‘New World.’ The second was to attempt to invade native peoples’ way of life, which includes, but is not limited to, propagandizing and tormenting the natives into accepting Christianity. One major tragedy to transpire, in 1562, is Diego de Landa’s burning of all the books of the Maya library, “in addition to some 5000 ‘idols’” (Gates 1937:iii), because he believed that they were the “‘works of the devil.’” Ironically, however, it is Landa’s write-up, following the burning, of Yucatan Before and After the Conquest that has provided us with the main key to deciphering Mayan hieroglyphics as well as a great deal of details pertaining to their traditions and rituals.

In order to see the symbolisms going on in modern-day Maya societies, it is important to comprehend their background. The following will summarize some of the main points pertaining to several Mesoamerican cultures, which all have a number of factors overlapping. In Central America, trees play an important role in most cultures’ mythology. The ceiba tree, specifically, is the one that is most commonly seen in mythological imagery and carries the most symbolisms with it. The ceiba tree is one of the tallest trees in the region; it can grow to height of sixty meters, which is beyond the canopy of Central American tropical forests (Woodward 2004). In most Mesoamerican societies’ mythologies, the ceiba tree is frequently referenced as the World Tree. The location of the ceiba trees and other natural phenomena in the area, such as fresh water supply, caves, and mountains, assisted in formulating the original layout and plans for city construction. The World Tree symbolized the connection between earth and the other
two inaccessible realms (Carrasco 1999). Most Mesoamerican societies traditionally accepted world layout in the shape of a quincunx. This was made up of four trees located in the four polar directions (for which the type of tree may vary) and the ceiba tree in the center connecting the world on earth with the sky and thus the stars above and with the primordial source of water below the ground (Drew 1999).

There is much symbolism associated with Mesoamerican monuments and the natural environment. A proper description for the World Tree’s role in Mesoamerican societies is as “the central axis of the world” (Schele and Freidel 1992:418). That describes the vertical part of the tree, or the trunk, viewed as the axis that runs through the three levels of the world, also known as axis mundi. The original words written out in hieroglyphics spell out the words wacah chan, which translates from Chol to be “raised up sky” (Schele and Freidel 1992). At the top, the World Tree is holding up the Upperworld and connects our Middleworld to the Underworld. One of the traditional views is that the ‘original’ World Tree was located in the great caves, symbolizing the center of the world. Mountains were also considered a sacred landscape because they represented the entrance into the Underworld from one side, (Schele and Freidel 1992) and elevated high enough to reach into the cosmos, which was also important, from the other.

One of the earliest examples of the World Tree imagery available to us comes from the sites of Izapa, which is a culture residing within close proximity of the Maya. Stela 5 from Izapa (Fig. 1) presents one of the earliest images of the World Tree, dating back to the Pre-Classic period, circa 300 B.C.E. (Kappelman 2001).
**Pre-European Creation Stories of Mesoamerica**

The main concept associated with the World Tree in the Maya region was the correlation of the World Tree and its role in the *Popol Vuh*, the creation story of Quiché Maya, pertaining to the Hero Twins. The following is a brief overview of the sections of the *Popol Vuh* that correlate to the imagery associated with trees. According to the *Popol Vuh* (Tedlock 1985), we are presently living in the fourth creation. However, when stepping back into the third creation, there was a pair of brothers, One Hunahpú and Seven Hunahpú who disturbed the lords of Xibalba (the Maya version of the Underworld) by playing the ball game. As a result, they were summoned to come down to Xibalba. There the Lords of Xibalba described to them several torments that they were going to be submitted to, however, One Hunahpú and Seven Hunahpú could not survive even the first one – the Dark House. As a result, they were sacrificed. However, One Hunahpú’s head was not buried, but instead they “put his head in the fork of the tree that stands by the road”, (Tedlock 1985), as seen in Fig. 2*.

Xkik’, a young maiden, who was curious to see this fascinating tree, was impregnated by touching it. When her father learned of her pregnancy, he wanted to have her killed and then her heart brought to him, however she was able to trick him and survive. After much turmoil she gave birth to the twins: Hunahpú and Xbalanqué. They became some of the main characters in Maya mythology, including their challenge to the gods of Xibalba, thus avenging their father’s death.

