From seed to Tree

Prologue.

This small book is the product of my research into the symbolism of the Sacred Tree in ancient mythology, most often referred to as the Tree of Life. After reading and researching as much as I could find on the subject, which I must say is rather limited, I realised that there were many threads of information here that would only make sense if brought together and studied as a whole. The more I brought together these diverse strands the clearer the whole subject became, as apparently separate cultural traditions started to blur into one whole coherent picture. This is a work in progress and I am still adding new information as it comes up and widening my search to include other cultures such as ancient India, China and South America.

What I have discovered is, as far as I can tell, ground breaking in some respects. Although much of it is simply a compendium of all that I could find on the subject there are parts where these comparisons reveal new information and some startling conclusions.
If you are familiar with the Tree of life from kaballah or if you are interested in the ancient Near East, Babylonian and Sumer then there will be some surprises for you, as there were for me.

I am not an academic, although I have made my self familiar with the literature available on the subject and even had the hubris to question some of it. The validity of my claims and discoveries I will leave up to the reader to decide.
This work brings together sacred geometry, ancient mythology, archeology and esoteric mysticism. It is not for everybody but those interested in these subjects will find themselves enriched with a clearer picture of how thousands of years ago civilisation was arranged around a single coherent symbolic theme, that of the Sacred Tree.

Most of what goes into this book came from the word wide web, from people who are also fascinated by these subjects. They gave this information away for free and so what I have taken I am giving back. Please feel free to share.

Jake Baddeley
The Hague September 2024

Chapter 1.
The Cosmic Egg

Underneath the local colour and cultural preferences a consistent theme can be found in the worlds creation myths. Particularly those myths of the worlds great civilisations tell a surprisingly similar story. This is the myth of the cosmic egg. Spread far and wide throughout the ancient world this story tells of the earliest beginnings of the creation. It is a story about the origin of the universe and the origin of life.

In the beginning was the void.

Hesiod— Creation

In the beginning there was only Chaos, an empty void. But somehow this enormous vacancy gave birth to Gaea, the earth, to Tartarus, the great region beneath the earth, and to Eros, the shining god of love and attraction. …
…Gaea, without help, gave birth to Uranus, the starry sky, to the Mountains, and to Pontus, the sterile sea. Uranus then became Gaea's mate and equal, for he covered her on all sides.

This primordial couple, sky and earth, produced the twelve Titans, the three towering wheel-eyed Cyclopes, and the three terrible Hecatoncheires with fifty heads and a hundred arms apiece.

Ovid in his metamorphosis describes it like this :

“for all the land was mixed with sea and air. The land was soft, the sea unfit to sail, the atmosphere opaque, to naught was given a proper form, in everything was strife, and all was mingled in a seething mass — with hot the cold parts strove, and wet with dry and soft with hard, and weight with empty void”.

For many of these cultures the void was known as the cosmic egg.
In Indian myth according to the Brahmanda Purana, the Shiva lingam was originally egg-shaped, representing the universe. It is called Brahmanda, the cosmic egg (Brahman is Sanskrit for ‘cosmos’ or ‘expansion’ and anda means ‘egg’). The Upanishads tells us that Hiranyagarbha (हिरण्यगर्भ) which literally means "golden foetus" or "golden womb" floated in emptiness and then broke into two halves which formed Heaven and Earth.
A variation of this is preserved by the worshipers of Vishnu, where the cosmic egg emerges from the world ocean at the beginning of the ever-recurring cycle of creation as a result of the friction produced by wind and water. The Puranas include fire here to complete the

elements. Vishnu then enters the cosmic egg and, after a period of quiescence, the god Brahma is born from its navel.
Notice that here at the root of creation we find the four elements, a common tradition with in these varying myths and the structural matrix upon which creation was built.

'The laws of Manu' one of the oldest sacred Indian text's found in the Vedas contain a similar story;

8. He, desiring to produce beings of many kinds from his own body, first with a thought created the waters, and placed his seed in them.
9. That (seed) became a golden egg, in brilliancy equal to the sun; in that (egg) he himself was born as Brahman, the progenitor of the whole world.
….
12. The divine one resided in that egg during a whole year, then he himself by his thought (alone) divided it into two halves;
13. And out of those two halves he formed heaven and earth, between them the middle sphere, the eight points of the horizon, and the eternal abode of the waters.

In this description we have a seed that is planted in the waters of chaos, a moment of conception. There is a period of gestation as the seed grows into an egg, then a splitting, a division from which is born the cosmos in the form of earth and sky. The metaphors used are both biological as well as cosmic.
The result of this description is a cosmic map with the sky above, the earth below divided into the 'eight points of the horizon, and with the eternal abode of the waters' in the middle. We will see that this is mirrored almost perfectly by the Sumerian creation myth, both of which will be seen to serve as tools for navigation and orientation.

According to Samuel Kramer, an early expert on the Sumerians, although the recovered writings of the Sumerians are large, early Sumerian founding myths are very rare and have to be deduced from the available fragments. Kramer helps us sum up this fragmented cosmology into the following (Amended);

First was the goddess Nammu, the primeval sea personified.
The goddess Nammu gave birth to An, the male heaven-god, and Ki, the earth-goddess.
The union of An and Ki produced the air-god Enlil, who proceeded to separate the heaven-father An from the earth-mother Ki.
Enlil, the air-god, …begot the moon-god Nanna to brighten the darkness of his house.
The moon-god Nanna in turn begot the sun-god Utu, who became brighter than his father.
Enlil, the air-god, now unites with his mother Ki, the earth-goddess. It is from this union but with considerable help from Enki, the water-god, that the vegetable and animal life is produced on earth.

The details of this creation myth were different from region to region and period to period but the general themes remain the same. The Sumerian creation myth is a genealogy of the gods and the order of the heavenly bodies of the universe, both chronologically as well as in order of spiritual power. Here too heaven and earth and the planetary bodies emerge from the waters of chaos or the primeval sea. Again we have both reproductive growth mixed with the creation of cosmic order.

The same theme of the cosmic egg appears also in Chinese mythology. A common creation myth in China tells of P'an-Ku who emerged from the cosmic egg.

In the beginning, there was nothing in the universe except a formless chaos. This chaos coalesced into a cosmic egg for about 18,000 years. Within it, the perfectly opposed principles of Yin and Yang became balanced, and P'an-Ku emerged (or woke up) from the egg. P'an-Ku or Pangu began creating the world: he separated Yin from Yang with a swing of his giant axe, creating the Earth and the Sky. To keep them separated, Pangu stood between them and pushed up the Sky. Pangu is aided in this task by the four most prominent beasts, namely the Turtle, the Qilin, the Phoenix, and the Dragon.

The Chinese included the elements too in this creation myth, as the Turtle, the Qilin, the Phoenix, and the Dragon are symbolically linked with the four elements. This is a feature of the myth that is always present.

A comparable account can be found in West Africa. Here too we find a creation myth describing the cosmic egg. The Encyclopaedia Britannica put it this way:

Perhaps the first important creation of the Dogon god Amma was the unformed universe, a body that is said to have held all of the potential seeds or signs of future existence. The Dogon refer to this body as Amma's Egg… According to Dogon myth, some undefined impulse caused this egg to open, allowing it to release a whirlwind that spun silently and scattered its contents in all directions, ultimately forming all of the spiralling galaxies of stars and planets.
Amma is also credited with having created life on Earth. …..Amma's divine seed successfully entered and fertilized the womb of Earth and eventually produced the primordial divine twins, the Nommo.

The Dogon say that the first eight Ancestors were called the Nommo, and were described as amphibious beings with the head of a man and the tail of a fish. The Nommos are referred to as "Masters of the Water", "the Monitors", and "the Teachers".

In the Dogon myth the creation deity Amma, begins the act of creation by placing two embryonic sets of twins in an egg. In each set of twins is a male and female. Oddly enough this is indeed the first stage of the growth of the cell, as the cell firstly creates twin copies of the chromosomes before splitting into two.

A summery of the Pelasgian creation myth of Ancient Greek origin reveals a comparable structure. The male and female principles emerge from the void and come together. The elements sky, wind and water are created, presumably by the goddess of the earth. After this the planetary gods are created and finally man.

Eurynome, the goddess of all creation, arose from Chaos and separated the sea from the sky. Then, dancing naked upon the waves, she created the wind and rubbed it in her hands to create the serpent Ophion, who made love to her. Pregnant, Eurynome became a dove and laid the World Egg, and Ophion coiled about the Egg and hatched it. This Egg brought forth the cosmos and everything in it. Then Eurynome and Ophion settled on Olympus, but their union was unhappy. When Ophion proclaimed himself the Creator, Eurynome banished him to the netherworld. Finally Eurynome established the seven planets, each with a Titan and Titaness to rule it. When man appeared he sprang from the soil, and the first man, Pelasgus, taught the others to eat acorns, build huts, and make a rude garment.

The Orphic egg in the ancient Greek Orphic tradition is the cosmic egg from which hatched the primordial Protogonus or Phanes who in turn created the other gods. The cosmic egg is often depicted with a serpent wound around it.

These examples should serve to illustrate the wide variety of cultures that expound what is in essence the same myth. They all describe the beginning of the universe in terms of the Cosmic Egg. From the void comes the egg, from the egg come heaven and earth, from these come wind and water and eventually life. We see also that the four elements have their place at the root of mythic creation. We are presented with a metaphor for both a cosmic expansion as well as the dividing and growing process's of life. We hear of womb, foetus, egg and seed. Many of these myths continue after these opening themes with the creation of man and eventually the creation of civilisation. Everything in its right order.
Next to this we hear of more cosmic themes of the creation of sky, earth and the planets elements. Modern cosmology describes the beginning of the universe in very similar terms, it too talks of an expansive event that we know as the "Big bang" where everything in the universe originated from an original seed event. Modern science would also agree that all biological life starts in a similar fashion from a small centre that we call the egg cell. These myths appear to follow the same thinking but wrap up both the macrocosm and the microcosm into one interwoven story.

Ancient Egypt is no exception. There are four different creation myths that originated from the four major ancient Egyptian cities: Heliopolis, Hermopolis, Memphis, and Thebes, each centred on their specific patron god. They succeeded each other through time but they also complimented each other, as they all are variations upon the myth of the Cosmic Egg a substitute for the primeval waters or the primeval mound.
Heliopolis was originally called An, Anu, Junu, Iunu the same name as the Sumerian primary god An. Heliopolis means the city of the sun and was centred around Atum and the nine highest gods called the Enead.

Heliopolis creation myth, (c.3100BC)

In this version of creation, the focus was upon a group of deities referred to as the Great Ennead. This "group of nine" consisted of the sun god, in his form as Atum, and a series of eight descendants. Notice that here again the elements play a decisive role.
Atum already existed in the primordial waters (sometimes said to have been "in his egg") and emerged alone to initiate creation. Atum was said to be "he who came into being by himself"and he then created his first two descendants, Shu (air) and Tefnut (moisture) from his bodily fluids. Shu and Tefnut then created the next pair of gods, Geb (earth) and Nut (sky), Geb and Nut then proceeded to produce four more beings, two male and two female: Osiris, who, continuing the theme, was the god of fertility and regeneration; Isis, who was the goddess of motherhood; Set (or Seth), who was the god of war and chaos and death and Nephthys, who was the goddess of the underworld and death, the counterpart of Set.

Hermopolitan myth

According to this version the goddess Naunet and the god Nu, the personifications of the inert primordial waters were the primal deities. The second divine couple were Kek and Kauket who represented the darkness within this primordial waters. Then there were Huh and Hauhet, the gods of the water's infinite extent. Lastly, Amun and Amaunet, the gods of the unknowable and hidden nature of the world. From the primeval waters are created four pairs of male and female deities known as the Ogdoad ("group of eight") who represented elements of the pre-creation cosmos. Often represented with the heads of frogs and snakes, these being associated with the primeval flood. These beings were viewed as inert, containing the potential of creation but only "activated" when a mound of earth emerged from the primordial waters and from this a lotus blossom grew opened, and revealed the newborn sun god, which brought light to the cosmos and initiated creation.

In this reiteration of the Cosmic egg myth the emphasis is on the Primeval Waters, the void from which all came. It is not is conflict with the other myths -simply a shift of focus.

Thebes creation myth

Theban theology claimed that Amun was not merely a member of the Ogdoad, but the hidden force behind all things. There is a conflation of all notions of creation into the personality of Amun, a synthesis which emphasizes how Amun transcends all other deities in his being "beyond the sky and deeper than the underworld". One Theban myth likened Amun's act of creation to the call of a goose, which broke the stillness of the primeval waters and caused the Ogdoad and Ennead to form. Amun was separate from the world, his true nature was concealed even from the other gods. At the same time, however, because he was the ultimate source of creation, all the gods, including the other creators, were merely aspects of Amun.

