Crossed Figures

A prehistoric motif and its relation to later artistic, metaphysical and mathematical ideas

All generation is from contraries

— Thomas Aquinas, Summa Theologica 1.46.1 ad 3

Introduction

The motif of crossed male and female figures is of great antiquity if we can judge from its widespread distribution. The American art historian, Carl Schuster (1904-1969) collected examples from many cultures and time periods. He believed that these figures represented the first Man and Woman of the tribe or group—like Adam and Eve—and that their crossing signified the act of creation. Their point of intersection, indicated by a checkerboard pattern in later periods, marked the center of the world, where creation began. We will also look at some related forms such as two-headed figurines and Y-posts which cast light on the ideas that evolved from this simple image and which were expressed in diverse ways in art, divination, astrology, metaphysics and mathematics.

Crossed Figures

A Neolithic steatite sculpture from Cyprus illustrates the basic form, a male and female forming a cross.



Figure 1: Steatite figurine, Neolithic Cyprus (c. 3000 to 3500 B.C.)

In Figure 2, two designs on a carved plank from Borneo, the limbs of the two figures are intertwined like tendrils, an act with sexual connotations, as we shall see.¹ One figure is male and the other female, indicated by the disparity in size.

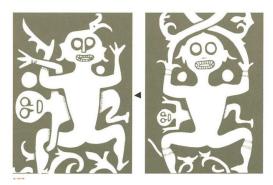


Figure 2: Details from a wooden plank, Borneo

There are many examples where this convention is observed. Figure 3, an earth sculpture from the Gila River Indian reservation in Arizona exhibits the same disparity in size.

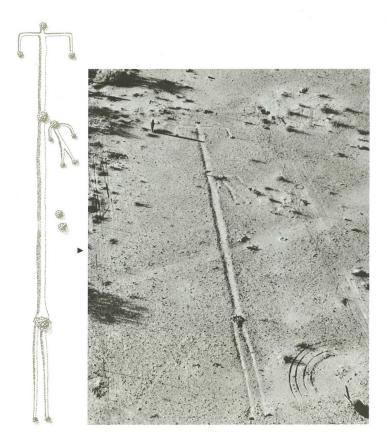


Figure 3: Earth sculpture, Gila River Reservation, near Sacaton, Arizona

Paired earth figures are common in both the Old and New Worlds and the sexual difference is usually indicated by size. Two Siouan earth sculptures built from stones show the same male and female configuration (Figure 4).

^{1.} One is reminded of Genesis 2:24, Ephesians 5:31 and Matthew 19:5: "Wherefore a man shall leave father and mother, and shall cleave to his wife: and they shall be two in one flesh."

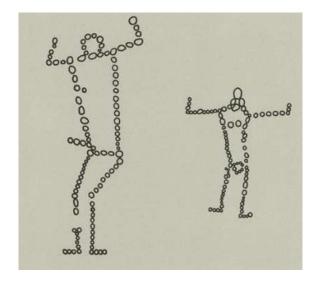


Figure 4: Stone sculptures, Sioux, Punished Woman's Lake, South Dakota

The anthropologist Edmund Carpenter writes:

Perhaps only among Australian tribes is their original conception, as the 'first man and his wife', still alive or was alive until recently. Descendants of American Indians who constructed paired earth figures don't speak of them in precisely these terms. Yet their ancestors may have done so. I suspect that in America, as in Australia, such male-female earth monuments represented the original tribal ancestors in 'primordial copulation', the monument being the point of origin of the tribe and, by extension, the beginning of the world.¹

Two earth figures created by the Kamilaroi tribe in 1894 were described by them as the Father and Mother of the tribe (Figure 5). Crossed figures appear to be an important variant of this basic idea of a primal couple. The crossing is of particular interest because it relates to the genealogical patterns that Schuster discovered as well as to cosmological diagrams and related ideas about the social structure and rebirth.

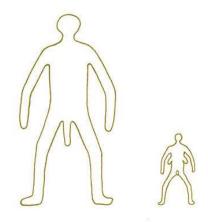


Figure 5: Earth works of first ancestors, Kamilaroi, New South Wales, Australia

^{1.} Carl Schuster and Edmund Carpenter, *Patterns That Connect*, p. 179.

Figure 6 is a petroglyph from Washington State depicting two crossed ancestor figures. The figures are of equal size but the emphasis here is not on individuals but on moieties. Marriage is depicted; the crossing of two family groups. Notice too, the enlarged area where they meet. This is the center of the world and will take on a significance of its own.

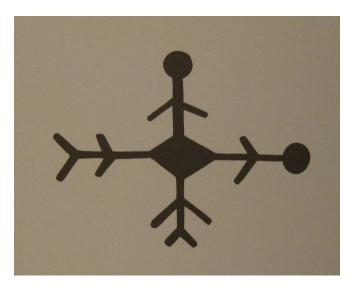


Figure 6: Petroglyph from Methow Valley, Washington.

Figure 7 shows the same motif on a Sioux Indian beaded pipe-bag. Notice again, the cross placed at the meeting of the two bodies.

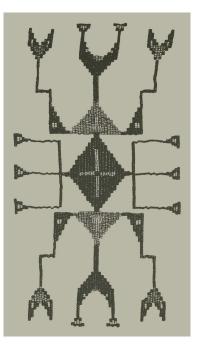


Figure 7: Main motif on a Sioux beaded pipe-bag

The same cross is found at the center of the diagram commonly used to create the labyrinth, also believed by many to be located at the center of the world, or more properly "worlds" (upper and lower).¹

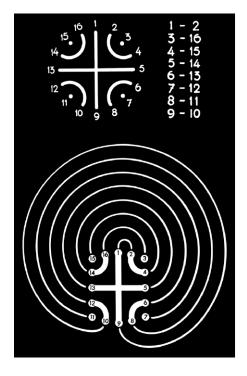


Figure 8: Common method for constructing the labyrinth

Another example appears on a gold drinking horn from Migration Period Denmark (Figure 9).

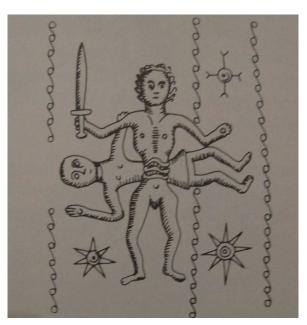


Figure 9: Flgures on a Danish drinking horn, 5th century A.D.

^{1.} On the design of the labyrinth, see Schuster and Edmund Carpenter, *Social Symbolism in Tribal Art*, vol. 3, book 2.

The Slung Leg Motif

The connection between the crossing of the figures and sexual reproduction is illustrated by a series of Merovingian cast bronze plaques (Figure 10).

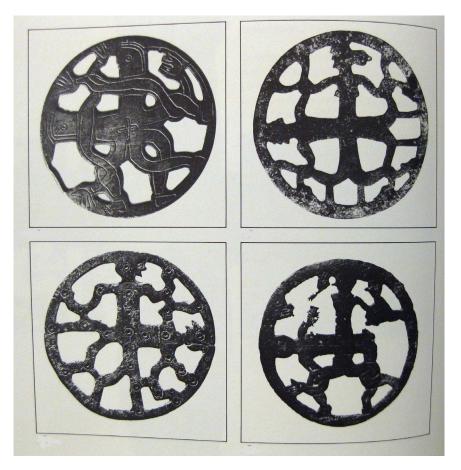


Figure 10: Merovingian bronze plaques, Germany

Once again, the upper-left-hand figure has a cross at the point of juncture which bears some resemblance to a thread cross, a subject to be discussed shortly. Harder to make out, is the pair in the lower-left hand corner, detailed in Figure 11. Here we see the beginning of a checkerboard pattern in the center of the figures.



Figure 11: Detail of Merovingian bronze plaque

Figure 11 shows an entwinement of the legs, a motif that appears in a more realistic form in Western art where it is generally referred to as the "slung leg figure."¹ The art historian, Leo Steinberg, writes "The slung leg in sixteenth-century art is invariably a token of marital or sexual union, of sexual aggression or compliance."² Steinberg found evidence for the motif in Classical times where it was associated with the depiction of mythological scenes involving lovers and this treatment continued in later periods (Figure 12).



Figure 12: Vincenzo De Rossi, Paris and Helen. Florence, Boboli Garden, 16th century

By medieval times the motif was applied to Mary as the bride of Christ, an idea that may seem strange to modern minds but which was quite in keeping with the theological interpretations of the Old and New Testament.

But from the second century onward Mary herself becomes a type of the Church. Before long, the Church is figured in Mary as Mary is in the Church. Christ is the bridegroom of the one as of the other. By the twelfth century, *Ecclesia*, herself Virgin and Mother and Beloved of Christ, has become in every respect interchangeable with the Virgin. As in the doctrine of Perichoresis, which describes the two natures of Christ, Mary and Church wholly inhere in each other.³

^{1.} See Leo Steinberg, "Michelangelo's Florentine Pieta: The Missing Leg."

^{2.} Ibid., p. 343.

^{3.} Ibid., p. 348. See also, Leo Steinberg, "The Sexuality of Christ in Renaissance Art and in Modern Oblivion."