* From this point on, any images that have a “K” reference #, are referring to the [http://research.famsi.org/kerrmaya.html](http://research.famsi.org/kerrmaya.html) database with the “K” ID#.
The other part of the *Popol Vuh* discussed here is the one more commonly repeated in the imagery found on the Maya codices, stelae, and lintels. It also plays an important part in the establishment of the symbolism pertaining to the authority and legitimacy held by ruling families at all city-states. It was also the foundation associated with several major rituals, which will be discussed further down in the paper. This part focuses on the Hero Twins’ encounter with Seven Macaw. The latter being arrogant attempted to become the replacement of the sun and the moon, thereby gaining additional power. As a result of his attitude and a fear of what Seven Macaw might do if he kept the status, the Hero Twins, Hunahpú and Xbalanqué, decided to kill him (Tedlock 1985). Nantze tree is one that Seven Macaw got his food from, thus the food of the gods; therefore, they took advantage of the situation when he was present.

The scene just discussed becomes popular and is found a number of stelae, ceramics (Fig. 3), and paintings. The image on Fig. 3 is the most graphic and produce detailed, including hieroglyphic text description.

**Application of Mythological Symbolism to Politics and Astronomy**

For the Maya, the World Tree was not only the tree holding up the sky, but it was also the connection between humans, especially the rulers, and the gods (Freidel, Schele and Parker 1993; Milbrath 1999; Newsome 2001). There is a standard, commonly seen layout for the World Tree. On several Classic Period images, at Palenque, the World Tree resembles the shape of the cross. Actually, the oldest concept of a cross in Europe dates all the way back to 31,000 B.C.E., representing the concept of a tree (Russell 1981). At the top of the World Tree, there is an image of Seven Macaw, and at the bottom, there is a face of the double-headed monster, the earth god.
(Fig. 4), which is at the location of the main contact to earth and the entrance to the caves (Leon-Portilla 1988).

Besides the connection to the *Popol Vuh*, the World Tree is also the link between the people here on earth with the realm of the supernatural, including the stars and the gods associated with them. According to Post-Classic documents, the *yaxche* was connected to the ancient ancestry of the ruler, which seems to be connected as having originated from the mountains, and thus being related to the gods (Bassie-Sweet 1996). Bassie-Sweet also argues that the main *yaxche* was located in the center of the pertinent site, versus the four corners or the cavern (1996:167-170).

The early versions of the concept were originally more graphic presenting the ‘crocodile-looking’ monster at the base and the trees at the top, as displayed in the Fig. 5, over time had transformed its appearance and became much more abstract, including further development of rituals. However, the imagery is clear as to the main factors associated with power. As a result of the leader holding the staff connected to the World Tree that reaches into the sky, he acquires the power to communicate with the deities and the ancestors presently located in the Upperworld. In the branches of the tree, there is always the image of Seven Macaw, as described in the *Popol Vuh*.

According to Mesoamerican mythology, gods resided in caves which were entrances to the mountains that stretched out in the sky and thus were related to the sky and the stars (Bassie-Sweet 1996). Another concept universal throughout Mesoamerica, was that the gods lived in the
mountains, which connected to the stars. Pyramids that were found in most Mayan cities were symbolic of the sacred mountain (Schele and Freidel 1992).

God K, otherwise known as K’awil, was the god associated with the lords and especially ancestry. Descent trees were connected to the ancient ancestry of the nobility, which seem to be connected as having originated from the mountains, and thus being related to the gods. “This reference suggests that souls reside at one of the world trees or in the underworld” (Bassie-Sweet 1996:168) even though that may be an interpreted from Landa’s biased perspective. The location of the souls’ residence, would vary based on the social class of the individual being referenced.

All Maya cities contain stelae with the imagery including that of the royal family member(s) communicating with the gods. There are several common scenes for that. One fairly frequent display is of the ruler holding a God K staff or wearing attire that includes either imagery of God K or the head of the Earth god. Another is the image of either the king or queen performing the blood-letting ritual, which invokes a hallucinatory state of being and thus connects them with their ‘mythical’ ancestors. The third is the frequent display of one or more gods, usually God K or the one head of the earth god/double-headed monster, in their headdress.