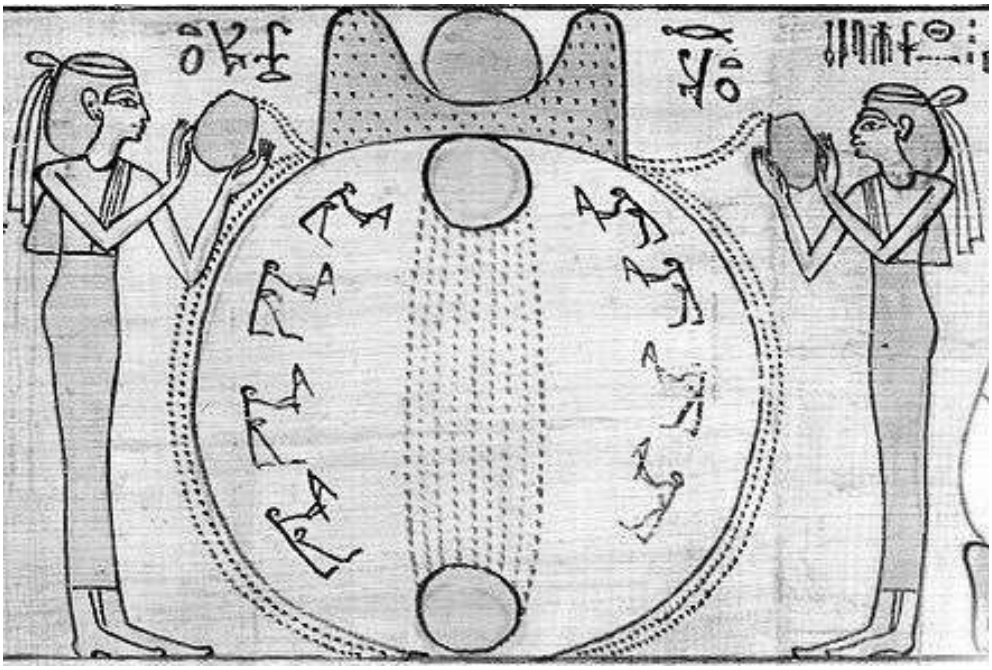
The emphasis here is not upon the feminine “Void” but the “male” spark that stirs the void into creation. As both are deemed necessary for creation to unfold.

Memphis

The Memphite version of creation centered on Ptah who was the patron god of craftsmen. As such, he represented the craftsman's ability to envision a finished product, and shape raw materials to create that product. The Memphite theology said that Ptah similarly created the world. This, unlike the other Egyptian creations, was not a physical but an intellectual creation by the Word and the Mind of God. The idea of the world formed inside of Ptah’s heart and was then brought into reality when he spoke the world out one word or name at a time. It was by speaking that Ptah created all other gods, humanity, and the Earth.

The microcosmic egg

All these various myths are centred around the idea of a cosmic birth, they continue the metaphor of union and division used to express how the material world became manifested. If we continue to think in terms of the metaphor of union, division and generation we begin to see another layer of meaning in some of the mythic images of creation.



The sun rises from the mound of creation at the beginning of time. The central circle represents the mound, and the three orange circles are the sun in different stages of its rising. At the top is the "horizon" hieroglyph with the sun appearing atop it. At either side are the goddesses of the north and south, pouring out the waters that surround the mound. The eight stick figures are the gods of the Ogdoad, hoeing the soil.

The above text is from Wikipedia and is describing this image from the Egyptian book of the dead of Khensumose shown above. It makes sense on a cosmic level. It is the Cosmic egg, the creation of the universe, it is the rising of the first sun over the primeval mound.

If we now shift levels and look at it as the beginning of life it also makes sense. It is now the cosmic egg but in a different sense. It has become the seed, the ovum. We have moved from the macrocosm to the microcosm.
In order to understand this metaphor we must first understand roughly the process of how a cell grows and the changes it goes through in order to do this. Only then will we see how accurate this metaphor really is.

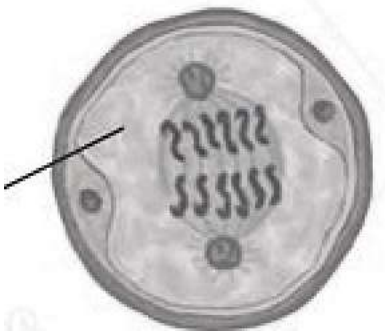
In most, if not all forms of life after the cell is fertilised it starts to divide its self into two. In order to do this it must first divide it's chromosomes. This is called mitosis.

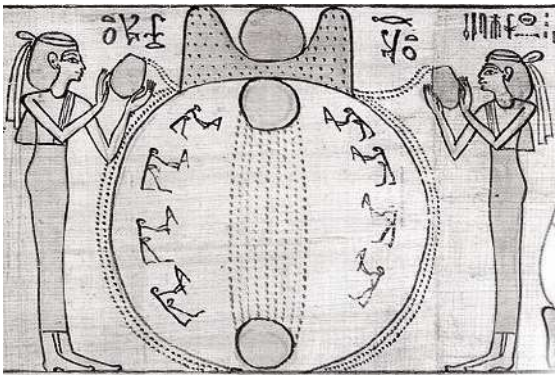
Mitosis is initiated by parts of the cell called centrioles. These move to the opposite ends of the cell and emit strands of protein that allow the chromosomes to migrate towards them, resulting into two identical sets in two nuclei. After this is complete the cell can divide into two separate copies.

Seen in this way the diagram of the cosmic egg takes on another meaning.

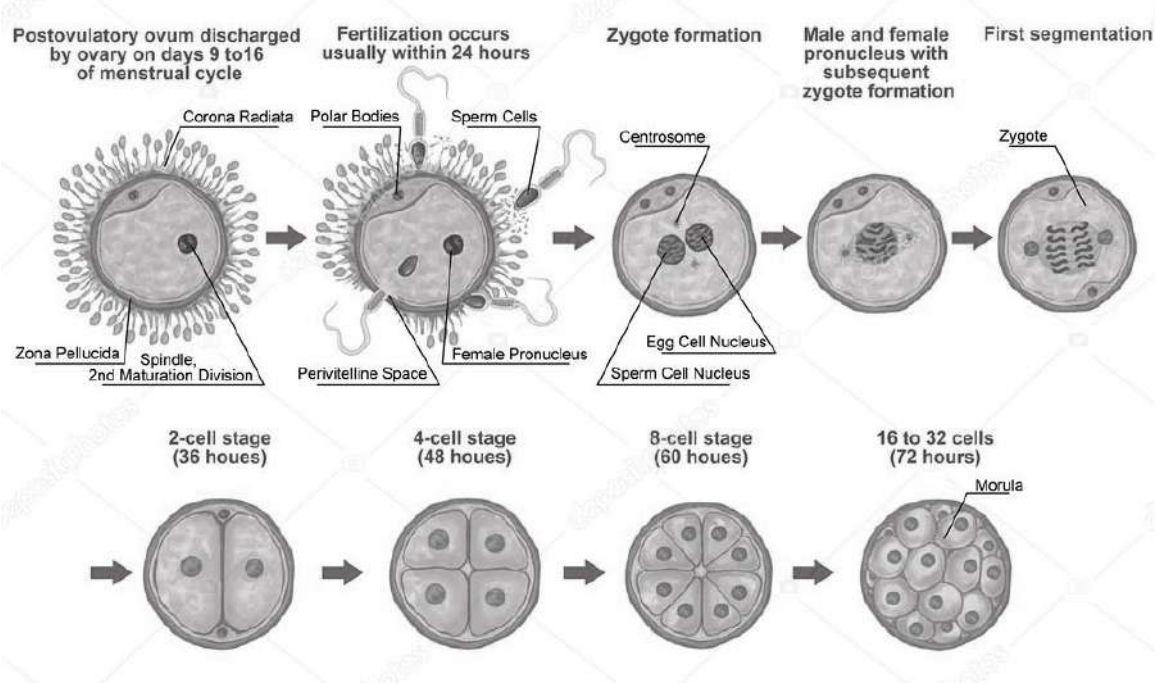
Nourished by the waters of the cosmic ocean, (the womb) the first cell of life starts to divide. Within the primeval waters of the unformed void the 'centriole' look just like little suns as they rise and set over the the primeval mound, in this case the first cell. The chromosomes are now bundled into two groups of four representing the eight Ogdoad, the Ancestors- literally. The hoes they are holding are the v shaped chromosomes when split in half. The result of this process is that the cell splits into two, producing eventually I suppose, the domes of the earth and sky, and eventually you and me. In reality the amount of chromosomes is not eight though. This is a purely diagrammatic representation as the amount can change according to what form of life is dividing.

Compare this to the illustration below that describes this process in a modern diagrammatic form.



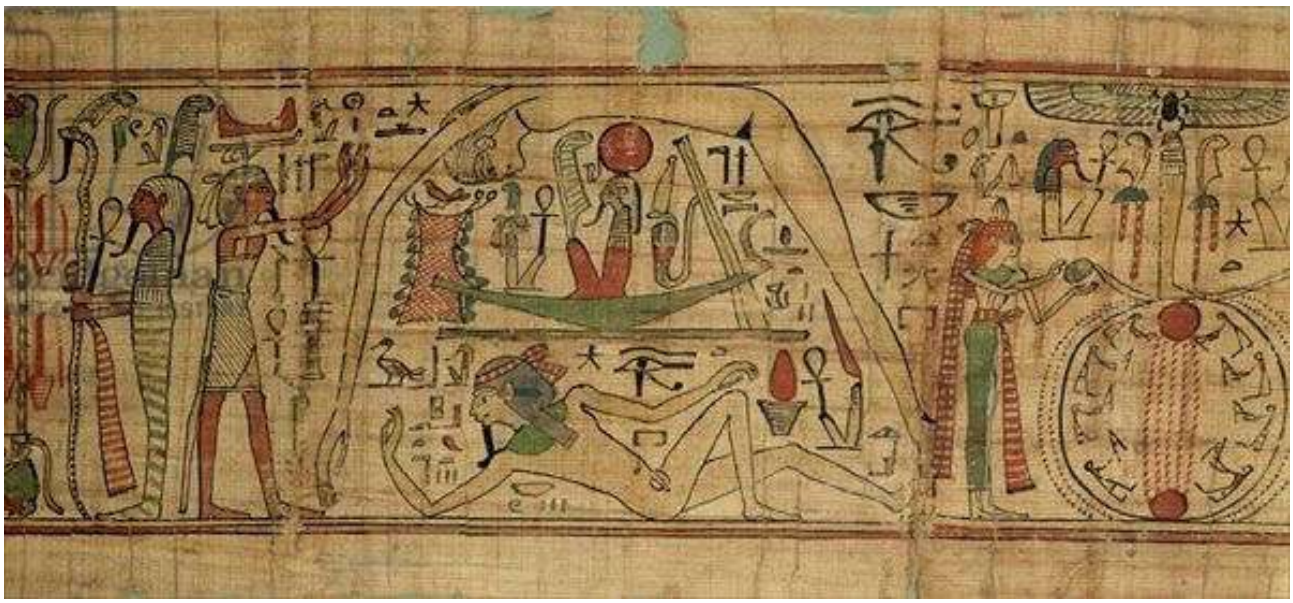


Above. The anaphase of mitosis showing the chromosomes being pulled apart. Right, an image from the Egyptian book of the dead of the sun rising over the primeval mound.



If we glance at the diagram above we can see the context in which this takes place. We see that after this phase of division of the chromosomes, the cell splits into two. We might

expect then for the Egyptian myth to place this event next as well, if the two are indeed comparable.



We can see from another example the “The creation of the world” as depicted on the papyrus of Nespakashuty, This is part of a series of events describing the creation and separation of earth from sky according to the Heliopolitan myth.

According to the Louvre website, this image;

….illustrates the mythological episode of the separation of heaven and earth. We see the sky goddess Nut, represented as a naked woman whose body arches above that of her husband, the Earth god Geb, who is lying on the ground. …. This mythological scene evokes the creation of the world. The separation of heaven and earth created a space in which the solar boat could sail that marks the beginning of the solar cycle, and thus the first day of the world.

In the right corner we see the anaphase process of division and directly after this the telophase, the cell has divided and now represents two distinct individual cells. Nun, the primeval water separates into man and woman, sky and earth. This creates the space for the sun to rise and set in his barge. From these primal deities come their children, the gods and the world. There seems to be an odd similarity between the process of cell division and this creation myth.