More mundane erotic scenes employed the same motif (Figure 13).



Figure 13: Govaert Flinck, Lovers. Paris, Louvre, 17th century

At the time when Steinberg wrote his paper on Michelangelo's use of the motif he was unaware that evidence for the motif existed before Classical times though he was convinced that it would show up. Edmund Carpenter writes:

When I sent a copy of 'Genealogical Patterns' to Leo Steinberg, the art historian, he replied: 'Though I began reading with great resistance in the conviction that the author was wildly overinterpreting, I found myself gradually yielding wooed over by the man's integrity and intelligence, and finally won over by the sweep of his imagination. In short, I am writing to tell you that you bestowed a great gift on me and that you created a fan. I only wish I had known the essay ten years ago. Now I find myself lamenting the fact that Schuster is no longer alive. A strange sentiment, for I never mind learning that Einstein is dead or Humboldt or Paracelsus. But with this man there is so much I would like to discuss.¹

Genealogical Iconography

Another common development of the crossed-figures motif replaces the human figures with reptiles. A Chalcolithic pottery design from Iran provides an early example (Figure 14).

In this class of pottery, the two [human and lizard] are often distinguishable only by the presence or absence of a rudimentary tail. Whether such ambiguity reflected mythological ideas or was merely playful doesn't affect the structural analogy.²

^{1.} Schuster and Carpenter, Social Symbolism in Ancient and Tribal Art, vol. 1, bk. 3, p. 685.

^{2.} Ibid., vol. 1, bk. 1, p. 246.

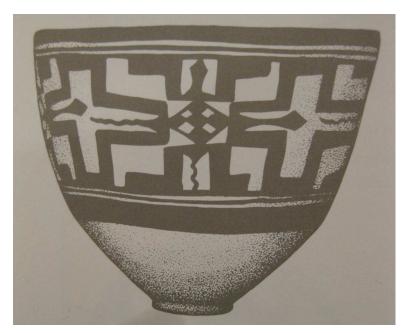


Figure 14: Painted bowl, Chalcolithic, Iran (4500-3500 B.C.)

The reptile's head and tail fit within a stepped framework (Figure 15, top right) that Schuster identified as being part of an ancient system used to depict genealogical relations.¹

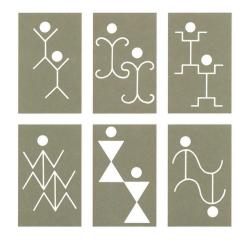


Figure 15: Basic units of genealogical iconography

The crossing of these reptiles, which may be totemic, indicates a marriage between two moieties (Figure 16).

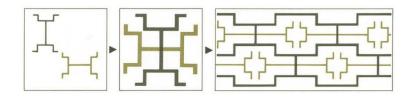


Figure 16: Genealogical pattern showing crossed moieties

^{1.} The system is outlined in Schuster and Carpenter, *Social Symbolism in Ancient and Tribal Art*, vol. 1. The swastika is derived from these patterns.

Board Games and Divination

Whether Chalcolithic peoples still understood this symbolism is hard to know. Traditional designs were repeated long after their meaning was lost or altered.¹

'Checkerboards' formed by the crossing of two creatures, human or animal or mythic mixture of both, occur in the arts & myths of many peoples. Human reptiles, cosmic birds, and primordial ancestors are favored subjects.²

The motif, of crossed reptiles appears quite often in West Africa, particularly among the Ashanti (Figure 17). The designs are clearly derived from earlier Middle Eastern prototypes (Figure 14). Does the cross-hatching in the middle represent the scuti of a crocodile or is this simply a rationalization for an older pattern no longer understood? The Ashanti gold weight

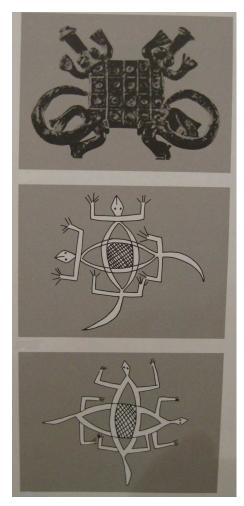


Figure 17: Ashanti brass weight (top) and two calabash designs, Ghana at the top of Figure 17 includes markings that may have been used for divination or astrology.

^{1.} See Mark Siegeltuch, "The Water Symbol" for an ancient symbol that changed its meaning.

^{2.} Schuster and Carpenter, Social Symbolism in Ancient and Tribal Art, vol. 1, bk. 1, p. 246.

Another Ashanti example, a priest's implement (Figure 18) lacks the cross-hatching but the shared bodies form a large diamond.



Figure 18: Ashanti, priest's implement, wood, Nsuatere, Ghana

A Batak divination chart from Sumatra shows one way the grid pattern was employed; for casting horoscopes.¹ The small squares contain Sanskrit names of deities four of which are used to



Figure 19: Batak divination diagram, illustration in a bark book, Sumatra indicate the cardinal directions. The chart was used to divine the future of an unborn child.

^{1.} See, Voorhoeve, Catalogue of Indonesian Manuscripts. Part 1: Batak Manuscripts.

The central area of our crossed figures is often used for divination or gaming in many cultures. These images are also cosmograms—like mandalas— which reflect the four cardinal directions. The older idea is that the place of primordial copulation is the center of the world, the appropriate place to orient oneself and to determine the future course of events.¹

A Viking gaming board (Figure 20) has the same configuration. The figures are not crossed but the size difference indicates that they are male and female. The board was used to play *hnefatafl* (King's Table) a type of game played by Celtic and Germanic peoples. The objective is for the king to escape his attackers by reaching one of the corner squares.

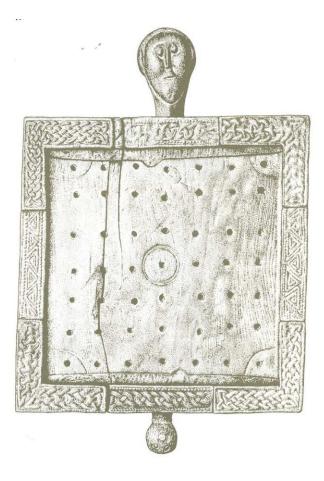


Figure 20: Viking wooden gaming board, Balinderry, Ireland (10th century A.D.)

Many board games such as *patolli* and *pachisi* share this configuration even though the heads are missing. Figure 21 provides a few examples from the many that exist. The goal of these "race" games is to move all of your pieces to the finish line before your opponents do. Quartered gaming boards are quite common throughout the world and reflect the cardinal directions. Some "war" games like Chataranga (Figure 22), an early version of chess, feature four armies, placed at the corners of a square board. Each army is associated with a color.²

Divination, horoscopy, and gaming are certainly later developments that arise with writing, numbers and astronomy. The older idea is creation from a primal pair as the origin of the group or tribe. These human diagrams are connected to ideas about rebirth and the continuance of the social order.

2. See R.C. Bell, *Board and Table Games*, p. 51.

^{1.} This kind of "spiritual geography" underlies much of the metaphysical and religious language and imagery involved in "centering" oneself and of the notion of Eternity, from which time and events unfold.

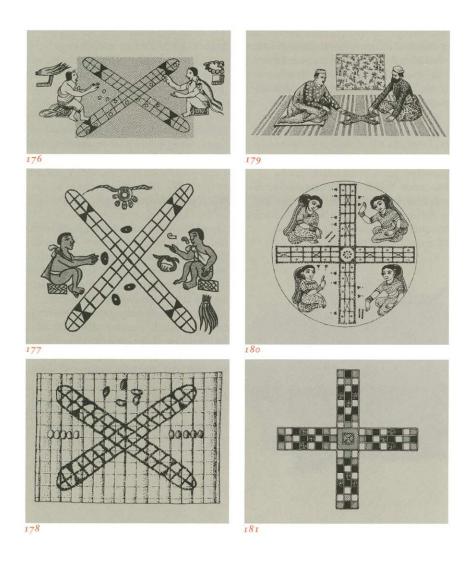


Figure 21: Board games built from a cross.

Number	Description
176	Aztec game of patolli. Father Diego Duran, History of the Indies of New Spain (1581).
177	Aztec game of <i>patolli</i> . Codex Florentino.(16th century).
178	Aztec patolli gaming set. Illustration from A. C. Bell, Board and Table Games.
179	Game of <i>pachisi</i> between a Hindu and a Mohammedan. Redrawn from Tylor, "On the Game of Patolli in Ancient Mexico and its Probable Asiatic Origin," Journal of the Royal Anthropological Institute of Great Britain and Ireland, 8/2, 116-131, London.
180	Card from a set of playing cards, Mysore, India. Bombay collection of R. V. Leyden.
181	Pachisi gaming board, Ceylon. Redrawn from Henry Parker, Ancient Ceylon (1909).