The Classic Period site of Palenque presents one of the most extensive and graphic examples pertaining to the relationship between people on earth, the World Tree, and other worlds. Based on the hieroglyphic record, we know that Pakal was the king of Palenque for over sixty years (615-683 C.E.). His burial presents us with some of the most detailed inscriptions, including part of the creation story. There are four major temples, known as the Cross Group, that include major monuments and wall inscriptions that graphically display not only the
mythological characters, but also the way in which humans, particularly Pakal, is connected with them.

The image that presents the clearest connection between royalty and gods is the one on the lid of Pakal’s sarcophagus (Fig. 6). It contains consistent presentation of the is the World Tree on the top with Seven Macaw and the head-variant of the earth god at the bottom. However, in this case there is also an image of Pakal being part of that World Tree, with God K being present in the left head of the double-headed monster (Milbrath 1999). It is already well accepted that the double-headed monster is associated with the Milky Way, which is believed to be the place where creation took place (Freidel and Schele 1988; Milbrath 1999; Schele and Villela). These symbols being present on Pakal’s sarcophagus, create the transformation of Pakal entering into the realm of the gods. As a result of this kind of power being given to a king, that creates a higher level of power given to the rulers of the city.

This demonstrates a clear connection between the symbolism associated with the cross and the World Tree. The cross also represents not only the World Tree but also the cross roads associated with different colors that the Twins encounter on their way to Xibalba, associated with the four global directions. Therefore, there are a number of preexisting symbolisms pertaining to the concept of the cross for the Maya that already exist before the Spanish invasion.

Unlike the Maya, we are not aware of the Mixtecs and Aztecs, who resided slightly to the north of the Yucatec peninsula, did not possess as advanced of an astronomical correlation to their
mythology. It is clear however, that their mythology did play an important role in their leadership power. For the Mixtecs, the upper class had the same origin as the gods. They were all descendents of the ‘sacred tree.’ However, unlike the Maya, the Mixtec societies in different cities could have been descendents of the World Tree. However, they did have the same iconography pertaining to the sacred tree, that of the symmetrical quincunx.

As can be seen in Fig. 7, the Mixtecs also associated with the concept of the World Tree. For them, however, as in many other cultures, the tree possesses features of both genders (Neumann 1972). Codex Vienna Obverse (Fig. 7) is one of the Mixtec codices that displays a man climbing out of a tree with a nude woman standing adjacent to him, thus being associated with the noble class (Markman and Markman 1992). The image of the tree displays its dual sexuality, which is consistent with the symbolism of the Mixtec creator gods. It is presented by the display of arrows on the right side of the trunk and branches and flowers/circles on the left (Markman and Markman 1992). There is also a male coming out the top of the tree and a female head coming out the bottom, once again emphasizing dual gender traits. Also, following in the next column there are two more people being born from trees, displayed as having roots for legs, leaves for hands, and branches for hair. The whole Vienna Obverse section focuses on Mixtec creation, with Fig. 7 displayed is just one example thereof (Boone 2000). When looking closely at the shape of the trees, observe that the general format tends to be similar to what would be described by Western society as being cross-shaped.
Post-European Invasion Adaptations

There are presently about four million native Mayan language speakers residing in Mesoamerica, spread out over the countries of Mexico, Belize, Guatemala, and Honduras (1999). These include a number of regional language variants in different areas, however there are still towns where few people know Spanish and retain the Mayan languages, as being dominant. Out of those Yucatec is the most widely used language and one directly connected to the Mayan hieroglyphics.

When Cortez arrived in Central America, it was relatively easy for him to defeat the Aztecs, because of Aztecs were located in large cities and the empire expansion. As a result of the conquering the regions around them, there were groups rebelling against the Aztecs and willing to assist Cortez. Upon the successful overthrow of the kingdom, the Spanish friars began the process of forcefully converting the natives of the area into Christianity. In a number of cases, they acquired the native languages to try and translate the bible to the native people. They also taught them to read and write in their native languages using the Spanish alphabet, which was one of the few things that they did to actually assist the natives. However, there was not as strong of a support to the conversions in the Maya region, because the people were scattered over a broad region in small villages. As a result, a great number of people continued to worship their traditional gods and carry out traditional rites.