The Heliopolitan myth is what is known as a theogony it is a description of the generations of the gods, it is a family tree. This creation myth can be broken down into the following order of events;
Within the membrane of the primeval waters of the cell 'Atum' divides the air from the water, then divides into the sky and the earth. The one becomes two, the two become four then become eight. It is a genealogy, a genesis and a process of division.

Chaos

Atum;

Air **Water**

Earth **Sky**

Set, Orisis **Isis, Nepthys**

The Sumerian creation myth is also a genealogy, this breaks down in a very similar way;

Chaos

sky earth

Water Air

Lesser gods and Goddesses (planets)

This comparison shows us that at their foundation these apparently separate mythic cosmologies are in fact one and the same. They both appear to stem from an ancient common parent. Below is a simplification of embryo genesis and the Heliopolitan myth. In the first image the primeval mound rises within the void. Within the mound the eight ancestors, parents of the sun god reside. In the cell this would be the chromosomes.

The suns rises and sets, representing the centromes that pull apart the chromosomes and dividing chaos into sky and earth, male and female and initiating the creation of life with the first splitting of the cell. the next stage would then be a further division into four cells named in the myths as the gods of Water and Air.

When we consider that the primal chaos in these stories universally consisted initially of sea water and that sea water is almost identical to the waters of the womb in salinity and trace elements, then we can begin to understand why the cosmos was conceived as a cosmic womb. Where better to describe the generation of life?

The flower of life

At this point I will have to digress, as in order to understand the point I want to make you will have to know a little about geometry. This is the language that the ancient's apparently thought in and I believe was their favourite metaphor for understanding the process of creation.

The flower of life is a name given to a set of concepts and images that can be discovered by playing with circles. They do it them selves all on their own, it only takes a few simple rules and these patterns are self generating, logical extrapolations of geometric inevitability. These forms have been found to be identical from all times and cultures all over the world, like other laws of nature they are waiting to be discovered in the very fabric of reality.

Like in the myths geometric creation begins, if there is a beginning, with absolutely nothing at all, which I will not illustrate. Then comes a point, a centre. It is imagined as having no size and no dimensions and is infinitely small. It is not yet even a *thing* but it is there. Then comes movement, the thing moves to a new position, in any direction any distance. We have a line, the first dimension. Again there is movement, the last created point moves again, this time around the first.

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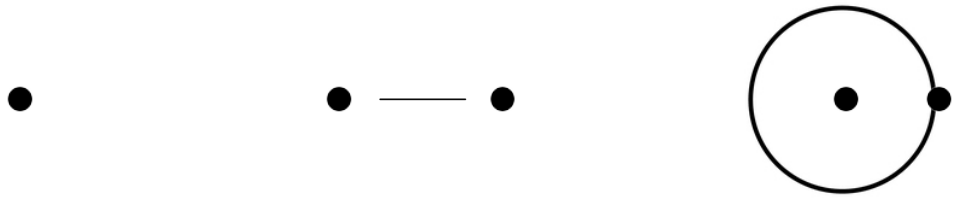
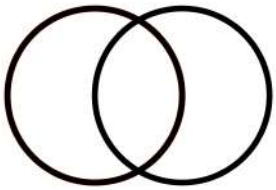


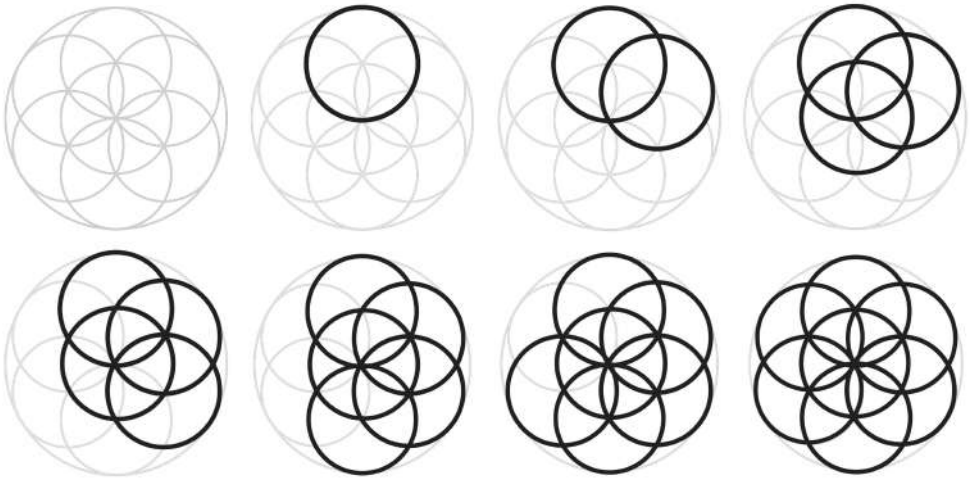
This time we have a circle, the plane, the second dimension. The third appears when we spin the circle, we get a sphere. For now though we will continue in two dimensions. The circle naturally produces the entire complexity of geometry, it is the mother of all shapes quite literally. If this is the mother then one asks where is the father? This is the straight line or movement without which reality would be incomplete. This principle we have already seen in the feminine “Void” and the “male” spark that stirs the void into creation in Egyptian myth. Both are deemed necessary for creation to unfold.

The circle then with nothing other than its own shape and the help of the straight line creates all of realities richness, it is all encoded into this one simple form which is the circle and its radius. It is a fascinating fact that these two elements and two alone are indispensable in creating the forms we find in the real world. It is in this sense very much like a seed. The image above, the circle with the dot in the centre is then the image of the seed. It is identical to the image of the ovum. The next movement steps beyond the seed phase into that of growth. It is a repeat of the previous one only this time we spin around the point at the edge of the circle and draw another circle.

This creates the vesica pisces, a special geometric form that generates an incredible amount of new information. From this we can define the triangle and the square amongst other shapes and forms from within its geometries.
This shape is a door way which pours out complexity and was recognised to the ancients as the vulva that births the world.

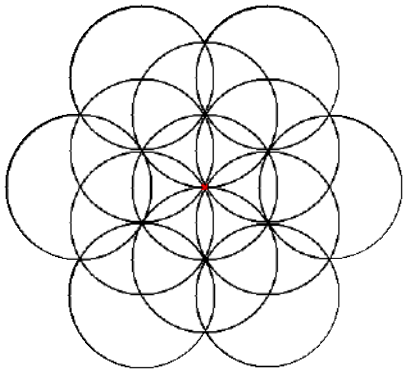


If this algorithm is repeated, we move again to the last point and make another circle. We now have three circles interlaced. When this is repeated a particular form appears, after which the process is naturally concluded. This creates seven circles in all.

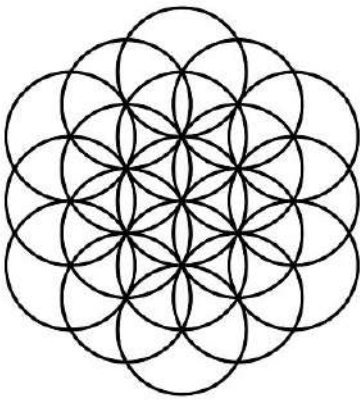


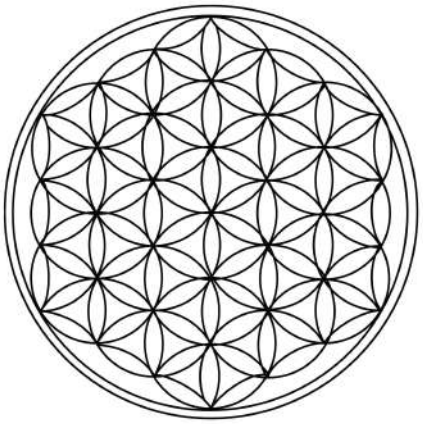
From a simple circle and with simple rules a flower has emerged, geometrically perfect. Because of its beauty and simplicity is has received a name. It is called the seed of life. One of the insights this form reveals is the relationship of sixness to the circle. There seems to be something about sixes. It is a geometric fact that six circles fit exactly around one and this is related to the three dimensions of space and the six directions they create.
The Sumerians chose the number six for the foundation of their mathematics, they counted in base six and ten, six was represented as a simple circle. This is why we still count time this way in sixes and tens.

The six outer circles in the Seed of Life intersect at six new points. These are the centres of the next iteration of circles. This is called the Egg of Life.

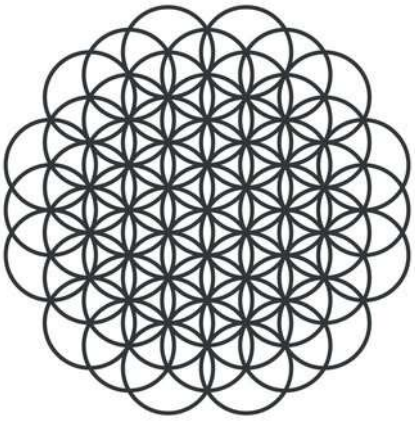


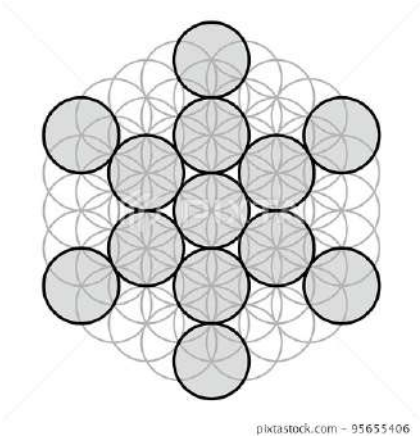
The next phase of this process is another series of twelve circles new that go beyond the seed and expand into what is known as the flower of life. From these, new points are created that create new points again in an ever expanding circle. According to an ancient tradition however at this point we stop. The image is unsatisfactory though, the petals are not complete. To complete these we need to enclose the whole thing in its own circle. This creates the last points from which we can complete the petals. Around this comes another circle, the size of which seems oddly undetermined but whose poetic meaning is clear, this creates a metaphorical boundary, a skin, reminiscent of a cell wall. it is a sign of completion and containment.



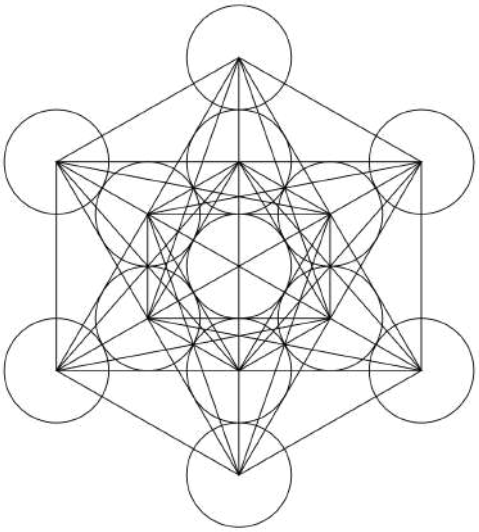


We have generated through a natural evolution of the circle from one encircled by six, then six again, then twelve, equaling nineteen in all. The next iteration of circles which is also nineteen, completes the last phase of growth.



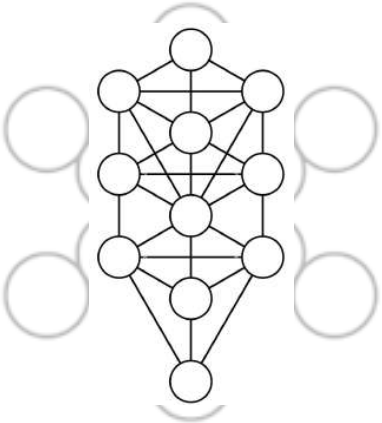


From this can be extracted a grid of circles that again reveals the principle of six around one. This is known as the fruit of life. From here it is the male principle that takes over. Lines from the centre of each circle to the centre of all the others are drawn, these lines create a two dimensional matrix from which three dimensional forms appear. From this framework all the Platonic solids can be found in glorious 3D.

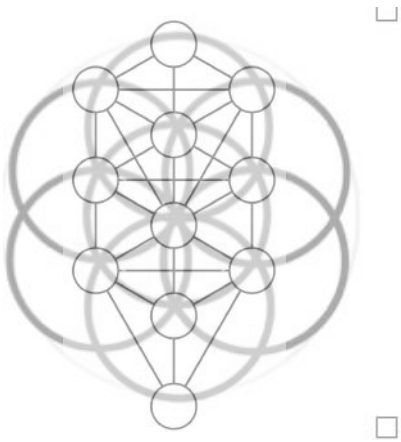


This is incidentally identical to a form known as the Tesseract or hyper cube which is the fourth dimensional analogue of the three dimensional cube. In other words the form of Metatron's cube is also extending into the higher dimensional space.