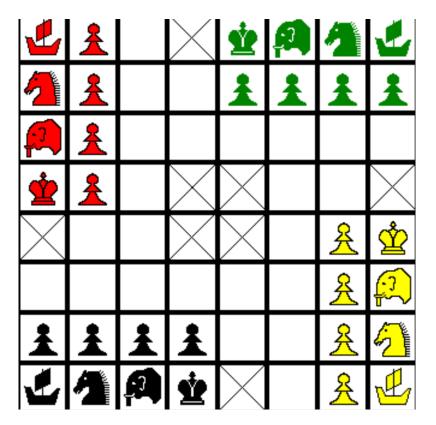


Figure 22: Chataranga board

Quartering

The relationship between our crossed figures and the Christian conception of Adam and Eve is clear, even if far removed in time. The setting is Eden, the center of the world, from which four rivers flow. The quartering created by the crossed figures forms another important part of the symbolism.

The quarters produced by the crossing of the male and female bodies are reflected in social, geographical and astronomical symbolism. Socially, the quarters can represent exogamous moieties that are subdivided into two groups each, a common configuration in folklore though not always in kinship structures, which are generally more complex. The four-group model maps on well to cosmological ideas (4 seasons, 4 cardinal directions) and to the design of houses, temples, and cities, which helps explain its popularity in religion and folklore. The design of games and mandalas reflect this conception owing in part to the symmetry that is offered.

The Zuni, and many other American Indians, associate four 'cosmic clans' with these color-designated cardinal directions [North = yellow, West = blue, South = red, East = white]. Clan members, competing in rites & games, wear appropriate symbols & colors.¹

Two examples of the four-group pattern will suffice, selected from the large number available from various cultures and time periods. Figure 23, a Navajo design from a sand painting and Figure 24, a Batak magic design from a bark book.

^{1.} Schuster and Carpenter, Social Symbolism in Ancient and Tribal Art, vol. 3. bk. 1, p. 178.

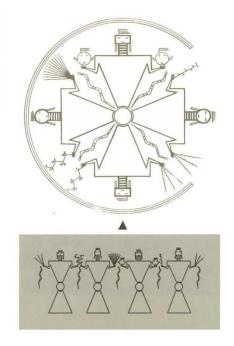


Figure 23: Design on a Navaho sand painting, Arizona

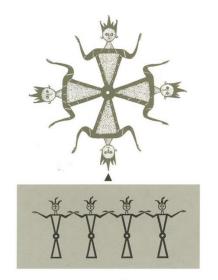


Figure 24: Batak magic design from a bark book, Sumatra.

Many peoples in the past, such as the ancient Chinese, shared the notion of four cardinal directions each with an associated color. We ourselves use the expressions "the four quarters of the world" and speak of a city as having "quarters".

Thread Crosses

Thread crosses are widely distributed and are of ancient vintage judging from their distribution. Colored thread or other pliable materials like hair are wrapped around two sticks to create the basic form. Multiple crosses can be connected to create more complex designs and items like feathers or colored stones can be added. Thread crosses have been found in North, South and Central

America, Europe, Africa, Asia, Oceania, and among the aborigines in Australia.¹ They share the same quartered structure as the other art forms we have been discussing and it is likely that the two sticks were once meant to represent primary ancestors although we have no definitive evidence for this.

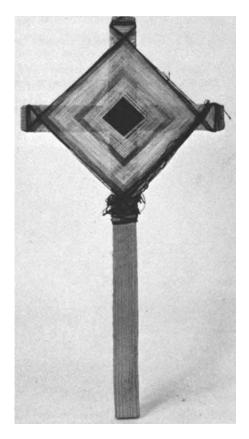


Figure 25: Thread cross, Inner Mongolia

While the original significance of these devices is unknown, a comparative analysis reveals certain common themes.

- They are regarded as protective devices that catch evil spirits. They are frequently compared to spiderwebs.
 - They may be thrown away or disassembled after use. The sticks and thread may be reused.
 - They share this protective function with mazes, which they resemble. Mazes were thought to trap unclean souls to keep them from bothering the living.

^{1.} Good summaries include Potts, *The World's Eye* and G. Lindblom, "Thread-crosses (Fadenkreuze), particularly in South America and Africa."

- They are often positioned in elevated places such as the tops of buildings or worn in a headband. The vertical stick may act as a mast allowing them to be planted in the ground. The elevation would suggest that they are intended to capture aerial spirits.
 - European examples were used to decorate rush or reed "crowns" worn during holiday festivities or placed at the top of a Yule "rowan" or Yule "cross" in the way that a star is placed on a Christmas tree.
 - An extended shaft can be seen as an "axis mundi" providing access to the central diamond, representing the sun and providing an entrance to Heaven.
 - In contrast, if the thread cross is placed flat, the center becomes the entrance to the lower world. This is why the cross is an essential part of the labyrinth design. West African mythologies speak of the crossroads as the place where the Devil or other evil spirit appears. These ideas were carried to America by the slaves.
- They protect against disease (caused by evil spirits) and are part of curative rites.
- They are often placed on or in graves to protect the deceased.
- They are used for a wide variety of ritual purposes such as circumcision ceremonies.
- They are often worn as ornaments during dance ceremonies.
- They have cosmological associations with the four quarters and the center of the world and they are often oriented in a specific direction.
- The thread or hair used to construct them is often of different colors and these colors are often assigned some significance.
- They are sometimes associated with fertility, especially of crops.



Figure 26: Headband with thread crosses, Rio Madre de Dios River area, South America (after Lindblom)

As a spiritual appliance, the thread cross combines a a large number of traditional motifs in one object. Despite any conclusive evidence, the basic form and the number of related associations would suggest a model based on two crossed human figures meant to represent the first ancestors.

Mithuna and Gemini

Productive Pairs

Another expression of crossed male/female figures can be found in the Vedic tradition, where "mithuna" (productive pairs) are often depicted as *yaksas*.



Figure 27: Yaksa and Yaksi, Thanesar, India, 2nd Century B.C.

The term *yaksa* appears in many contexts and refers generally to Brahman or other universal deities, tutelary deities of kingdoms or clans, deceased ancestors, or local tree spirits of good or bad character. In general, the *yaksa* represents the immanent Spirit that dwells within each being. *Yaksas* are associated most closely with vegetation, fertility, and the Water of Life. *Yaksas* are part of an older stratum of ideas later absorbed into the more speculative and abstract conceptions of Hindu and Buddhist theology. Varuna himself is qualified as a *yaksin* (RV vii.88.6). A *yaksa* may be either male or female (*yaksi*) or depicted as productive couples (*mithuna*) (Figure 27).¹

In the Satapatha Brahmana (ix.4.1.2-5) we read that "From Prajapati, when dismembered, couples went forth...birth originates from a *mithuna*." A similar idea can be found in Genesis (1.27) where Adam is described as both male and female.²



Figure 28: Culakoka Devata, from Bharhut, on an Elephant Vehicle (c. 2nd century B.C.).

Yaksis are also depicted wrapping a leg around a tree or holding a branch in one hand (Figure 28). Dr Coomaraswamy noted the erotic connotations of these gestures and pointed out that the Sanskrit word *lata* means both "creeper," "vine" and "woman." Note the connection with the

^{1.} See Coomaraswamy, Yaksas. Essays in the Water Cosmology for the requisite background.

^{2.} See Coomaraswamy, "The Tantric Doctrine of Divine Biunity, in Lipsey, Collected Works, vol. 2, p 231-240.

slung-leg motif, only here the man is represented by the vine. Figure 2 may be a more archaic version of this Indian motif, surviving in Borneo.

Gemini

The zodiacal figure we call Gemini was originally a productive pair and not male twins, an interpretation that seems to have arisen in Graeco-Roman times. In medieval illustrations, Gemini

is sometimes depicted as a man and woman, reflecting the older view.¹ Note that it is the arms or hands of the couple that are entwined, rather than the legs. The sexual symbolism remains intact but the eroticism is reduced to meet the mores of a Christian society.



Figure 29: Medieval images of Gemini (after Hourihane, above)

Colum Hourihane describes the iconography of Gemini during the medieval period:

Gemini is always represented by the twins, for the month of May (modern horoscopes align it to May 21 – June 20). The two figures can be shown fulllength or as busts and are usually in a landscape. They can both be male or female or one of either sex. They can be fully clothed or nude. They can also appear in the guise of lovers and are sometimes shown touching each other on the breast or the face. They are particularly reminiscent of Adam and Eve when they are shown in a garden surrounded by foliage, and he may hold an apple in his hand towards her. In one example their modesty is covered by a large fig leaf (Morgan Library, M.264 fol 5r). Often related to the twins Castor and Pollux, it is clear that some examples are directly based on male

^{1.} Zodiacal symbols, from whatever culture, reflect mythologies that are much older than astronomy.

twins. Some examples show them as not quite nude – as when they have a piece of transparent gauze over their middle (Morgan Library, M.262 fol 5r). They are frequently shown as two conjoined figures with one set of legs and one trunk but two heads (Morgan Library, M.700 fol 6r, M.64 fol 5v). In a number of other cases their middles are covered by a heraldic shield (Morgan Library M.283 fol 3v, M.440 fol 3r).¹

Examples that have one trunk supporting two heads are of particular importance since they preserve a very archaic tradition which we will discuss next.