Following events like Landa’s book burning, as discussed above, the native populations were forced to practice their traditional ways of life in seclusion from the Spanish. Some Maya also secretly recorded some of the information that they remembered from the books that were burned in their native languages, but using the now acquired knowledge of the Spanish alphabet. Some of the books were found and destroyed, but some survived. In those books, known as
books of Chilam Balam, which translates as the books of Prophet Balam, there are many accounts from different sources. These books originate from different villages, were written up by different people over extensive periods of time, and contained accounts and rituals starting before the Spanish invasion through the later periods post-conquest events including practiced rituals. They provide us with a more accurate account of ‘history’ regarding the cruelty experienced by the Maya, examples of their ongoing cultural practices, and their modification of Christianity. The following is the Maya perspective of their Christian ‘savior’: “…Christianity was introduced by the real Christians. Then with the true God, the true Dios, came the beginning of our misery” (Roys 1933:31).

For the Maya, Mixtec, and other peoples of the region the idea of fully converting to Christianity would have been equivalent of acceptance of defeat by the Spanish. Another major reason behind Maya not being forced to undergo a complete assimilation with the Spanish, but closer to acculturation is because very few Spanish people resided in their small villages. As a result, many of the towns did not even have their own priests, but would have one visiting the town a couple of times a year (Restall 1997). The Spanish setup the churches in the villages, however the rituals practiced by the Maya were not totally consistent with Christian perspectives. Also the money collected by the churches was applied to acquire power against the Spanish. The festivals and celebrations that the Maya held were not necessarily of Christian origin. The following quote displays the Mayan customization of some of the basic concepts in Christianity:

In the middle of the town of Tihoo is the cathedral, the fiery house, the mountainous house, the dark house, for the benefit of God the Father, God the Son and God the HolySpirit.

Who enters into the house of God? Father, it is the one named Ix-Kalem.
What day did the Virgin conceive? Father, 4 Oc <was the day> when she conceived.
What day did he come forth <from her womb>? On 3 Oc he came forth.
What day did he die? On 1 Cimi he died. Then he entered the tomb on 1 Cimi.
(Roys 1933:67)
The terms in the quote, such as 1 Cimi and 3 Oc, are examples of a complex Maya dating system, in which a complete cycle does not repeat for approximately fifty-two years. However, ironically, the Mayan dates listed in this version are only fractional, because they list only half of the complete day/month name combination attempting to be of a similar format as the western calendar, yet using the native layout.

Over time, Christianity acquired numerous symbolic modifications while being applied in native Mesoamerican cultures. The Chamula are a modern Maya community in Mexico that make up about 40,000 residents and are scattered over a number of villages (Gossen 1980). They present to us a contemporary version of modifications applied to Christianity. The following are some members of their modified pantheon. The sun god’s name was adapted to htotik, which translates as “Our Father” or Jesus Christ; the moon deity hme?tik became equivalent to “Our Mother” or Virgin Mary (Gossen 1980:132). The Chamula retain the myth of four creations, as described in the Popol Vuh; the modern version’s fourth creation includes: “the monkeys, demons and Jews, only to be resurrected as the sun on the fourth day after his death” (Gossen 1980:133).

The Chamula applied the symbolism of covering up their native deities with Europeans names. As mentioned above, Chamula just like other societies from the area believe that they are part of the fourth creation with no specific length of time attributed for each one. Another example found in modern texts is associated with the first creation of Chamula. They state that the first people were also called Adam and Eve. However based on their creation story, Adam and Eve were sitting under a tree when there was an earthquake, and the dirt they were sitting on turned into people (Gossen 1980). There is obviously a great overlap between the Biblical and native versions of the myth, with obvious modifications applied.
In another region of Mesoamerica, there is a more dramatic modernization applied to the Popol Vuh and other native myths. Chorti is another group of present-day Maya, who when worshipping the cross do not pray specifically to Christ but to the traditional symbol of the World Tree, which as discussed above is shaped similar to the Christian cross (Bassie-Sweet 1996). The crosses found in the Chorti communities, are made of living trees to retain the same symbolism. Modern Maya still worship and hold rituals in honor of the modernized versions of the Classic gods, such as Chak, the god of rain. When I was in Mexico last summer, there were Chak rituals held pertaining to the lack of rain, during the rain season. Therefore traditional rituals were performed making an attempt to invoke Chak to provide more rain necessary for their harvest.