We have discussed the seed, the egg and the fruit of life which are the names given to these shapes since ancient times and which in all probability go back to Sumer. The last phase of this creation story is the creation of the "Tree of life" which can be found hidden within the seed, the flower and the fruit of life.



Fruit of life with the Tree



Seed of life with the Tree

We can see then that the “Tree” is a geometric shape that is derived from the matrix of the flower and consists of circles and straight lines that join the nodes found in the flower. This form can be found in the Hebrew mystical tradition known as Kaballah and like kaballah is derived from older Middle Eastern sacred traditions. This form is a stylised symbolic representation of the mythological Tree of Life familiar from the Bible and other cultures where it holds a preeminent position as one of the most sacred symbols. As we go forward we will see what this form represents and just how deeply it is entwined with the creation myths of the world, especially the myth of the cosmic egg.

Now that you have seen how the simple circle is the container of geometric form, a package of pure potential, it is not hard to see how it was ascribed the powers of motherhood and qualities of female procreation. In a similar way the line is needed to express this potential, it is the catalyst and so it represents the male powers of fatherhood. furthermore the whole process of generation lends its self to the growth of the plant and of life in general, as it self is a product of this very principle, the emergence of number from unity and the many from the one. Holding this in mind we can return now to the myths with hopefully a deeper insight into their meaning.

Genesis

Thus the heavens and the earth were finished, and all the host of them.
And on the seventh day God ended his work which he had made; and he rested on the seventh day from all his work which he had made.
And God blessed the seventh day, and sanctified it: because that in it he had rested from all his work which God created and made.

The Cosmic egg myth format is also present in Genesis, and here too we find a reference to the development of life in the context of a cosmic process. Modern scholarship has revealed that Genesis is derived from earlier versions of this myth especially that of the Babylonian. It is no coincidence then that Chapter 2 of Genesis begins with the seventh day. The break here divides the six from the seven, the symbolism being that there are six days of movement and one of stillness. The same pattern can be found in the “Seven tablets of

Creation" or the Enuma Elish, the Babylonian inspiration for the Hebrew version of this myth. This also finishes with the seventh tablet that serves as a reflection upon the previous six in which creation is manifested.
This seven fold structure found in Genesis is directly related to the seven days of the week of course, with six days of work and one of rest. The day of rest or Sabatu, as it was known in Sumer was a sacred day alined with the moon and its phases, another sevenfold phenomena. In Genesis God performs the usual act of division, he divided this from that, ever refining creation in the process. The more he divides, the more complex the organism being created becomes.

The seven days of Genesis……

- Day 1: Light
- Day 2: Atmosphere / Firmament
- Day 3: Dry ground & plants
- Day 4: Sun, moon & stars
- Day 5: Birds & sea creatures
- Day 6: Land animals & humans
- Day 7: The Sabbath of rest

Genesis can be read then as an example of a creation myth that follows the cosmic egg principle, in that it follows the sevenfold structure of sacred geometry that maps the emergence of complexity from simplicity. The seed of life could be an illustration of this creation story and in fact has been done so by Rabi's through the ages. This equivalence between Genesis and the seed of life is not surprising as these traditions are intimately entwined, both stories have been long known to the Hebrews, both concepts are embedded in their sacred literature, the former in the Bible and the later in kaballah.
The origin of this structure can be found in Sumer.

The Akkadian 'Enuma Elish' as it is the most detailed and complete version of the Babylonian creation story that we know of. Although it is obviously a political patchwork of older myths, it still retains clues to its older ancestry and its original impetus. Here a new god Marduk the patron god of Babylon, the takes the role of the Sumerian Enlil. This poem, translated by E. A. Wallis Budge, [1921] 1200 BCE. is written on seven tablets. It opens with a theogony, an account of the descent of the gods and ends with the gods rebellion against their primal mother Tiamat. whose carcass is used for the purpose of creation. Marduk splits her in half and places one part on high to become the heavens, the other half to be the earth. He lays out the calendar, creates the positions of the planets and establishes

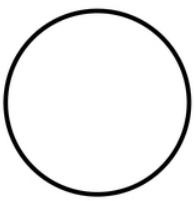
the sun, day, and night. From various parts of Tiamat's body, he creates the clouds, winds, mists, mountains, and earth.

The Enuma Elish edited according to the most significant events begins thus:

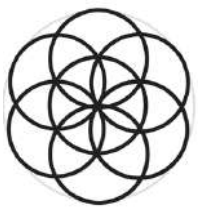
3. Apsu, the oldest of beings, their progenitor,
4. "Mummu" Tiâmat, who bare each and all of them--
5. Their waters were merged into a single mass.
9. The gods came into being in the midst of them.
10. The god Lakhmu and the goddess Lakhamu were made to shine, they were named.
11. [Together] they increased in stature, they grew tall.
12. Anshar and Kishar came into being, and others besides them.
14. The god Anu, their son, the equal of his fathers, [was created].
16. And the god Anu begat Nudimmud (Ea) the image of himself.
21. The confraternity of the gods was established.

If we break this down we find that Tiamat is the primeval waters and represents chaos. Absu is movement and form, her opposite representing order. Male and female mingle. Six gods made by Tiamat and Absu struggle within her womb.

The above text of the Enuma Elish produces the following image;



Chaos



The seven gods

The division of chaos into sky and earth

Tiamat plays the role here of an older Sumerian goddess Nammu who was self impregnated, self created, the primeval sea personified, She also represents chaos. She brings forth all things and she contains all things. Her waters are likened to that of the salt waters of the sea and of the womb. She can therefore be symbolised as the circle. The consort of Tiamat who is Absu represents therefore the sweet waters and is her opposite-

order. An examination of Absu shows him to be the progenitor of form. As such he is the catalyst that starts the creation sequence and can be equated with the straight line.
From these came Lahmu and Lahamu, the first set of twins who are male and female personifications of motion and production, the moving wind or spirit, sometimes referred to as serpents, they are the "wind on the waters"

To conclude then, in the watery womb of creation two principles one male one female merge together, thereupon the gods are born in male- female pairs, as twins, eight in all. They reside within Tiamat (the cosmic egg) which is then pulled apart into sky and earth and all that is contained therein. The genealogy of the gods then according to the Enuma Elish would look like this.

God Goddess
Tiamat -Absu
Lahmu -Lahamu
Anshar - Kishar
Anu- ki
Enki-

The similarities to the Egyptian creation myths are striking. There is also a recognisable description of the growth of the cell that we saw there, the two coming together becoming one and the separation and birth of the many. The Older Sumerian creation myths follow a similar general pattern as the Akkadian, diverging from each other only in the names of the gods and other minor details, proving themselves to be the the original model for the Enuma Elish. A Sumerian tablet for example called the 'Barton tablet' details a sacred marriage between the sky god An and the earth goddess Ninhursag, during which heaven and earth touch and the seed of seven twins of deities are planted in her midst.
The Alster and Westenholz translation reads:

"Enlil's older sister / with Ninhursag / he had intercourse / he kissed her / the semen of seven twins / he planted in her womb"

If we sum sum up the fragmented cosmology from various sources we arrive at the following;

The primal goddess of chaos Nammu gave birth to An, the sky father and earth goddess Ninhursag. The union of An and Ki produced the air-god Enlil, who proceeded to separate the heaven-father An from the earth-mother Ki. Enlil begot the moon-god Nanna who in turn begot the sun-god Utu. Enlil then unites with his mother Ki, and from this union but with considerable help from Enki, the water-god the vegetable and animal life is produced on earth. following this mankind is created and eventually kingship is ordained.

This may then be stated something like this;

Nammu
An+Ki
Enlil+ Enki
Other major deities/Planets
plants
Animals
Mankind

If we compare the seven days of Genesis with that of the Sumerian creation myth we reveal their inherent similarities in both the order and the elements of creation:

The seven days of Genesis…… and their	Sumerian equivalent as deity.
• Day 1: Light	Anu- God of sky and fire.
• Day 2: Atmosphere / Firmament	Enlil - air, Enki-water
• Day 3: Dry ground & plants	Ki, Goddess of the earth
• Day 4: Sun, moon & stars	The planetary Gods
• Day 5: Birds & sea creatures	Plants, animals
• Day 6: Land animals & humans	The creation of Man
• Day 7: The Sabbath of rest	Rest

The list on the right is in essence a condensation of the Sumerian creation myth or the Enuma Elish. It correctly describes the order of creation and the spiritual power of their deities with the primal god Anu at the top of the list and mankind below. The seven days of creation of Genesis are therefore a condensed description of the Sumerian creation myth and follow the same order of events.

These same influences can be found in later Persian myth that also pattern creation upon a series of seven creations. According to Zoraster, Ohrmazd fashioned his creations in

material form, He first he created the sky which enclosed the world like the shell of an egg. The second creation was water which filled the lower half of the "egg." The third creation, earth shaped like a flat disk, floated on the primeval waters. On it stood the fourth, fifth, and sixth creations, respectively the single plant or tree and the first man, The seventh creation, fire was said to have permeated all other creations.

The single tree mentioned here, also known as the 'Tree of life' has been known for thousands of years and is the most sacred symbol of the ancient world. It lies at the heart of almost all world religions and this is no less true for Sumer. Their creation myth describes it and their art depicts it most often upon the primeval mound at the beginning of time as it rose from the waters of chaos.

The myths of the cosmic egg seem to describe the gestation and birth of the universe in terms of cell division and replication, growth and reproduction, a process that creates a cosmic order, a dynasty of the gods and eventually mankind. These processes are directly comparable to the process we know as 'the beginning of life' that is first formation of a new life form, the zygote and the splitting of the cell. When mapped out geometrically this process of becoming is echoed in the way form unfolds from unity, and complexity unfolds from simplicity. This can be seen in the geometry of the circle. Within this geometry lie figures that since ancient times have been named after the seed, fruit and egg of the tree of life, symbols found also in the myths. If the creation myths are an answer to the question from where do we come, the answer seems to have been a lesson in biology, genealogy and astronomy all in one.

The cosmic egg as a description of the creation of the universe is chronological. First this happened then that. But it has another order, that of complexity. In the beginning was simplicity which became more complex as it grew. A complete and pretty standard version of the Sumerian creation tree looks like this;

Nammu- Chaos

Anu-Fire
Ki -Earth
Enki -Water
Enlil -Air
Planets\ stars
Plants
Animals
Mankind
Civilisation

You may notice that the first four gods are also the elements. Their order varies somewhat but always with Anu above. After these come the lower planets and life. If we were to order creation according to modern science as the emergence of the cosmos chronologically we would arrive at this same list;

Pure energy
The first formation of the elements
The formation of the stars then the planets
Life forms, first plants
Then animals
Then man
Then civilisation

Now let's make a list according to the complexity of creation. As things emerge they become more complex emerging from simplicity;

Pure energy
The first formation of the elements
The formation of the stars then the planets
Life forms, first plants
Then animals
Then man
Then civilisation

Yes this is the same list. The tree of life it appears is scientifically correct description of the order of the cosmos.

These diverse myths of the earliest civilisations retain their initial archetype, an imprint, it seems, inherited from a distant mother race from which they must have descended. This mother race is known to scholars as the Proto- Indo Europeans, or Aryans, a pan continental culture from which many later continental cultures were descended. It is hard to conceive of such a culture as it seems to presuppose a single race that includes Indian, Chinese, Egyptian, European and Nordic that all share the same origin story. For such a myth to be so wide spread is testament to its incredible age which appears only to be contradicted by its sophistication.

This cosmic egg upon inspection shows its self to be a metaphor for the processes inherent in nature of how simplicity grows into complexity. The integers, counting numbers and the whole of math emerge from zero, the geometry expands into form from the simple circle or point and the cell divides and multiplies into life into seed fruit and tree. What all these have in common is that they grow and become as does the cosmos its self. Within this process everything has a place and a function and so the tree becomes a map, a plan, upon which knowledge can be ordered and their relationships understood.

Chapter 2.
The Elements

It might be said that there are two ways of looking at the the world, or of thinking about the world. One is mathematical and ultimately depends upon measurement. This way would say 'Truth is what we can measure'. This way can be found since the earliest of times in Egypt and Mesopotamia. It is based upon understanding through logic. The other way of thinking is associative, symbolic and likes to correlate things with other things weaving a web of relationships and order from similarity. This mode too has been around since the beginning of civilisation as the Babylonians building upon the Sumerians before them used this mode to interpret the data they so scientifically collected. "This star is rising: the king will fall dead" too loosely quote a Babylonian tablet. Here in Babylon these two modes of thought lived happily together apparently without quarrel.