Two-Headed Figures

Another related form is the two-headed figure. Let us start with a 14th century German manuscript known as the *Sachsenspiegel*, a legal code that includes illustrations of joint-marked humans intended as memory devices, helpful for determining the sequence of relations governing the rights of inheritance (Figure 30).

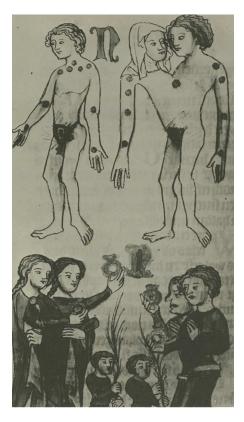


Figure 30: Illustration from the Sachsenspiegel legal code, Germany (14th century)

Figure 30 might be a mere curiosity were there not many other such two-headed figures widely distributed throughout the world, many with similar genealogical associations.

...I doubt that medieval jurists invented this kinship chart. I think they simply codified an image from earlier times. Among the Germans, at least, the 'primitive' idea of the whole body as a chart of relationship is deeply embedded in linguistic usage. Grimm brought together from various Germanic languages a series of kinship terms, both specific & general,

^{1.} Colum Hourihane, *Time in the Medieval World, p. lxi.* The heraldic shield occupies the position of the checkerboard or gaming board. Heraldic shields were quartered and associated with genealogies.

derived from the names for head, nose, cheek, bosom, stomach, lap or womb, side, back, elbow, femur, knee, ankle and nails.¹

A few examples among the many available will demonstrate the widespread distribution of this image both in time and space.

Among the oldest known two-headed figure is this Neolithic example from Anatolia, dating from the middle of the 7th millennium (Figure 31). Other examples were found in Cyprus, Syria, and elsewhere in Anatolia (Hacilar).

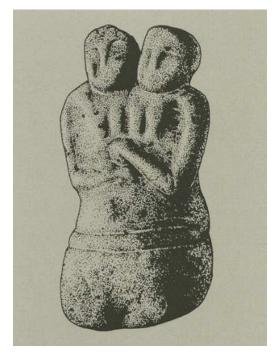


Figure 31: Figure in white marble, Catal Huyuk, Anatolia, Turkey (c. 6500 B.C.)

Another Neolithic example from the Vinca culture (Figure 32) appears to be wearing a mosaic garment. Like the *Sachsenspiege* figures, it is joint-marked though the placement of the punch marks is a little off.

^{1.} Schuster, Carpenter, *Social Symbolism in Ancient and Tribal Art*, vol. 1, bk. 3, p. 865. The connection between ancestors and body joints is not a subject we can pursue here. See Mark Siegeltuch, *The Thread-Spirit* for a summary.



Figure 32: Double-headed pottery figurine, Gomolava, Yugoslavia (6 millennium B.C.)

This is common with joint-marked images, particularly in later periods where the original significance of the markings is no longer understood.¹ Single-headed figures from the Vinca culture have the same markings.

An example from Sicily (Figure 33) from classical times is of special interest since the triangular shape suggests that the artist modeled the form on a wooden prototype, such as a two-headed Y-post, which we will discuss next. Durable material like stone survived but wooden Y-posts probably have older roots. Because wood is perishable, Y-posts are found mostly in tribal societies where they were in use as late as the 20th century.



Figure 33: Stone stela, Selinuntum, Sicily (4th century B.C.)

^{1.} See Carl Schuster, "Joint Marks" and "A Survival of the Eurasiatic Animal Style, Bronin Modern Alaskan Eskimo Art." Our Figure 2 from Borneo also appears to have displaced joint marks.

Figure 33 is one of many dicephalus stelae from the same area. Some of them show Greek influence but the form is clearly more ancient as our brief survey shows.¹

Like the Gemini figures, the sex of two-headed figures can vary (male/male, male/female, female/ female) or indeterminate (Figure 34).



Figure 34: Two-headed figures from Bronze Age Cyprus, Syria, and Anatolia

Number	Description
203	Plank "idol" of pottery, early Bronze Age, Lapithos, Cyprus
204	Plank "idol" of pottery, early Bronze Age, Lapithos, Cyprus
205	"Eye-idol" of alabaster, Tell Brak, eastern Syria, Bronze Age.
206	Cappadocian marble "idol", Kul Tepe, Anatolia, Turkey (c. 2000 B.C.)

^{1.} See Schuster, Carpenter, *Social Symbolism*, vol. 2, bk. 5, p. 1295, illustration 213.

Asia provides a number of examples such as Figure 35, an Ainu wooden image from Siberia used to prevent twins from falling ill.

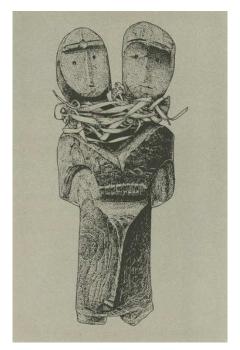


Figure 35: Ainu wooden image, Sakhalin, Siberia

Figure 36 is a painted wooden carving of an image traditional among the Konyak Naga of India. The figures below may be ancestors.



Figure 36: Painted wooden figure, Assam, India

Even the Buddha has been depicted as two-headed (Figure 37). The major religions of the world incorporated older forms of expression into their iconography.



Figure 37: Clay figure of Buddha, Khara Khoto, Eastern Turkestan

Figure 38, three of ten staffs or "swords" recovered from a peat bog in northern Honshu, Japan, dates from the late Jomon period. The limbs of the figures are intertwined in the first two staffs, as we saw with earlier examples of this motif.

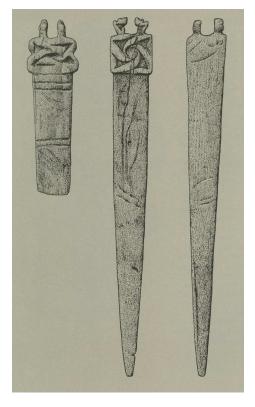


Figure 38: Staffs recovered from a peat bog, Honshu, Japan (c. 1000-250 B.C.)

Double-headed figures have a limited distribution across Central Africa which closely overlaps that of Y-posts. Figure 39, a double-headed stone sculpture from the Kissi tribe of West Africa which includes what appear to be three children.



Figure 39: Stone sculpture, Kissi, Guinea/Liberia/Sierra Leone, Africa

Figure 40 is a wooden figure from Burkina Faso.



Figure 40: Wooden figure from the Lobi, Burkina Faso

Some musical instruments from Central Africa exhibit double-headed figures.¹ One example is presented here, a finger piano from Angola (Figure 41). Many tribal peoples believed that musical sounds were the voices of ancestors, speaking to the living.



Figure 41: Finger piano, Kasayi, North Angola

^{1.} We both human and animal heads on many stringed instruments both in Asia and Europe though I know of no twoheaded examples.

Examples can be found in the New World as well, particularly in pottery. When the motif first arrived is a matter of guesswork, but wooden examples probably preceded those in more durable materials. This two-headed image was carved by an Eskimo in the 19th century (Figure 42).



Figure 42: Bone cup made from walrus tusk, Bering Strait Eskimo, Alaska

A pottery pipe-bowl from a proto-Huron site in Ontario, Canada has two heads on a single body (Figure 43).

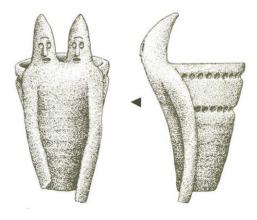


Figure 43: Pottery pipe-bowl, Proto-Huron, Benson Site, Bexeley, Ontario, Canada (c. 1540 AD).

In keeping with our earlier large-scale earthwork examples, a two-headed figure from Wisconsin is forty meters wide and nearly a meter high (Figure 44). It is one of many human and animal earthwork sculptures in the area.

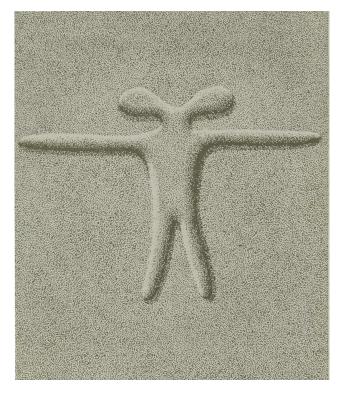


Figure 44: Prehistoric earthwork, Muscola, Grant County, Wisconsin

Surviving South American examples are mostly in pottery and stone.



Figure 45: South American two-headed figures

Number	Description
134	Pottery figurine, Valdivia Culture, Coastal Ecuador (c. 2300 B.C.)
135	Pottery figurine, Valdivia Culture, Coastal Ecuador (c. 2300 B.C.)
136	Stone figurine, Ecuador, Provenience unknown.

Some examples, like this stone image from Bolivia, have a tapering or branching body which may have its origin in wooden two-headed images made from tree limbs.



Figure 46: Stone image from Cochabamba, Bolivia The form existed in Brazil as late as the 20th century; a doll from the Caraja.



Figure 47: Painted pottery doll from the Caraja, Brazil.

Some Central American examples are made of wood, such as this modern carving from the Choco of Panama, in which the sexes are distinguished.