Another correlation to the concept of the World Tree is applied in modern Aztec society. They refer to one of the still worshiped gods as Talocan which translates as the “Most Holy Earth” (Knab 1995). When referred to as the Underworld, it is described as a constantly misty, dusky state of being, which is a suiting correlation with the world of the dead that modern religious leaders ‘can’ travel to in order to communicate with the spirits. “There is a great tree in the center of the underworld, the talcuauhuitl or xochicuauhuitl, which supports the surface of the earth” (Knab 1995:99). Also that tree contained four more trees around the edges to help and holdup the earth. Once again this myth correlates perfectly to the consistent representation of the World Tree and the four directional trees, as was discussed above.

Important four-corner structure (kan tu ’ uk’) is associated with a square created based on the two extremes of the two solstices and a median horizontal (Sosa 1986). There are two types of crosses: Fig. 8: Modified Maya cross
commonly used by the Maya. The first resembles the Christian imagery. The second is known as the saantoh de ce’, which is shaped more like a tree and meaning “cross of wood” (Fig. 8) (Sosa 1986). Traditional Maya cosmology can be directly applied in modern ‘Christian’ ritual pertaining to “Celebration of the Sacred Sacrament” (Sosa 1986:138-9). The tree, yum balam, correlates to Jesus Christ. The priest’s name, yum k’in, translates as father sun, and the monstrance is “a large golden
sunburst” (Fig. 9) (Sosa 1986:138-9). Table setup intensifies the original Maya symbolism. It is designed to represent the layout of the sky as setup in tradition rituals (Fig. 10), including the three world layers discussed above. The table includes a hanging platform, below the main level, as can be seen in the image, to represent the Underworld. The center candle is symbolic of the traditional center World Tree (Sosa 1986).

Another modification of the Popol Vuh includes Xkik’s impregnation and deliverance of the Hero Twins: Hunahpú and Xbalanqué. The modern version of the creation story has been modified to a somewhat ‘Christianized’ however similar version. In it, Xkik’ is associated with the holy Virgin named Qachu Kilaj Qapoj, which translates as “Our Mother Beloved Maiden” (Akkeren 2001). San Pedro, associated with Saint Peter who secretly
provides her with an apple; this is the modification of her going and to pick the fruit of the tree. It is interesting how the two stories overlap here, because the idea of having committed a sin by eating the fruit of the tree sounds almost directly from the Bible’s creation story (Graulich 1983), however quite a large portion of the story retains the original mythological track. In fact, there are a number of modifications added into the Xkik’s adventures, ironically, however, they seem to be more detailed providing more mythological hardships for Qachu Kilaj Qapoj then the original version of the Popol Vuh. The ending of this version, however, has a Christianized twist to it, where Xkik’ successfully gives birth to the “the son of the god who is in heaven” (Akkeren 2001), which seems to correlate closer to Jesus than the Hero Twins.

The other creation story variant, of the Mixtecs, only has three brief written accounts to correlate to, all of which are from post-Spanish invasion. They were originally passed down orally and later recorded on paper. One of the versions was not recorded until as late as the twentieth century. However, the stories appear to be remarkably consistent with the imagery of the earlier recorded pictographic historic accounts.

The earliest recorded account was from Fray Antonio de los Reyes, which was originally written down, in 1593 (Furst 1977). His description was brief; he said that the kings and gods were born out of some trees, though he did not make it clear which kind. He used the verb desgajar that means “to tear off from, to separate” (Furst 1977:186), when describing the process of giving birth. That term can have several possible connotations associated with it, which are still being analyzed. Fray Francisco de Burgoa recorded the second one, in 1674. He claimed that the Mixtec nobility was born from two trees on the riverbank at Apoala River (Furst 1977). There are some known cases where the Apoala River had been translated as the “river of the
lineages” (Furst 1977:184). Unfortunately, his account was also quite brief, but it did provide a geographic hint pertaining to the region.

The final version of modern Mixteca Baja, Furst received via dictation from a native of Santa Cruz, Thomas Ibach, who was interviewed as recent as 1976. Ironically, once again this was the most detailed description of all with no contradictions to neither the codices nor the other accounts. He described that a man impregnated the sacred tree; he later went and made a whole in the tree, which permitted him to see a little man inside the tree (Furst 1977). According to Ibach, the man born from the tree was named “Man of 14 Strengths.” He became strong and took good care of the tree because he cared about it a lot. Ibach placed the tree-birth somewhere in the mountains, with no genealogical details. This once again links the nobility with the World Tree as in all previously discussed cases.