Much of ancient science was built on solid logic and number, but much of it was not. It was built on solid association, intuitive symbolic thinking. Thinking that equates like with like. From logic's stand point this magically creates cause and effect where there should be none. Symbolically this could be seem as the straight line mode and the curved mode. The square and the circle. The male and female.

This is associative thinking. It is very important because without it you would not be able to read this text.

This correlative way of thinking produced a huge edifice, an associative index of thought that was shared by almost all the major cultures. Historically we find the same basic ingredients that have now mutated into various diverse schemes, were once a universal mythos from which modern scientific thought would emerge.

This edifice brought together various ideas about the cosmos using an associative logic of like equals like. It is subjective, but logical. A bird is not an arrow but both can fly. They have something in common. The arrow then symbolises flight, movement. and gives this symbol meaning >>>. This is in essence magical thinking.

Today associative thinking has acquired a bad name being kicked out of the house of science and exiled to religion or the arts. But once they were entwined and celebrated as both relevant modes of understanding. Astrology and astronomy are divorced and not speaking. Alchemy, the mother of chemistry has been rejected as childish nonsense.

This is why you will find this knowledge in modern times hiding in both esoteric magical treatises, grimoires and religious texts but also the history of science. It is the science that was, the poetic brother of modern exact logic now hiding in the shadows of the occult.

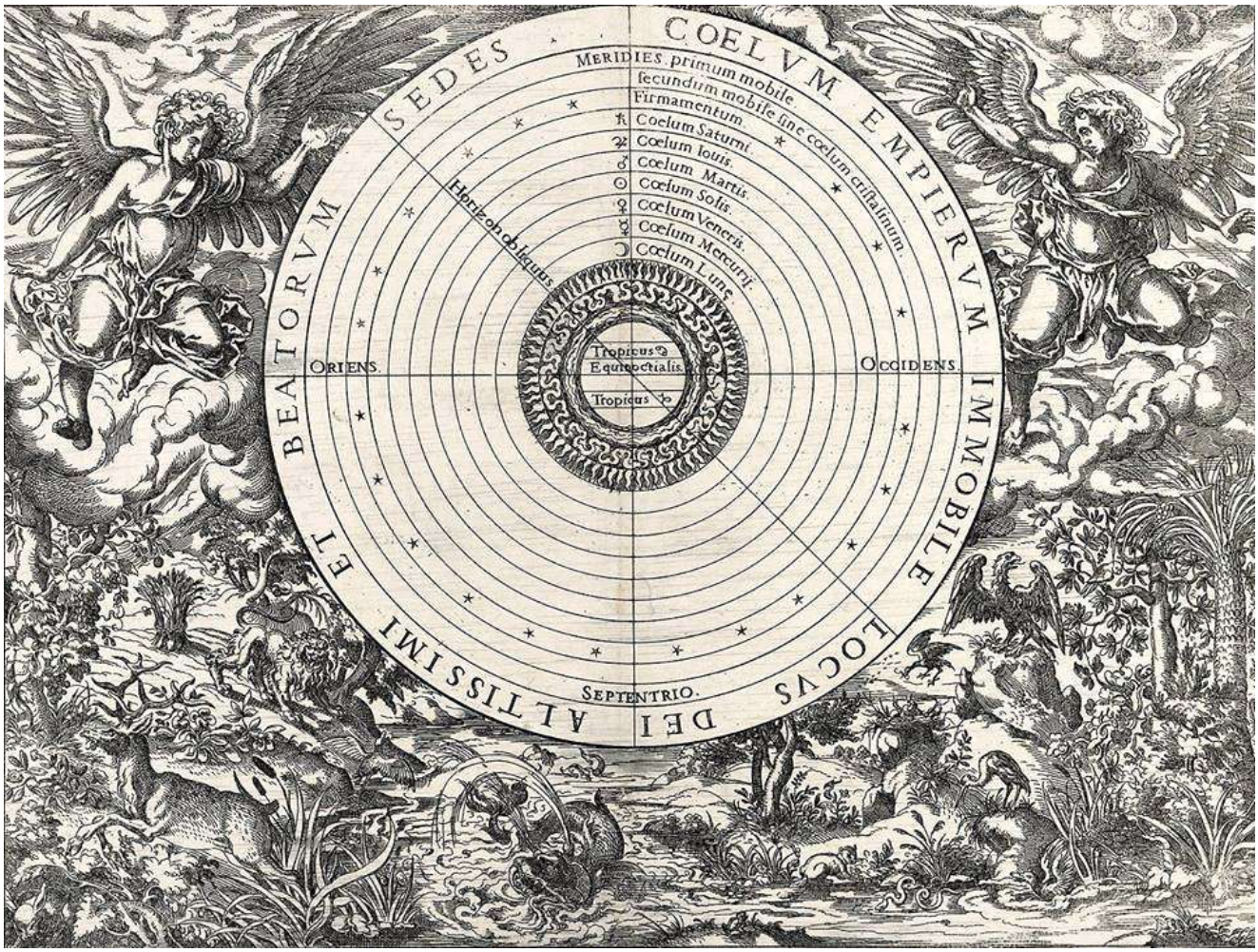
These ideas, that compose the poetic logic, at their core are not complicated and culturally are not so different from one another, as they shared, stole and copied from one another for thousands of years.
The foundation of this world view, world picture, is astronomical, as it is all about our place in the world and the origin of the cosmos.
Ancient science was the first to propose a big bang, a cosmic explosion that created the universe. Modern science has worked out the details of an idea proposed by the first myths, the universal cosmic egg. From the seas of chaos, the uncreated, came the elements, created in their simplest form, from there ever to expand in a series of transformations into the world we know. This was the founding myth of ancient times, as it is today.
Since the Greek Atomists first proposed that matter consists of of sub elements or archetypes, indivisible units, from which all is made, scientific thought has been searching for them, naming them and defining them, confirming the theory in principle. They have now expanded the amount of separate elements, originally three, or four, to 118 types of matter. In this way much of modern science can be found to be the extrapolation of ancient themes, antiquated modes of thought that remain as fossils, unchanged in nature but defined into great detail. The four elements did not vanish though, as they now turn up as the four phases of matter. solid, liquid, gas and plasma.
But even before the Greeks, Poetic logic had organised the world according to the elements, it was the fundamental matrix upon which the edifice of ancient thought was built. It was never meant to be empirical or exact, It was a web of analogies, an index of affinities, therefore a form of poetry.
Can this web can still be found? what did it look like, and how, if at all did it work?
Traditionally the Elements were the fundamental parts from which everything was said to be made. Their place in the order of creation is the first division from the primordial unity. The first movement, the first steps of creation that created the two, the four, and sometimes more, elements.
“There are four common elements,” wrote Polish alchemist Michael Sendivogius (1566-1636), “and each has at its centre another deeper element [the archetype] which makes it what it is. These are the four pillars of the world. They were in the beginning evolved and moulded out of chaos by the hand of the Creator; and it is their contrary action which keeps up the harmony and equilibrium of the mundane machinery of the universe; it is they, which through the virtue of celestial influences, produce all things above and beneath the earth.”
It is interesting to compare this to a modern interpretation:

During the formation of the universe in the so-called big bang, only the lightest elements were formed: hydrogen, helium, lithium, and beryllium. Hydrogen and helium dominated;

the lithium and beryllium were only made in trace quantities. The other 88 elements found in nature were created in nuclear reactions in the stars and in huge stellar explosions known as supernovas.
Both descriptions are saying the same thing in slightly different ways. They tell us that everything in creation is a product of the elements, that first four were created then everything else is a product of these four mixed with the stars. As Sendivogius was not an astrophysicist one wonders how he arrived at his conclusions.

The elements are ordered today according to their atomic number, which in a way, is according to the complexity of the atom. The lower the number the simpler the atom. This is related to its mass, which in essence following the advice of Aristotle who ordered his elements according to density. This created the web of associations we know today as the periodic table, a wonder of associative thinking in its self.
The periodic table gives us the four simplest elements as understood by modern science. It tells us that the substances with the least atoms are the simplest and therefore the lightest in perfect accordance with Aristotle. Oddly these seem to be named after the Classical elements.
The simplest element of all is called Hydrogen ('Maker of water") It is the chemical element with the atomic number 1. and the lightest element in the periodic table. Hydrogen is the most abundant chemical substance in the Universe.
We might then assign this to the element water.
Helium is the second lightest and second most abundant element in the observable universe. It has the atomic number 2. It is named after the Greek god of the sun Helios. As the sun is overwhelmingly hydrogen this seems as strange choice of name but we will assign this to the element fire anyway.
Lithium with the atomic number 3 is a soft, silvery-white metal and the lightest solid element. It was named after the Greek- Lithos meaning stone, which would make it our element earth.
Beryllium is the chemical element with the atomic number 4. a grey and hard, lightweight and brittle metal. It is the fourth most common element. I would have loved to assign this to air but it seems that here the poetry ends.
In the cosmology usually attributed to Aristotle, (c 400 BC), each of the elements had a weight. Earth was the heaviest, water less so, and air and fire the lightest. According to him the lighter substances moved away from the centre of the universe and the heaver elements settled into the centre. Indeed this is the true order of phase change known to modern science and the true order as we find them physically on the planet. Today we use this mode of thought to define the elemental states of matter, as solid, liquid, gas and plasma.

These two interpretations of the nature and creation of matter, are so similar that we can either assume that science is recognising the same truths, or simply seeing the world through the same lens.



An engraving showing the Ptolemaic order of the planets. Below this the Aristotelian elements constitute the earth as concentric circles with the heaviest in the centre. Jost Amman, *The Ptolemaic System* (1579) from Barthelemy de Chasseneuz, *Catalogus gloraie mundi*,

Ritual science

Modern scholarship maintains that the four elements formed as a concept in Greece around 800 BCE. Like most statements this is an over simplification and the truth is much more interesting. According to this authors research the concept of the elements can be found in the oldest civilisation we know of, albeit in mythological form, with the elements constituting the basis their creation mythos.

Around 4000 BC in Sumer, modern Iraq. Fire, Water, Earth and Air were known as the great archetypes of creation and given names of Anu, Enki, Ki, and Enlil. Each god was apportioned a part of the sky with the Goddess allotted the earth. There were indeed four pillars of heaven, as Michael Sendivogius informs us thousands of years later, being the four directions and the stars that were appointed them. If we piece together the later Babylonian creation story from the pieces we know, a pattern emerges, this too reveals the elemental gods as the primary forces in Mesopotamian thinking. It is a story of becoming, beginning with the beginning of the universe.
Samuel Noah Kramer puts it this way;

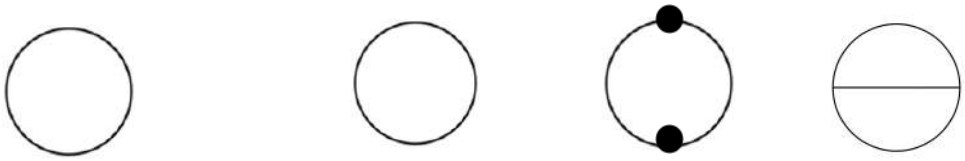
Of all these hundreds of deities, the four most important were the heaven-god, An; the air-god, Enlil; the water-god, Enki; and the great mother-goddess, Ninhursag.

The goddess Ninhursag or Ki as she was also known of course represents the element earth, as she is the Goddess of the earth. We will not just take Kramers word for it that these were elemental deities because as we progress it will be come increasingly clear that he had good reason to assign to them these epithets.

The Sumerian creation was adapted and utilised by the later Akkadian peoples who relate their version in a text known as the Enuma Elish. According to this creation myth in the beginning was Tiamat the primordial goddess of undifferentiated chaos. From this primordial unity emerged several deities;
Lahmu and Lammu, the twin deities thought to represent movement, wind, or perhaps breath. From these came Anshar who was the god of the north pole (“Pivot of An.”) and Kishar who was the deity of the south pole. (“Pivot of Ki”). Some translate this as expanse, or “the whole of”. They pulled apart Chaos to create Heaven and Earth and eventually An and Ki, the great Father sky and Mother Earth. Anu had his station at the North pole. Anu is poetically assigned to fire. We know this as Tiamat in the Enuma Elish refers to Anu when she says. "May the utterance of your mouths subdue the fire-god”. Ki had her station at the south pole, the pivot of Ki -shar. Ki is the Earth Goddess.

We can read this myth, and understand it better, as an ideagram.