Figure 48: Wood carving, Choco Indians, Punta Pinas, Panama.

Mexico turns out to be a special case. In most places, a limited number of examples can be found, but in Mexico the figure was produced in great numbers in pottery over a wide area. It must have been very popular, like the images of saints we see today. Figure 49, a pottery figurine from Huasteca.

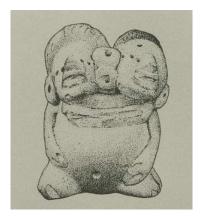


Figure 49: Pottery figurine, Huasteca, near Vera Cruz, Mexico

Figure 50, another example from the Valley of Mexico from Tlatilco dating from the 6th century B.C.



Figure 50: Pottery figurine, Valley of Mexico (c. 500 B.C.) Mexico

Edmund Carpenter believed that the multiplication of the image in such numbers suggests that the meaning was lost.

As long as double-headed figures were made of wood, and their heads were carved from branch stumps, they probably still reflected the inherent genealogical symbolism of branching. But when made of stone or pottery, there may have been a tendency to forget the symbolism ¹

In some places, the form survived along with its meaning. Figure 51, the Aztec earth-goddess, Tlaltecuhtli, whose joints are supplied with fangs to devour the dead.



Figure 51: Aztec motif from the Codex Borgia

^{1.} Schuster and Carpenter, Social Symbolism in Ancient and Tribal Art, vol. 2, bk. 1, p. 125

Y-Posts and Forked Sticks

Our working thesis is that the two-headed figures we find in durable materials were originally made of wood. It is a commonplace in many cultures to equate the branching of a tree with the social divisions generated by marriage and procreation. We ourselves express our ancestry in terms of "family trees" "branches" and "roots" and these metaphors were there in the beginning. One of the many ways of expressing these ideas was to carve human heads or faces on trees limbs or posts. Carl Schuster collected examples from many cultures and periods. I will select a few relevant examples out of many.¹

Lets begin our brief tour in the Pacific where many examples survived into modern times. Figure 52 is a Y-post from New Ireland with carved heads on the ends. These kinds of posts were incorporated into stone walls surrounding sacred places. Entry into the sacred enclosure involved stepping through the crotch of post. Captured warriors were impaled on these posts before they were eaten.



Figure 52: Forked-post, New Ireland, Papua New Guinea.

Human sacrifice has been connected with Y-posts in other locations including Easter Island, but here the two-headed figure is made from stone, perhaps because wood was scarce. "According to native information transmitted to Palmer in 1870, the cup-shaped receptacle between the two human heads [in Figure 53] was designed to receive burnt offerings of human flesh at the time of cannibal feasts."²

^{1.} See also, Mark Siegeltuch, "The Social Symbolism of Horns," in which animal horns are described as a variant of forked sticks whose symbolism is social and involves the initial branching of the tribe or group via the first Man and Woman.

^{2.} Carl Schuster and Edmund Carpenter, Social Symbolism in Ancient and Tribal Art, vol 2, bk. 1, p. 29.

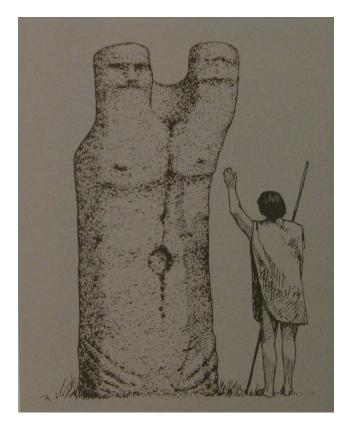


Figure 53: Two-headed "Cremation" stone, Vinapu, Easter Island

Further attestation is provided by a drawing from Buka in the northern Solomon Islands (Figure 54). According to local information, it was once customary to impale captured warriors on these posts before the victims were eaten.



Figure 54: Drawing from Buka, Solomon Islands

Forked-posts were also documented in Australia, some of them used in conjunction with cannibalism.¹ In later periods, we find that forked-posts, both large and small, are the site of animal sacrifice or of offerings of food to ancestors or gods.

A housepost from New Guinea has faces on each branch and human figures on the shaft, some of them inverted.

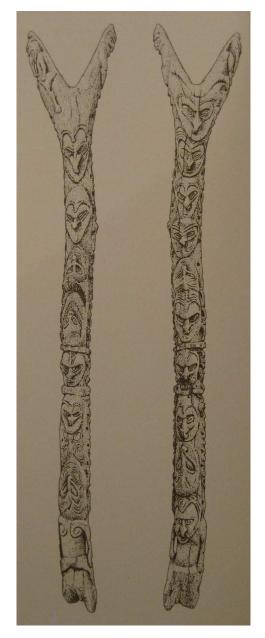


Figure 55: Housepost (back and front), Middle Sepik, Papua, New Guinea

Many examples are not figurative but exhibit the genealogical symbolism of linked human figures that Carl Schuster deciphered. Figure 56, a miniature model housepost from New Guinea is encircled by a common genealogical pattern in which the continuous lines represent connected bodies and the vertical lines spinal columns. The pattern is meant to represent the descent of generations from the original pair at the top.

^{1.} Carl Schuster and Edmund Carpenter, Social Symbolism in Ancient and Tribal Art, vol 2, bk. 1, p. 29.

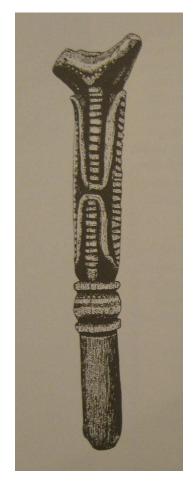


Figure 56: Miniature housepost, Sepik, New Guinea

Moving into Polynesia, we find anthropomorphic posts in Hawaii, erected in an underground ceremonial center (Figure 57).

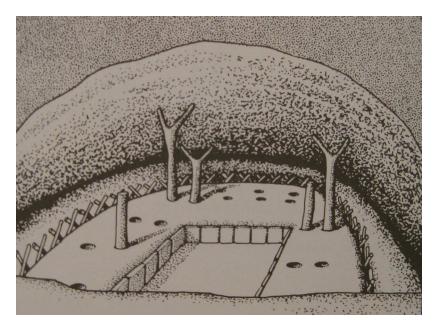


Figure 57: Y-Posts from underground ceremonial center, Hawaii

Among the Nias of Indonesia, miniature Y-sticks existed alongside Y-posts and megaliths, all associated with ancestors and often, human sacrifice (Figure 58).

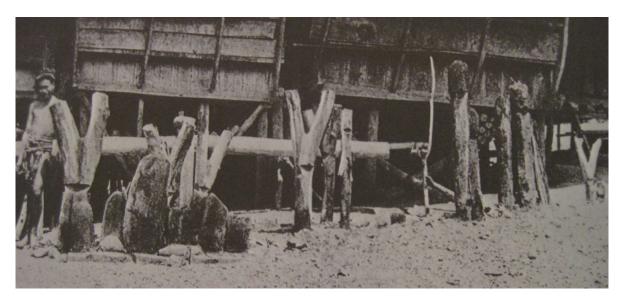


Figure 58: Nias house with ancestral figures, Indonesia.

The Y-post is also known in Siberia. Figure 59, which features two small human heads, is from the Ude of eastern Siberia. It was collected by the Russian explorer, Vladimir Arsenyev, in the 1930s, but he was not able to obtain any information about it from the residents. Perhaps they no longer knew what the symbolism meant. It was referred to as "the shaman post".¹

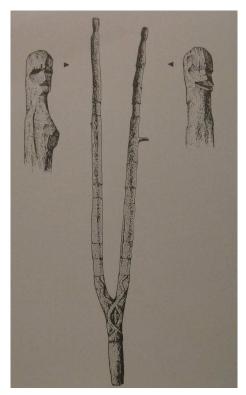


Figure 59: Forked post, Ude, Samarga River, eastern Siberia.

^{1.} Carl Schuster and Edmund Carpenter, Social Symbolism in Ancient and Tribal Art, vol 2, bk. 1, p. 57.

A shaved stick from the Ainu of Sakhalin resembles two human heads on a forked, shaved stick (Figure 60). The stick was put at the top of a tree to which a sacrificial bear was bound during the bear festival.¹ Space precludes any further discussion of shaved sticks but they share the same arboreal symbolism as many of these other art forms. Each shaving represents a generation, like the limbs of a tree.²



Figure 60: Ainu inao, Sakhalin, Russia.

Forked posts and double-head images appear as shamanic equipment among the Ostyaks, Enets (Samoyads), Koryaks and other northern peoples. An Ostyak's shaman's drum displays carved faces on each of its supporting "arms" (Figure 61). Similarly, a clothed two-headed figure described as the "spirit of the tent" was found among the Nganasan or Tavgi Samoyads on the Taimyr Peninsula in the far north of Asia (Figure 62).

^{1.} Carl Schuster and Edmund Carpenter, op. cit.., p. 59.

^{2.} See Carl Schuster, "The Ainu Inao; Some Comparative Considerations,"



Figure 61: Ostyak shaman's drum (inside), Siberia, Russia.