**Conclusion**

It is clear that regardless how much effort was devoted to forcing the native religion and ethics out of Mesoamerican native societies, it was preset for failure. Over the past 500 years, since the Spanish conquest, these societies were able to modify their cultural norms slightly permitting them to adapt to the brutality and force applied to them by the Spanish missionaries. In order to satisfy their oppressors, they adapted the symbolism of the cross to correlate to their millennium old belief system. Over time, there evolved a modified version of Christianity that assimilated traditional Mesoamerican views into the Western Christian perspectives. Even though there are numerous ‘Christians’ among the native Mesoamerican population, that does not mean that they are ‘monotheistic’ as the European churches try to claim* to be. The better

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description would be that they have managed to combine and adapt to the Christian church’s symbolism to compliment their native beliefs in order to avoid the church’s brutality.
References Cited

1999  Native American languages. Electronic document,  

Akkeren, Ruud van  
2001  How Our Mother Beloved Maiden was Saved from an Untimely Death: A  
christianized version of the Xkik’ tale of the Popol Wuj. Electronic document,  

Bassie-Sweet, Karen  
1996  At the edge of the world caves and late classic Maya world view. University of  
Oklahoma Press, Norman. Electronic document,  
on April 15, 2005.

Boone, Elizabeth Hill  
2000  Stories in red and black: pictorial histories of the Aztecs and Mixtecs. 1st ed.  
University of Texas Press, Austin.

Carrasco, David  
1999  The Sacrifice of Tezcatlipoca: To Change Place. In Aztec ceremonial landscapes,  

Drew, David  

Freidel, David A. and Linda Schele  
1988  Kingship in the Late Preclassic Maya Lowlands The Instruments and Places of Ritual  

Freidel, David A., Linda Schele and Joy Parker  
1993  Maya cosmos: three thousand years on the shaman's path. 1st ed. W. Morrow, New  
York.

Furst, Jill Leslie  
1977  The Tree Birth Tradition in Mixteca, Mexico. Journal of Latin American Lore  
3(2):183-226.

Gates, William  
1937  Introduction. In Yucatan before and after the conquest, pp. iii-xv. Dover Publications,  
New York.
Gossen, Gary H.  

Graulich, Michel  

Kappelman, Julia Guernsey  

Knab, T. J.  

Leon-Portilla, Miguel  

Markman, Roberta H. and Peter T. Markman  

Milbrath, Susan  
1999 *Star gods of the Maya: astronomy in art, folklore, and calendars*. The Linda Schele series in Maya and pre-Columbian studies. University of Texas Press, Austin.

Neumann, Erich  

Newsome, Elizabeth A.  

Restall, Matthew  

Roys, Ralph L.  
Russell, Claire

Schele, Linda and David A. Freidel

Schele, Linda and Khristaan D. Villela
*Creation, Cosmos, and the Imagery of Palenque and Copan*.

Sosa, John R
1986 Cosmological, symbolic and cultural complexity among the contemporary Maya of Yucatan. Paper presented at the World archaeoastronomy: selected papers from the 2nd Oxford International Conference on Archaeoastronomy, Merida, Yucatan, Mexico.

Tedlock, Dennis

Woodward, Catherine L.
Through the "hearth" that consisted of a mother and her children, women played a profound role in Iroquois political life. Each "hearth" was part of a wider group called an otiianer, and two or more otiianers constituted a clan. The word otiianer refers to the female heirs to the cheiftainship titles of the League, the fifty authorized names for the chiefs of the Iroquois, passed through the female side of the otiianer.

Iroquois political philosophy was rooted in the concept that all life is unified spiritually with the natural environment and other forces surrounding people. The Iroquois believed that the spiritual power of one person is limited, but when combined with other individuals in a hearth, otiianer, or clan, spiritual power is enhanced. Study: Tree Leaves Have Built-In Thermostat Live Science - June 11, 2008

Although Native Americans used to burn forests to farm, such practices were nowhere close to damaging "as the drastic deforestation that came with the Europeans," Roddick said. The colonists, like the Native Americans, cleared forests to farm, and felled trees for their timbers as well. "White pine was used a lot for shipbuilding," he explained. As deforestation leveled native trees, so too have infestations of disease and insects decimated forests. Oldest Living Tree Found in Sweden - 9,550 years old.