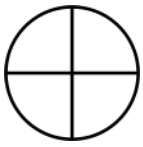
Nammu/ Chaos Lahmu wind Pivot of An An



Lahamu Pivot of Ki ki

It is not difficult to make the comparison here to the separation of the chromosomes and the division of the cell known as mitosis that we saw in the first chapter, the stages of change are virtually the same. But there are other levels to this metaphor, this time we can trace the development of cardinality, the mapping of space from the primordial centre. This is one of the primary functions of the four elements. From the pristine unity of the unformed chaos several deities emerge as a series of separations, these are opposites that produce in their turn other powers resulting in the separation of sky and earth. Then came a further division, a finer distinction between these two primary elements. Earth and Sky come together to produce firstly Enki-water who is differentiated from earth, then Enlil-Air who is a differentiated aspect of Sky.

North
Fire
Anu

West. water Enki  Enli. East. Air

South.
Earth
Ki

As Anu is specifically given the north pole and Ki the south this “myth” describes a map and a compass with the four directions being an essential part of it. If Anu is placed in the north and Ki in the south Might we assume then that Enki and Enlil can be assigned to the east or west? Again I refer to the Enuma Elish which describes the acts of Marduk once he has created heaven and earth.
“He fixed the heavenly stations of Enlil and Ea (Enki) with it. Gates he opened on both sides, And put strong bolts at the left and the right.”

We can recognise here the two gates that mark the east -west path of the sun, traditionally assigned to the horizon. The bolts are understandable in this context as they are fixed points that do not move, the cardinal points or the equinoxes from which all else is measured. Although the cardinal positions of water and air are yet uncertain, as a working hypothesis we have the general lay out of the Babylonian/Sumerian assignation of the elements and cardinal directions.

Fire	North =Anu
Air	East =Enlil
Earth	South =Ki
Water	West =Enki

Above. Ki- the word “Earth” in Sumerian, forms a square and so describes the four corners of the world.

This part of the Babylonian creation story has established a frame of reference in space. It is a compass with which to navigate the world. It represents the basic fundamentals of astronomy, the axis of the world upon which it spins. It locates the sunrise and sunset therefore establishing time. Without establishing the solar cross none of these are possible. These are “the four pillars of heaven” upon which all else hangs.
The ideogram that represents the four directions has been called the sun wheel and can be found in diverse forms throughout the Middle East and wider world. It represents an

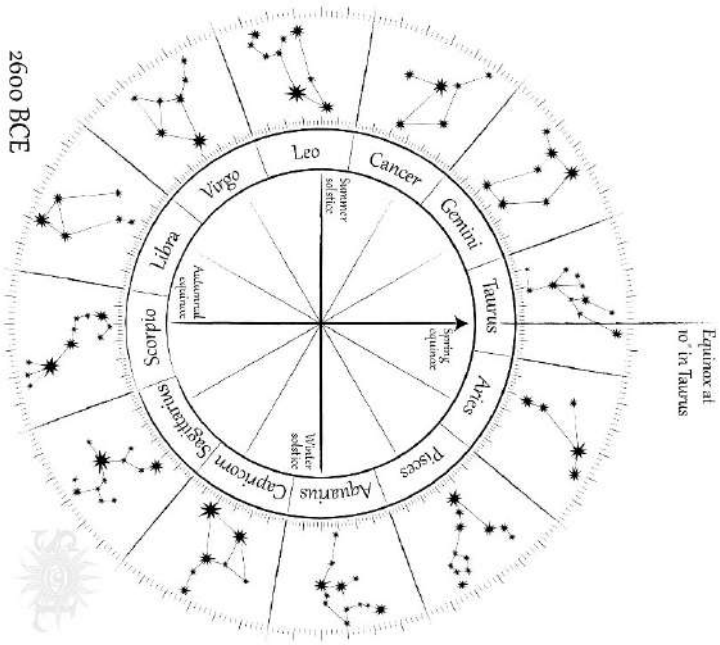
essential framework upon which the art of poetic association can behung and in so doing allows the complexities of mastering space and time to progress making it simple and clear.

This simple set of orientations form the basis of what would become the first sky charts, calendars, maps and clocks. This is made explicit in the Babylonian poem the Enuma Elish: Marduk, god of the rising sun, has won the fight against Chaos;

1 He fashioned heavenly stations for the great gods,
2 And set up constellations, the patterns of the stars.
3 He appointed the year, marked off divisions,
4 And set up three stars each for the twelve months.
5 He established the heavenly station of Ne-beru to fix the stars' intervals.

The stars were incorporated into this circle in the following way;
The spring equinox marked the beginning of the year and was signalled by the rising sun in the east. This moment coincided with the rising of the constellation of Taurus. Because Marduk has established the twelve constellations and their stations he can know the stars associated with the times of the year.
Having tied the spring time to the east, the zodiac can be laid over the circle of the elements and the four directions and the four seasons each receive a constellation.

North -Anu -Summer- Fire Leo



South-Ki - Winter— Earth Aquarius

Marduk has now added a map of the sky to his achievements, he can now navigate and mark the passage of time.

Most of us take it for granted that we understand the concept of the directions but when asked how do we find north without a compass, how would we know? North could be defined as the 'direction towards the axis of the spinning earth' But this is also true of south. How can we tell up from down? The answer is based upon the passage of time. Because the sun appears to travel from east to west throughout the day it defines these directions by its travel. East is where the sun rises, North is found in front of us if we place east upon our right.
To understand this better draw a circle in the sand. Call it undefined chaos. Place a stick in the sand at the edge of this circle and mark the position of the end of the shadow cast by the stick with a stone, Watch its shadow move as the minutes pass and mark this too with a stone. Draw a line between these stones. You now have an east west marker, a line parallel with the world and you have divided the sky from the earth. Draw a line at a right angle to this to find north and south, Anu and Ki.

At the core of the Babylonian/Sumerian creation myth is a series of instructions in how to order the world, how to make it comprehensible and therefore master it. The opening passages of the Babylonian Enuma Elish exemplifies this. This is the power that Marduk has, he does not create the world, he orders it. The actions of Marduk are the methods with which order from chaos is separated and in so doing reaffirm the secrets of civilisation. It is ritual science.

The following are the cardinal points of the solstices and equinoxes that were correlated with the zodiac signs known in Sumer circa 3000 BCE.

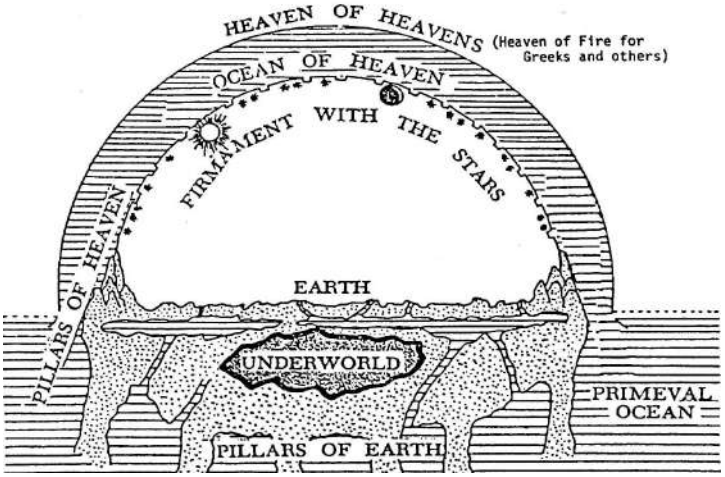
Leo- Summer,
Scorpio -Autumn,
Aquarius -winter,
Taurus- spring.

We can add to this the directions and the elements described by our map.

North -Anu	-Summer-	Fire	Leo
West -Enki-	Autumn	Water	Scorpio
South-Ki -	Winter—	Earth	Aquarius
East- Enlil-	Spring	Air	Taurus

Notice that we are reading the circle of the year anticlockwise which is to follow the seasons and which produces a list of gods in no particular order. However if we reverse the direction and read clockwise a different order emerges.

In the cosmic order of Sumer each deity was assigned a station in order of their height on the ladder to heaven. Anu for fire in the heavens Enlil for the air above, ki for the earth and Enki for the waters below. The underworld, the place of the dead was originally reserved for Eriskigal the dark goddess. This is the cosmological order of the elements.



Above. The cosmological order of the elements and the gods according to Babylonian thought; Fire, air, earth and water in that order. This is of course identical to the cosmic compass where we began.

Fire	North =Anu
Air	East =Enlil
Earth	South =Ki
Water	West =Enki

The order that the elements are arranged in then is symbolic and an essential part of the system of the elements as they are tied to the directions and seasons. and map to the positions of the gods and so describe their roles in creation.

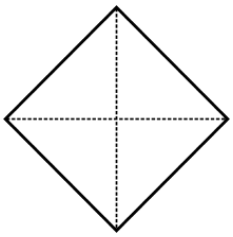
The four winds

The placing of Enlil and Enki in their correct cardinal positions is still uncertain. however we have clues from ancient fragments that help us understand their relative position. A section in a late Assyrian fragment associates the three main gods as elements.

“Girra: Anu: fire.
Primeval: Ea: water.
East wind: Enlil: wind”

So we seem to have a position for Enlil, he is placed in the east. By her absence we know that Earth is reserved for Ki. We have also learnt that the winds have a place in this scheme as well. Because we know the gods relative positions and we know that Enlil was the east wind we also know the others.

Fire Anu North Wind

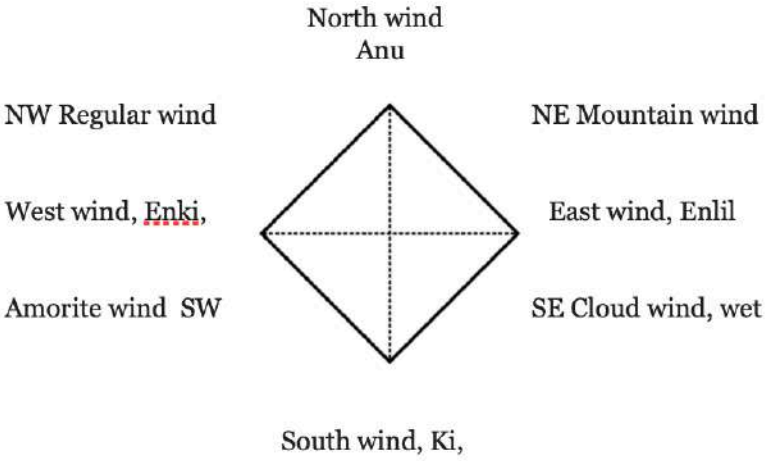
Water Enki West wind  Air Enlil East wind

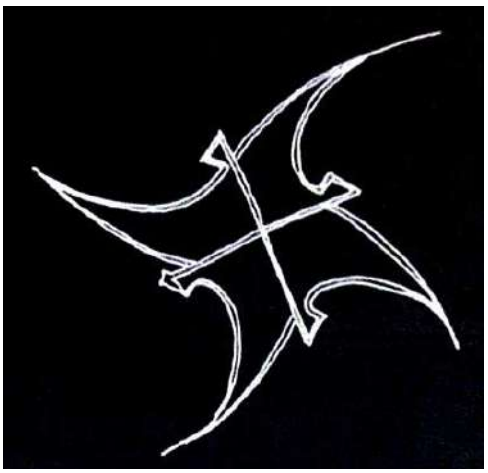
Earth Ki South Wind

Wikipedia tells us that:
The concept of the Four Winds originated in Sumer, before 3000 BCE. While older theories posited that the ancient Mesopotamians had a concept of cardinality similar to modern day with a North, East, South, and West, it was more likely that their directions were framed around these four "principle winds". The Akkadian word for cardinality is equivalent to the word for wind. J. Neumann names these winds as "The regular wind" (NW), "The mountain wind" (NE), "The cloud wind" (SE), and "The Amorite Wind" (SW). These wind directions could be used to establish the presence of astrological bodies, orient maps, and direct the layout of cities and home construction, keeping buildings open to wind blowing in and

alleviating the heat. These winds, aside from being used for cardinality, were also figures important to mythology and general culture in Mesopotamia.
As figures, the four winds have been identified with four winged beings on cylinder seals. Three are male (the NE, NW, and SW winds) and one (The South wind or South-East wind) is female.

We now learn that there were eight winds in all, so we must add these to our map.





Early Dynastic III abstract map from Abu Salabikh in Sumer, Is this an image of the eight winds?

Akkadian fragments offer further insight into the positions of the deities.;

..] The South wind which served Ea.
...] The East wind which served Enlil.
...] The North wind which served Adad and Ninurta.
...] The West wind which served Anu.
And;

The South wind: Ea, father of the gods.
The East wind: Enlil, lord of all.
The North wind: Ninlil, lady of breezes.
The West wind: Anu, father of the gods.