Figure 62: Wooden image, Nganasan, Siberia, Russia

Y-posts and two-headed figures are also found in North and South America but there are not as many examples. A Delaware housepost (Figure 63), one of twelve that lined the walls of the Big House, has a human face and a fork at the top. A pair of Lenape-Delaware drumsticks feature male and female heads (Figure 64).



Figure 63: Delaware housepost, Dewey, Oklahoma

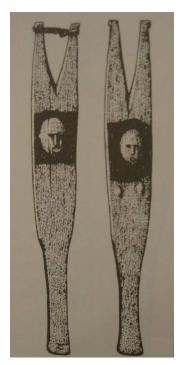


Figure 64: Drumsticks, Delaware, Oklahoma

Central and South America provide a number of examples both in wood and clay. Figure 65, an ancient Peruvian memorial post with a single head.



Figure 65: Nazca grave-post, southern Peru (c. AD 100-1300)

Another example from Peru is part of a spear-thrower, or a ritual object resembling a spear-thrower, with both a male and female head (Figure 66).



Figure 66: Bone finial of a spear-thrower, Chancay, Peru (AD 1300-1450)

In Africa, Y-posts are found primarily in West Africa but occur as far east as Ethiopia. A wealth of examples exist. The Dogon of Mali carve anthropomorphic posts with female figures (Figure 67). Many posts are segmented and notched, where each division represents a generation.

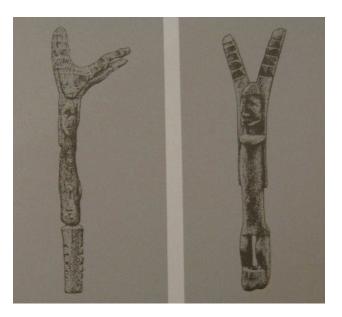


Figure 67: Dogon wooden figure (left) and "spirit ladder (right)," Mali

Many Y-posts serve as grave markers. A Moro funeral post in Sudan has both naturalistic ancestor figures in addition to two more conventionalized figures with legs, torsos and upraised arms (Figure 68).



Figure 68: Moro funeral post, Nilotic Sudan

From the Mbaye of Moissala, Chad, a photograph shows an eldest brother, at the death of his father, sitting before a shrine of miniature forked-posts (Figure 69).



Figure 69: Funeral rite with forked-posts, Sara tribe, Chad.

Other examples could be adduced from the Ivory Coast, Upper Volta, Ghana, Cameroon, Nigeria, Congo, Ethiopia and Madagascar as well as the Senegalese forked shrine discussed earlier.¹

European examples are rare probably because most wooden posts did not survive. One exception is Figure 70, three poles excavated from a Neolithic lacustrine deposit in northern Germany, dated from the 4th millennium. The center pole is single-headed and it is likely that the carver used the kink in the trunk to suggest steatopygia, as is common in many Paleolithic images. Two shorter posts flank the central one and appear to have been attached by cords to the main post. They may have represented children of what would be a clan ancestress.

The anthropologist, Edmund Carpenter, suggested that some Paleolithic objects may be miniature Y-posts, or at least, share the same symbolic purpose (Figure 71).

No satisfactory explanation has been offered to date for pierced staffs common in the Upper Paleolithic in Europe, from Aurignacian I through terminal Magdalenian. Each consists of a reindeer horn, cut & perforated at its branching, [Figure 64], Many are richly decorated. About a third have phalliform handles.

They were first called *batons de commandement*, as if they were ancient swaggersticks. But this hardly explains their form. Next, they were compared to arrowstraighteners used by 19th century Eskimos around Bering Strait. But they show little evidence of any use, least of all as spear-straighteners, though a few are broken at the hole.

I think it more likely they were ceremonial staffs, ie miniature Y-posts, like Y-posts ...from West Africa. Conceivably, the hole or round motif represented a vagina. In many ancient cultures, horns were regarded as both symbols & sources of fertility, possessing a divine potency, an outcropping of the life-substance of the head.²

^{1.} See Carl Schuster and Edmund Carpenter, Social Symbolism in Ancient and Tribal Art, vol. 2, bk. 1.

^{2.} Ibid., p. 93.

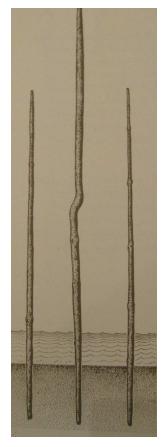


Figure 70: Three poles in lacustrine deposit, Ahrensburg, Germany (c. 4th millennium)

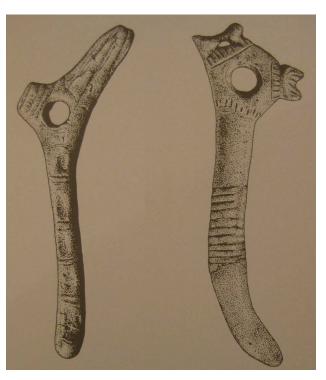


Figure 71: Pierced antler staffs, (left) Saint-Michael, France (right) Laugerie, France, Magdalenian In regard to Figure 71, the archeologist R.M Gramley writes:

It might be germane to mention that there is an idea or notion among archaeologist who specialize in the Eurasian Upper Paleolithic, that these objects functioned as handles for "arrow-slings". A cord (with a little loop at the end) was presumably knotted through the hole in the baton. The looped cord engaged the end of a javelin, and cord and javelin were stretched tight in preparation for casting the javelin at some quarry. Such arrow-slings were very tricky to use, but would have aided in propelling a javelin. An advancement in design was the regular atlatl or *propulseur* having a spur at one end for engaging the butt of a javelin. Such atlatls with spurs may have been a later development and thus post-dated use of the baton-rig.¹

Interim Summary

The depiction of crossed human figures has its origins in prehistoric times and has left traces throughout much of the inhabited world. The image relates simultaneously to the origin and structure of both the cosmos and human society. Let me summarize the evidence adduced thus far bearing in mind that it represents a fraction of what is available and that many related ideas have been omitted for the sake of brevity.

- Creation begins with a primordial couple who engage in sexual intercourse at the center of the world. (A "Big Bang" theory, if you will.)
- The primordial couple is depicted using an image of a crossed male/female whose point of intersection is the center of the world.
 - In cosmological terms, the cross represents the division of the world into four quarters.
 - In social terms, the cross represents the marriage of two opposing moieties and their subdivision into four groups.
 - Subdivision permits marriage between groups and an increase in population.
 Crossing will come to represent creation and increase in a more general sense.
- The crossing as a means of indicating marriage and increase is part of a larger system for depicting genealogical relations discovered by the American art historian, Carl Schuster. (It is not discussed in detail in this paper.)
- Divination and gaming become associated with the crossed and quartered form in later periods.
 - The center is the point at which the future can be ascertained since it comes to represent Eternity (the source and sink of time).
 - Gambling is about winning: attaining rebirth and/or the accumulation of wealth and power. Gaming pieces are called "men" or "women" in many cultures.
 - These ideas are related to the caching of incised stones or churingas or other tokens meant to represent ancestral spirits. More ancestors equal more spiritual power and protection.
- Two-headed figures and Y-posts also represent the primal couple, without the symbolism of crossing.
 - Wooden Y-posts are the older form and survived as an object of veneration and protection in many tribal societies. They were sometimes used as architectural supports.
 - The Y-post combines the symbols for the male and female genitalia.

^{1.} Personal correspondence with R M. Gramley, March 21, 2018.

The rest of this paper will have two goals: the first is to show the continuity of the basic idea of crossed figures in later thought; the second, to demonstrate that images such as these form the basis of much of later thought. As Dr. Coomaraswamy wrote, "To have lost the art of thinking in images is precisely to have lost the proper linguistic of metaphysics and to have descended to the verbal logic of "philosophy." Our commitment to the written word has been both a help and a hinderance in understanding the past where ideas were transmitted over a long period of time without the aid of writing.

Metaphysical and Mathematical Ideas

Metaphysics, as the word indicates, deals with those forces that lie behind the physical world. Its method are not empirical like science, but speculative or idealistic. The focus is on how things derive their being, rather than their manner of being.¹ In its earliest form it appears to be an interrelated set of images and attendant ideas that find later expression in the doctrines of the world's major religions. To put it another way, metaphysics is the substructure of the various religious traditions. It has been proposed by Dr. Coomaraswamy and others that this accounts for the similarity of religious doctrines despite the apparent differences in practice and emphasis which are chiefly the results of the time period and culture in which particular religions arose. As Franz Boas remarked, "The metaphysical notions of man may be reduced to a few types which are of universal distribution."² Or, in the words of Lord Raglan, "The pattern of the lives of heroes is universal."³

This metaphysical substrate is itself derived from even older prehistoric ideas, formulated without the aid of writing and which find expression in a wide variety of cultural forms we may term "traditional".