Receive, South wind, beloved of Ea!
Receive North wind, beloved of Sin!
Receive, East wind, beloved of Anu!
Receive West wind, beloved of Ea and Anu!

"Šamaš when he rises is Enlil, and when he sets is Ki-uraš"

According to Kramer 'Ninurta' is the god of the South Wind, who was regarded as the son of Enlil, the air-god.

Enlil is here associated with the East, and an Earth deity with the West.
Although the gods and winds are confused and somewhat inconsequent, Enlil is always in the east, Enki or Anu often in the west. We can see clearly that they equated the directions and the gods and the winds into one set.

So we have seen how the simple act of an orientation to the cardinal points and establishing their positions became a hook upon which more and more information could be hung. Space and time have been mastered and ones relative position in creation can be understood and utilised.

Zoroastrianism

The Persian empire inherited these traditions from the Babylonians and it is here that we next find mention of the elements.

Zoroastrianism worship an uncreated and benevolent deity of wisdom known as 'Lord of Wisdom' -Ahura Mazda as its supreme being. It is an Iranian religion and one of the oldest forms of organised religions in the world. According to an anonymous Syriac text, fire, water, earth, and atmosphere (*wây* "air") were revered by the Persians as gods. The roots of Zoroastrianism are thought to lie in a common prehistoric religious system dating back to the early 2000 BCE. The prophet Zoroaster himself, though traditionally dated to the 6th century BCE, is thought by many modern historians to have been a reformer of the polytheistic Iranian religion who lived circe 1000 BCE.
The Zoroastrians saw the four elements as sacred and worshiped fire and water as deities. The life force that originates from Ahura Mazda, known as truth and cosmic order who stands in opposition to falsehood, deceit.

This creation myth of Persian theurgy is also a map of creation that includes the elements in a primary position, again with fire as the overruling principle.

Fire,
water,
earth,
form a trinity above, with air placed lower on the cosmic ladder.

This is essentially the Sumerian order read as north, west, south and east.

The Chaldean oracles (Greek, Babylonian, Persian theological soup c. 300 -AD.) mention the elements in the following order;

"Concerning the composition of the world from the four elements, by the Demiurgus. He made the whole world from fire, water, earth, and all-nourishing air".
As all who study the elements and their role in ancient thought come to realise quickly that the noted sequence of the elements is of great importance as it is this that describes the cosmic and theological structure. Therefore we should take good notice when an ancient writer lists them. It is not a coincidence then that the above sequence is the same as the Sumerian order of the elements that I have suggested.

Elsewhere the author is very specific about this order;

“Concerning the seven firmaments, the heavens, the heavenly bodies, ether, air, earth, and water:”

“Placing earth in the middle, but water in the bosoms of the earth, and air above these”.

This becomes;

Fire
Air
Earth
Water

Again this is the Sumerian order of the cosmos.

The Chaldean Oracles greatly influenced Greek thought. It represented the jewels of Babylonian and Zoroastrian (Persian) wisdom and was well received and highly regarded by the Greeks. Below is a picture of the Oracles cosmic order derived from Westcott. Like the Babylonian it describes not simply a physical order but a metaphysical one as well. In keeping with the Sumerian view the cosmic fire rules the heavens followed by several lower powers including the planets. The other elements are seen as earthly and so are placed in the lower material realms.

CHALDEAN SCHEME OF BEINGS.
Representatives of the previous classes guiding our universe.

I. Hyperarchii—Archangels

II. Azoni—Unzoned gods

III. Zoni—Planetary Deities.

———————

Higher demons: Angels

———————

Human Souls

———————

Lower demons, elementals

Fiery

Airy

Earthy

Watery

Evil demons

Lucifugous; the kliphoth

This list is meant to be read as a map of the cosmos, a ladder to heaven, just like the one I have derived from the Enuma Elish. The order of the elements given here is again that of the Sumerian concept of the cosmos and as such supports my deductions so far.

As an alternative to this interpretation, Stanley describes a triad;

"The last and lowest are the Material Worlds, which Psellus and the other Summarist assert to be three; meaning doubtless the Air, Earth, and Water; for so the Oracle ranks them"…

He lists them so ;

"One Empyreal World (Fire)
Three Aetherial Worlds
The Supreme Aether next the Empyreum
The Sphere of fixed Stars
The Planetary Orb
Three Material Sublunary Worlds
The Air
The Earth
The Water".

The history of the Chaldaick philosophy by Thomas Stanley.
Stanley, Thomas, 1625-1678.

Here although we have some extra divisions to the cosmos (also derived from Babylonian sources) the resultant order of elements is consistent with the Sumerian.

Westcott was a Theosophist and a Freemason and went on to create the Golden Dawn an esoteric secret society. He claims that the Chaldean oracles used a system of "qualities" that preceded the elements and that they used them in combination with astrology.

"The Oracles assert that the impressions of characters and other divine visions appear in the Ether. The Chaldæan philosophy recognized the ethers of the Elements as the subtil media through which the operation of the grosser elements is effected -- by the grosser elements I mean what we know as Earth, Air, Water, and Fire - the principles of dryness and moisture, of heat and cold".

"These subtil ethers are really the elements of the ancients and seem at an early period to have been connected with the Chaldæan astrology, as the signs of the Zodiac were connected with them. The twelve signs of the Zodiac are permutations of the ethers of the elements - four elements with three variations each; and according to the preponderance of one or another elemental condition in the constitution of the individual, so were his natural inclinations deduced therefrom. Thus, when in the astrological jargon it was said that a man had Aries rising, he was said to be of a fiery nature, his natural tendencies being active, energetic, and fiery…",

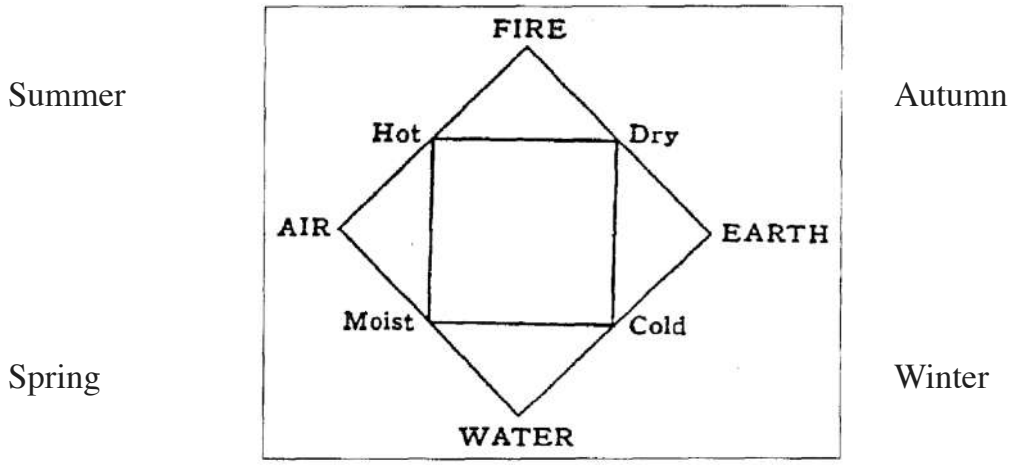
W. Wynn Westcott. The Chaldean Oracles

It is clear that the Chaldean doctrine emulates the Babylonian in structure but differs slightly in detail. Both the Zoroastrian Babylonian and the Chaldean oracles conform to the idea of a map of the cosmos as an order of emanations and follow the same order of elements we have seen in Sumer and Babylon, their only difference being the direction they are read upon the circle of the year. Further study of the Oracles and Zoroastrianism leads swiftly to the conclusion that the origin of the former as well as the latter is Babylonian as stated by diverse ancient authors.

A brief history of the elements in Ancient Greece.

Fire air earth and water. These four words kept the best Greek minds entertained for hundreds of years. The first mention of the four Elements in Greece that I can find comes from the Pythagoreans. Living in the 6th Century BC, Pythagoras is said to have studied in Babylon, which might have been his source of the doctrine of Four Elements. In fact it is said of Pythagoras that he was initiated into the Egyptian, Babylonian, and Chaldean Mysteries. It is also believed by some that he was a disciple of Zoroaster. The Pythagoreans worked with the four Elements and the four seasons, adding the four stages of life. Here we see for the first time clearly a new ingredient, the use of opposing qualities to define the elements as well as the appearance of an alternative order of their arrangement.

The "Pythagorean organic cycle" as it is known shows us that a system of "qualities" also known as "the subtile ethers", was used by the Greeks, These were the subjective qualities of moist, warm, dry and cold that preceded the elements as fundamental things and from which they were drawn. It is possible that the Greeks inherited this idea from the Babylonians though at this time I can find no proof of it as yet.

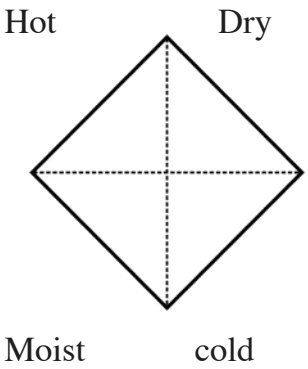


The Pythagorean order of the elements and the seasons.

These fundamental qualities when combined together then produce the elements themselves. This brings us back to the statement by Michael Sendivogius who tells us that "*and each has at its centre another deeper element which makes it what it is"* These subjective primary qualities are combined to produce the elements themselves. Hot and dry

for example are combined to produce the qualities of fire. The season of spring, summer, autumn, winter were said by the Pythagoreans to have followed this same logic with spring being moist and summer hot, autumn dry and winter cold. The life of a person also followed this same pattern, the young baby being understood as beginning life as moist becoming hot then dry in old age and ending cold in death.

The pythagorean elemental system builds its self from first principles, each quality mixing with its neighbour to create the elements themselves. Try it, the result is always the same order of elements around the square.



This order is different from the Babylonian as it creates an opposition of fire and water instead of an opposition fire and earth. This order is one of density usually attributed to Aristotle but which is in reality much older. This seems to represent a change in cosmic world view. At some point in history, most likely by Pythagoras, the Sumerian/Babylonian system was changed into the Greek with earth and water switching places. What was lost was the archetypal poetic link between sky father and mother earth, the great opposites had become fire and water.

We can see how these ideas developed through the Greek period as different philosophers interpreted the elements in their own way, each building upon the former. We should be wary of attributing these concepts to specific authors however as the written record is not always the reality and it is often the case that the concepts usually attributed to specific philosophers were in fact much older and more generally known than we might otherwise assume.

Heraclitus 500 BC

"Cold things warm up, the hot cools off, wet becomes dry, dry becomes wet."

Alcmaeon of Croton (c.500 BC)

The concept of humours, that is liquids in the body that were associated with the elements, goes all the way back to Babylon, India and Egypt. In Greece though it can be traced to the writing of Alcmaeon of Croton who was an early Greek medical writer and philosopher-scientist. Alcmaeon, like others of his times, used humour theory to explain health and disease. He described a healthy body as arising from a balance of the humours in the body. Domination of one humour over the others, he argued, results in disease. His ideas developed into the work of Empedocles who reduced these varied humours to four and in so doing linked them to the elements within Greek thought.

Empedocles (c. 492—432 B.C.) A disciple of Pythagoras.

John Opsopaus tells us that:

"Although Empedocles is considered one of the founders of Western science and philosophy…. In his own time he was viewed as a prophet, healer, magician and savior. His beliefs and practices were built on ancient mystery traditions, including the Orphic mysteries, the Pythagorean philosophy, and the underworld mysteries of Hecate, Demeter, Persephone and Dionysos. These were influenced by near-Eastern traditions such as Zoroastrianism and Chaldean theurgy. Empedocles, in his turn, was a source for the major streams of Western mysticism and magic, including alchemy, Graeco-Egyptian magic (such as found in the Greek magical papyri), Neo-Platonism, Hermeticism and Gnosticism.".

To him is attributed often the invention of the four-element theory of matter being earth water air and fire, although we have seen that this is not at all the case, his ideas are heavily influenced by the Persian system. Empedocles' world-view is of a cosmic cycle of eternal change, growth and decay, in which two personified cosmic forces, Love and Strife, engage in an eternal battle for supremacy. In his *Tetrasomia*, or *Doctrine of the Four Elements*, Empedocles described these elements not only as physical manifestations or material substances, but also as spiritual essences.

His order too is Pythagorean;

"With earth we see earth, with water water, with aether divine aether, with fire destructive fire, love with love, and strife with baneful strife" (Ierodiakonou, 2005).