By "folklore" we mean the whole and consistent body of culture which has been handed down, not in books but by word of mouth and in practice, from time beyond the reach of historical research, in the form of legends, fairy tales, ballads, games, toys, crafts, medicine, agriculture, and other rites, and forms of social organization, especially those that we call "tribal". This is a cultural complex independent of national and even racial boundaries, and of remarkable similarity throughout the world.⁴

The relation between religion and folklore is simply the conflict between an earlier dispensation and a later one. The gods of the older religion become the devils of the new. Folklore is transmitted in the vernacular as compared to the sacred languages in which scripture is delivered and interpreted. Folklore is also less moralistic but its themes share a common source with those of religion. Jack's beanstalk is Jacob's ladder. Religion is not contaminated by folklore but uses it to express the same ideas in a more rationalized and moralized setting, just as Plato used myths to explain his philosophy.

The structure of earlier ideas is generally preserved even when the meaning is changed. In traditional cosmologies, four birds are assigned to the quarters of the universe, while a raptor guards the entrance to heaven. In Christianity, we have four angels and St. Peter. Rituals become games once their meaning is no longer understood, but they preserve traces of their origins. Dr. Schuster compared traditional forms to rocket ships. Meaning got them into orbit but they continue

There is no opposition between science and metaphysics. They are two different methods for looking at the world. Aristotle wrote: "Man and the Sun generate man" (*Physics* 11.2) combining both outlooks. He distinguished mediate causes (science) from First and Final Causes. From the Greeks onward, there was a good deal of confusion about the proper boundary between these two disciplines. Kepler and Newton were still wrestling with these problems. A concept like "aither," which is metaphysical in origin, was part of science until the Michelson-Morley experiments in the late 19th century. See E.A. Burt, *The Metaphysical Foundations of Modern Science*.

^{2.} Franz Boas, The Mind of Primitive Man, p. 156, New York, (1927),

^{3.} Lord Raglan, The Hero, London (1936,

^{4.} A.K. Coomaraswamy, "Primitive Mentality," in Selected Papers, vol. 1, p. 286.

to circulate once the fuel is spent. A comparative analysis, if pursued with some rigor, can reconstruct the meaning.

Metaphysics is a complex subject and it would be beyond the focus of this paper to build up a systematic account of the basic beliefs. I will concentrate on those ideas that appear to have an origin in the images we are discussing.

We begin with unity, whether of the Godhead or of the cosmos in its initial, unformed state. The dualities that emerges upon creation are believed to remain unified at their source.¹ Creation requires duality in order to exist. Creation can be seen both historically, as an event, or as an ongoing, behind-the-scenes process.² The physical creation of the world can be a repetitive or cyclic process as in Hinduism or Buddhism or a one-time event as in Judaism or Christianity though there are traces of the cyclic idea in Genesis.

Duality is expressed by the counterbalanced forces that make up the visible world: earth/sky, day/ night, male/female, up/down, etc. In the older traditions the earth is separated from the sky by a pillar. Without this separation, no ongoing generation would be possible as Thomas Aquinas wrote (see the epigraph of this paper.)

Temporal events, which come into being and pass away, are distinguished from the Eternal, which is their source and sink. The ever-present "now" generates both the past and future just as the moving earth creates the impression that the sun is moving through the sky. This is why creation can be described simultaneously as within time (historical) and outside of it (principial). This idea is probably the hardest for modern people to understand but it is crucial to understanding traditional modes of expression. The "once upon a time" of folklore is also "once upon all time". Stories favor the historical but the underlying notion is that these things have always been so, like a proverb.

Two factors support this outlook. Ancient and tribal languages possess timeless tenses which render these ideas more intelligible. Secondly, traditional societies look to the past, not the future, and they are surrounded by art forms that they believe were there in the beginning. They live in the presence of the past, a living past. This is the basic definition of a primitive society; one that believes in an Edenic state and strives to return to it. We look to the future and have a sense of history, sequence, and development, largely lacking or devalued in oral and manuscript societies. When writing appears, these older ideas are simply abstracted and internalized as personal rather than social desideratum. As such, they remain embedded in metaphysical and religious doctrine.

Creation from Contraries

The model for creation is the crossed male and female. Creation legends tell us that these two figures came from a single source, God or the First One (ancestor). Crossing connotes sexual relations between individuals as well as between the groups that make up the society.³ The primordial couple are the source of the group and their crossing generates a fourfold social order. The social order is mapped onto the cosmos as the cardinal directions. The center is the point of origin and becomes a fixture in ritual as the place to put oneself to get in touch with the Eternal.

^{1.} The coincidence of opposites in Nicholas of Cusa's *De Visione Dei* provide an example. In folklore, the entrance to Heaven is protected by these dualities (clashing doors, flaming swords, Scylla and Charybdis, the jaws of death, etc.). See Coomaraswamy, "Symplegades," in *Selected Papers*, vol. 1, p. 521-544.

^{2.} The "in the beginning" of John 1:1 (L. *in principio*, Gr. *en arche*) is not only a beginning in the historical sense but more importantly, a "principle," something that is always true. History is seen as the unfolding of the possibilities inherent in the Eternal.

^{3.} This may be the origin of the concept of gender. Sex is about physical characterization, gender about the group an individual belongs to. The male gender is your father's group, the female, your mother's group. Both groups contain men and women. Gender is a classification system.

The center is where the axis mundi penetrates the three world and can be represented by a tree, pillar, post, upright stone, ladder, mountain, or beam of Heavenly light.¹

Another variation on this symbolism can be found in the fire drill. The Chukchee and Koryak of Siberia drilled into a board carved in the likeness of the First Ancestor. They believed the creation of the world and the tribe had its origin in a sexual act performed at the base of the axis mundi, the center or navel of the world.

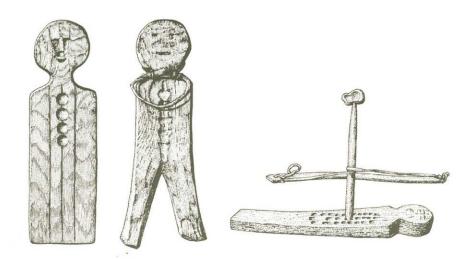


Figure 72: Maritime Koryak fire drill and boards

The Delaware Indians of Oklahoma believed that drilling on the body of First One called forth via the Cosmic Pole, a sacred element from the other world.² In many cultures, the act of creating fire was likened to sexual intercourse. In the Vedic rite of fire making, two sticks (*arani*) designated male (*uttarani*) and female (*adharani*) are employed. The vertical male stick is inserted into a notch on the horizontal female stick and rotated to produce fire. The ancient Greeks had a similar practice involving sacred fire sticks and attributed the invention of fire making to Hermes, the messenger god and bearer of souls (*psychopomp*).

The symbolism connected with looms and weaving provides another example of how the crossing of the male and female figures was employed in later periods as a metaphor within the sacred writings of the world's major religions. René Guénon investigated this matter within the Hindu, Islamic, Buddhist and Taoist traditions.³ He noted the close relationship between sacred books (texts) and cloth (textiles). The Indian sacred books are composed of *sutras* (threads) and the same may be said for the Koran where the Arabic word *sûrat* refers to the chapters. A book is formed of threads in the same way a cloth is. These ideas derive from a more ancient tradition in which knotted cords were used for mnemonic purposes.

Continuing the analogy, the Chinese associate the warp threads (*king*) with a fundamental text and the weft (*wei*) with the commentaries on it. In Hindu terminology the *shruti* or fruit of direct inspiration is associated with the warp and the *smriti*, the product of reflection and commentary on the text, is associated with the weft. More generally, the warp threads represent the divine,

^{1.} Note that the word "beam" refers to both wood and light. If you burn wood, you get light. Hence, the burning bush in which God's presence is revealed.

^{2.} See Carl Schuster and Edmund Carpenter, Social Symbolism in Ancient and Tribal Art, vol 3, bk. 1, p. 74.

^{3.} See "The Symbolism of Weaving" in *Symbolism of the Cross*. This book provides many examples supporting the thesis of this paper.

immutable element and the weft threads the human and contingent. It is the coming and going of the shuttle that makes possible the application of eternal principles to given conditions.

The symbolism of weaving is also used to represent the world, or more precisely, the aggregate of all the worlds, that is, the indefinite multitude of the states or degrees that constitute universal Existence.¹

What begins as an ideal pattern unextended in time and space, becomes fabric by the actions of the weaver, who creates a reflection of the divine prototype. Weaving, like all the traditional arts, has both a spiritual and material component and represents the re-creation of things as they were in the beginning.

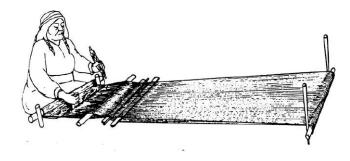


Figure 73: Horizontal loom

The intersection of a warp thread with a woof thread forms a cross, representing the juncture of the Universal Spirit—which links all possible states of being—with a particular state of existence. Each human existence results from the intersection of these two threads.

The warp thread also represents the active or masculine principle (*Purusha* in the Hindu tradition) while the weft represents the passive or feminine (*Prakriti*). Or astronomically, the warp threads may be conceived as solar (direct) light and the weft lunar (reflected) light. In either case, what is stressed is creation from complementary or opposing forces.

Mathematics

One interesting application of the symbolism of crossed figures is found in the field of number theory, formulated in ancient times and bequeathed to the Middle Ages through the quadrivium.

By definition the square is four equal straight lines joined at right angles. But a more important definition is that the square is the fact that any number [sic], when multiplied by itself, becomes a square. Multiplication is symbolized by a cross, and this graphic symbol itself is an accurate definition of multiplication. When we cross a vertical with a horizontal giving these line-movements equal units of length, say 4 for example, we say that this crossing generates a square surface: a tangible, measurable entity coming into existence as a result of crossing. The principle can be transferred symbolically to the crossing of any contraries such as the crossing of a warp and weft which gives birth to the individual being, or the crossing of a warp and weft which gives birth to a cloth surface, or the crossing of matter and spirit which gives birth to life itself. So the crossing is an action-principle which the square perfectly represents.²

^{1.} Ibid., p. 67.

^{2.} Robert Lawlor, Sacred Geometry, p. 24.

It is of some interest that the symbol used to denote addition and one of the symbols used to denote multiplication are both crosses. We lack any historical evidence which would explain why these symbols were chosen but the evidence produced thus far in this paper would suggest one. The plus sign was first used, as far as we know, in medieval manuscripts, as an abbreviation for the Latin word *et* (and). It is a conjunction, or joining of two words or numbers. The multiplication sign "x" was first used by the English mathematician, William Oughtred (1574-1660). He does not tell us why he chose it.

The mathematician and historian of math, Abraham Seidenberg (1916-1988), provides more evidence in his article, "The Ritual Origins of Counting."¹ He begins with by positing that Base 2 is the original system for counting and that other methods were derived from it. In this binary system we start with 1 and 2 and derive the other numerals from combinations of these numbers:

1 2 2+1 2+2 2+2+1 etc.

Such a system was once found in tribal societies in Australia (Gumulgal), South America (Bakari) and South Africa (Bushman). He continues: "There is epigraphical evidence from Sumeria showing that the 2-system was known there in 3000 B.C.² In the same regard, Carl Menninger writes, "In the Sumerian number sequence, "one" and "two" have the meaning "man" and "woman," respectively."³ Without entering into the complex problem of the origin of counting there is clearly a pattern here related to the notion of First Man and First Woman. Seidenberg continues with a discussion of some of the Pythagorean ideas about numbers. Those of interest here are:

- One is God.
- One is both odd and even.
- Odd numbers are male, even numbers female.

This looks like a numeric version of the metaphysical principles we discussed earlier. In fact, the division of numbers into odd and even was known to the Egyptians, Babylonians, Indians, Chinese and Incas, and is found in Africa Sumatra, the Philippines, Polynesia and North America.⁴ Seidenberg goes on to provide evidence for counting rituals that proceeded by chanting the numbers of male and female participants alternately. Procession by couples is familiar to us from the Bible: "There went in two and two unto Noah into the ark, the male and the female, as God commanded Noah." The numbering is a calling into existence by the creative word of God (*logos*). Creation itself is a kind of counting.⁵ Without addressing Seidenberg's central assertion that counting began as a ritual activity, it is clear that the image of crossed figures is the first evidence we have of these ideas, numerical or otherwise. The symbolism appears to be both social and cosmological and contains both implicitly and explicitly, the general ideas of creation, multiplication, and increase as reflected in the act of sexual intercourse.

^{1.} In Archive for History of Exact Sciences, vol. 2, no. 1, pp. 1-40, (1962),

^{2.} Seidenberg, ibid., p. 3.

^{3.} Karl Menninger, Number Words and Number Symbols, p. 13.

^{4.} Seidenberg, op. cit., p. 9

^{5.} In some cultures, children are given number names. For example, the Roman Primo, Secundo, Quintus, etc. Ibid., p. 25.

Final Thoughts

This paper has concerned itself with the history of a single image, the figure of a crossed male and female, which has carried a number of related meanings through time and space. The fact that art should concern itself with the transmission of ideas and not emotions is what separates ancient and

tribal art forms, which are largely anonymous, from the post-Renaissance art of the West.¹ It has been more common in the 19th and early 20th centuries to consider images from an aesthetic or psychological point of view. While this approach may have some value for the appreciation and/or understanding of modern literature, cinema, or advertising, it obscures the essential role that images served for our ancestors in transmitting ideas. As Dr. Coomaraswamy wrote:

An adequate knowledge of theology and cosmology is then indispensible to an understanding of the history of art, insofar as the actual shapes and structures of works of art are determined by their real content. Christian art, for example, begins with the representation of deity by abstract symbols, which may be geometrical, vegetable, or theriomorphic, and are devoid of any sentimental appeal whatever. An anthropomorphic symbol follows, but this is still a form and not a figuration; not made as though to function biologically or as if to illustrate a text book of anatomy or dramatic expression. Still later, the form is sentimentalised; the features of the crucified are made to exhibit human suffering, the type is completely humanised, and where we began with the shape of humanity as an analogical representation of the idea of God, we end with the portrait of the artist's mistress posing as the Madonna and a representation of an all-too-human baby; the Christ is no longer a man-God, but the sort of man we can approve of.²

It follows from these considerations that traditional art is a primary means for determining what people believed in the earliest times since the tradition has been continuous across cultures and time periods. Our academic categories hide this continuity. The comparative method is as valid in art and religion as it is in linguistics where it has enjoyed some success. It would appear that a basic set of beliefs was transmitted down through time that formed a substructure for later thinking and development. This shouldn't surprise us since nothing will come from nothing, and people don't invent themselves. They have a history. Too much has been made of borrowing when the real clue is the common underlying inheritance the diverse cultures share. People are the real transmitters of culture, mother to daughter and father to son. We can study traditional imagery to avoid the trap of seeing history as the exclusive domain of written evidence.

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^{1.} Modern and post-modern art has reversed this tendency and is more concerned with perception and ideas though aesthetic considerations are not entirely absent, depending on the artist.

^{2.} A. K. Coomaraswamy, Christian and Oriental Philosophy of Art, p. 45.

Bibliography

Bell, R. C. Board and Table Games from Many Civilizations. Dover Publications, New York (1979).

Burt, E. A. The Metaphysical Foundations of Modern Science, Dover Publications, New York (2003).

Coomaraswamy, Ananda K. Coomaraswamy. *Selected Papers/His Life and Work*, three vols. Edited by Roger Lipsey. Princeton, N.J., Princeton University Press, 1977. Bollingen Series, Vol. LXXXIX.

_____. Christian and Oriental Philosophy of Art. Dover Press, New York (1956),

_____. *Yaksas: Essays in the Water Cosmology*. Edited by Paul Schroeder. Indira Gandhi Centre for the Arts, New Delhi. Oxford University Press (1993).

Hourihane, Colum. *Time in the Medieval World. Occupations of the Months and Signs of the Zodiac in the Index of Christian Art.* Pennylvania State University Press, 2007.

Lawlor, Robert. Sacred Geometry. London, Thames and Hudson, 1992.

Lindblom, G. "Thread-crosses (Fadenkreuze), particularly in South America and Africa." Ethnos, vol. 5, nos. 3-4. (July-December, 1940).

Menninger, Karl. Number Words and Number Symbols. New York, Dover Publications (1992).

Potts, Albert. The World's Eye. The University of Kentucky Press, Lexington (1982).

Schuster, Carl. "Joint Marks: A Possible Index of Cultural Contact Between America, Oceania, and the Far East." Koninklijk Instituut Voor de Tropen, Amsterdam, 1951.

_____. "A Survival of the Eurasiatic Animal Style in Modern Alaskan Eskimo Art." *Indian Tribes of Aboriginal America*, edited by Sol Tax, pp. 35-45, University of Chicago Press, 1952.

_____. "The Ainu Inao; Some Comparative Considerations," Proceedings, VIIIth Congress of Anthropological and Ethnological Sciences, Tokyo and Kyoto, Science Council of Japan (1968), pp. 86–98.

Schuster, Carl and Carpenter, Edmund. *Materials for the Study of Social Symbolism in Ancient and Tribal Art*, three vols. New York, Rock Foundation, 1986-1988.

_____. Patterns That Connect. New York, Harry N. Abrams, Inc., 1996.

Seidenberg, Abraham. "The Ritual Origins of Counting." Archive for History of Exact Sciences, vol. 2, no. 1, pp. 1-40, (1962),

Siegeltuch, Mark. The Thread-Spirit. The Symbolism of Knotting, Weaving and Spinning. Fons Vitae Press, Louisville, Kentucky (2010).

_____. "The Social Symbolism of Horns" (2017). Posted on Academia.edu.

Steinberg, Leo. "Michelangelo's Florentine Pieta: The Missing Leg," Art Bulletin, vol. 50, no. 4.

_____. "The Sexuality of Christ in Renaissance Art and In Modern Oblivion." October 25 (1983). MIT Press.

Voorhoeve, P. *Catalogue of Indonesian Manuscripts. Part 1: Batak Manuscripts.* With a contribution by Carl Schuster. The *Royal Library, Copenhagen, 1975.*