Which becomes ;
Earth
Water
Air
Fire

Empedocles influenced later philosophy, medicine, mysticism, cosmology, and religion. His philosophical system responded to Parmenides' rejection of change while embracing religious injunctions and magical practices. As a result, Empedocles has occupied a significant position in the history of Presocratic philosophy as a figure moving between *mythos* and *logos*, religion and science.

For Empedocles fire and air are outwardly reaching elements, reaching up and out, whereas earth and water turn inward and downward. His system, it should be noted borrows heavily from the Zoroastrian which also describes this fundamental battle between the forces of love and the forces of evil.
Empedocles specifies the order of the elements and links them with the names of the major deities as we saw in Babylon. With this he also invokes the Sumerian order showing that both orders were admissible.

> *"Hear first of all the four roots of all things:*
> *Zeus the gleaming, Hera who gives life, Aidoneus,*
> *And Nêstis, who moistens with her tears the mortal fountain"*

This becomes ;
Zeus==========fire
Hera==========Air
Aidoneus=Hades===Earth
Nestis=Persephone=Water

Empedocles declares;

> *"Eternal, sealed by broad oaths:*
> *Whenever by crimes some one pollutes his limbs, by murder*

<…> whoever commits a fault by perjuring himself on oath,
Must wander thrice ten thousand seasons far from the blessed ones,
Growing during this time in the different forms of mortal beings,
Exchanging the painful paths of life.
For the force of the aether chases them toward the sea,
The sea spits them out toward earth's surface, the earth toward the rays
Of the bright sun, and he [i.e., the sun] hurls them into the eddies of the aether.
Each one receives them from another, but all hate them.
Of them, I too am now one, an exile from the divine and a wanderer,
I who relied on insane Strife.

So we see how the elements were part of a cosmic drama of becoming and find their place in the order of creation. Not only this, they are part of the cycle of the soul and the key to its redemption as it reincarnates through lifetimes eventually to become divine its self.

Hippocrates of Kos 460 BC.

The Hippocratic writings of the 460 – c. 370 BC), are related to the four humours the four temperaments and the four Elements. His order is that of Pythagoras.

Hippocrates in "On the nature of man", describes the theory as follows:

"The Human body contains blood, phlegm, yellow bile, and black bile. These are the things that make up its constitution and cause its pains and health. Health is primarily that state in which these constituent substances are in the correct proportion to each other, both in strength and quantity, and are well mixed. Pain occurs when one of the substances presents either a deficiency or an excess, or is separated in the body and not mixed with others. The body depends heavily on the four humors because their balanced combination helps to keep people in good health. Having the right amount of humor is essential for health. The pathophysiology of disease is consequently brought on by humor excesses and/or deficiencies.

As we have seen the concept of humours can be traced much earlier than this to the writing of Alcmaeon of Croton (c.500 BC) but the concept of "humours" as I have stated has its real origins in ancient Egypt, Babylon and India. Early texts on Indian medicine presented a theory of three humours (dosas), linked with the five elements, earth, water, fire, air, and space.

Hippocrates, and then much latter the Roman Galen suggested that a moderate imbalance in the mixture of these fluids produces behavioural patterns or temperaments. Carl Jung's theory of personality types is clearly derived from the temperaments of Hippocrates.

Plato (428 -438 BCE) in the Timaeus invokes the Babylonian order of the elements. As Plato is aware of the importance of this order it can not be a mistake.

"…Now that which is created is of necessity corporeal, and also visible and tangible. And nothing is visible where there is no fire, or tangible which has no solidity, and nothing is solid without earth. Wherefore also God in the beginning of creation made the body of the universe to consist of fire and earth. …. God placed water and air in the mean between fire and earth, and made them to have the same proportion so far as was possible (as fire is to air so is air to water, and as air is to water so is water to earth)…."

Plato – Dialogue of Timaeus (4th C BC, Athens)

Plato seems to be envisaging an image of creation where the void is divided thus;

FIRE
WATER AIR
EARTH

Which is the Sumerian order. But then adds another list which runs; Fire, Air, Water, Earth- the Pythagorean order. In this way he too acknowledges two systems of thought that he deems equally worthy.

Aristotle (384–322 BC) Aristotle made several new contributions while adapting the traditions he inherited. He highlighted the transmutation of the elements to explain the changes of physical state of matter with the presence of two qualities in each element, acting as the agents of the transformations. He taught that all substances are composed of these four elemental states of matter in different amounts and combinations in accordance with Empedocles.

Aristotle's work on the elements was primarily concerned with the contrary properties or qualities, of cold hotness, dry, and moist, and their combinations. (the Pythagorean model). He explains that Moistness is the quality of fluidity or flexibility, which allows a thing to adapt to its external conditions, whereas Dryness is the quality of rigidity, which allows a thing to define its own shape and bounds. As a consequence Moist things tend to be volatile

and expansive, since they can fill spaces in their surroundings, whereas Dry things are fixed and structured, since they define their own form.

It was primarily Aristotles theory of the elements that would survive through the middle ages in both the monasteries and in astrology. What arrived in Greece as a theology, a mystical religion, in three hundred years the Greeks turned into a science. The theory of the elements became a medical as well as a psychological tool long before its adoption by the Romans.

Galen (200 Ad)

The Roman philosopher and physician Claudius Galen formulated a concept of personality types based on the ancient theory of the humours, From his writings we can understand how the temperaments were seen.

Sanguine Temperament-Air
Sanguine people are characterised by being happy, optimistic and by always seeking the company of others Likewise, they show enthusiasm when interacting with people and their behaviour is more subject to feelings than to the conclusions drawn from rational analysis In addition, they change their minds easily and rarely act with discipline, since they are guided by the search for immediate pleasure That is why they often leave things unfinished. Its related element is air.

Phlegmatic temperament-Water
The phlegmatic temperament expresses a tendency to behave calm and serene, and a persevering and rational way of approaching goals .According to Galen's theory, people who stand out for this type of temperament attach great importance to precision when thinking and doing things, they rarely get angry, they do not express their emotions too much, coming to seem a bit indifferent. In addition, they tend to be somewhat shy and avoid being the center of attention or assuming leadership roles. These people correspond to the element of water.

Choleric temperament.-Fire
People who are known for their angry temperament are particularly energetic, proactive, and independent. Likewise, in correspondence with Torres they show a tendency to always commit to an activity or to undertake a project, and actively defend their points of view and positions in the different situations they experience.
In the same way, they believe in their own standards and are not afraid to confront others, so they are assertive and stand out in leadership positions. However, if this type of

temperament is very extreme, it will lead to many conflicts and hostilities. The element related to them is fire.

Melancholic temperament-Earth
People who are known for their melancholic temperaments are emotionally sensitive, creative, introverted, self-sacrificing, and perfectionists. To some extent, in correspondence with, this type of temperament may be related to the recent concept of highly sensitive people, although defined in a much more vague way.
Although they find pleasure in tasks that require effort and personal sacrifice, it is difficult for them to decide when to start the project, precisely because of that perfectionist spirit and because of the concern produced by the insecurity of not knowing what will happen.
Likewise, the melancholic type includes people with a tendency to fantasy and imagination, but also predisposed to feeling negative emotions, particularly sadness.
its element is the earth.

Hierocles, of Alexandria (430 Ad)

Hierocles elaborates upon this four fold structure in the 'Golden Verses' of the Pythagoreans and adds the four faculties of judging Mind, Science, Opinion and Sense, as well as number its self to the list of things created from the original 'fourness' ;

"But solidity is proper to the QUATERNARY. For in that is the first Cone whose trianangular Basis is made by a Ternary, but the top by an Vnite. Besides, the faculties of judging are 4, Mind, Science, Opinion and Sense. All things that are judg'd fall under one of these; in a word, all things are comprised in the QUATERNARY, Elements, Numbers, seasons of the Year, and ages of Life. Neither can you name any thing which does not depend upon the QUATERNARY as its root and foundation. For as we said before, the QUATERNARY is the Producer and Cause of the Universe, the intelligible God, the Author of the heavenly and sensible Gods.
Now the knowledge of these things was handed down to the Pythagoreans from Pythagoras himself, whom the Author of these Verses closely following gives us to know, that the perfection of Vertue will bring us to the splendor of Truth."

Astrology and the elements

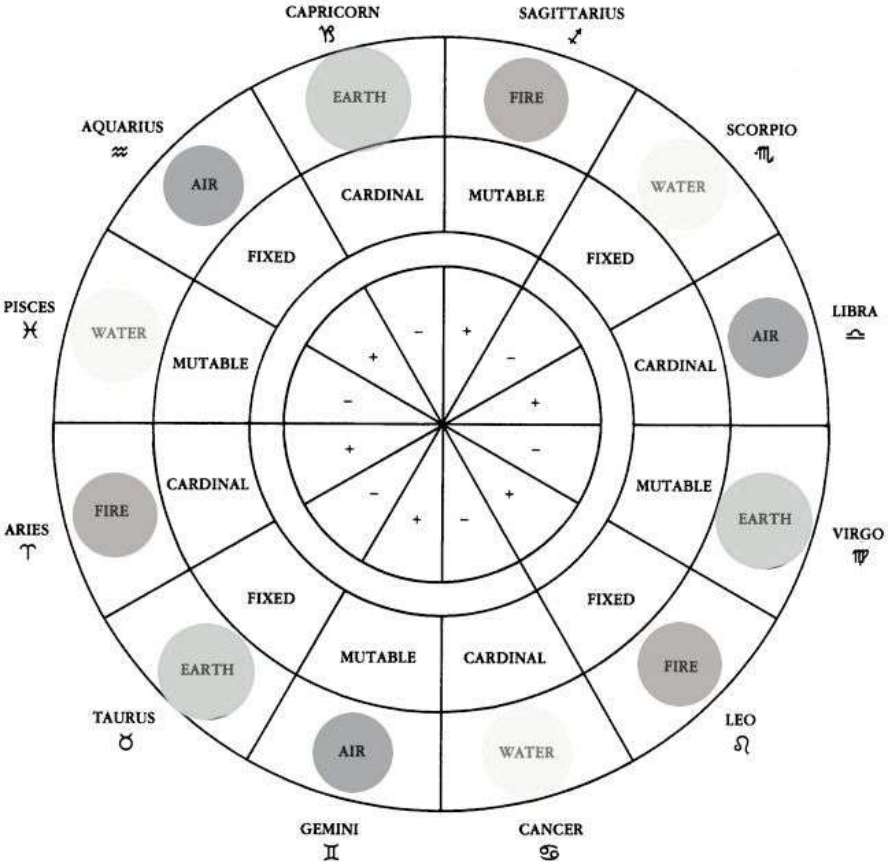
Parallel to these developments is the history of astrology, its self derived from the cradle of Sumerian theology and equally founded upon the theory of the four elements. In Western astrology the sequence is always Fire, Earth, Air, & Water in that exact order, the Pythagorean order. The oldest system in astrology assigns three constellations of the twelve to each quadrant of the sky as can be seen below. We can therefore read the cardinal directions and the seasons in the correct order. They also match with the correct constellations as determined during the Sumerian period.

North—- Summer (hot becoming dry) – Fire – Cancer, Leo, Virgo
East ——Spring (wet becoming hot) – Air – Aries, Taurus, Gemini
South —Winter (cold becoming wet) – Water – Capricorn, Aquarius, Pisces
West —-Autumn (dry becoming cold) – Earth – Libra, Scorpio, Sagittarius

By Ptolemy's time around 1oo AD astrologers were assigning the elements using an algorithm that distributed the elements equally around the zodiac producing very different alinements. Beginning with the first sign Aries which is a Fire sign, the next in line Taurus is Earth, then to Gemini which is Air, and finally to Cancer which is Water. This cycle continues on twice more and ends with the twelfth and final sign Pisces. This leads to a divorce from the original solar cross that anchored the stars according to their cardinal directions. They are summarised as follows;

North	Fire	Aries	Leo Sagittarius	hot, dry,
East	Air	Gemini	Libra Aquarius	hot, wet
South	Water	Cancer	Scorpio Pisces	wet cold
West	Earth	Taurus	Virgo Capricorn	cold dry

Modern astrology therefor assigns the elements to the constellations not according to the cardinal points but are evenly distributed around the wheel of the year.


CAPRICORN
♑
SAGITTARIUS
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AQUARIUS
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PISCES
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LIBRA
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ARIES
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VIRGO
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TAURUS
♉
LEO
♌
GEMINI
♊
CANCER
♋
EARTH
FIRE
AIR
WATER
CARDINAL
MUTABLE
FIXED
+
−

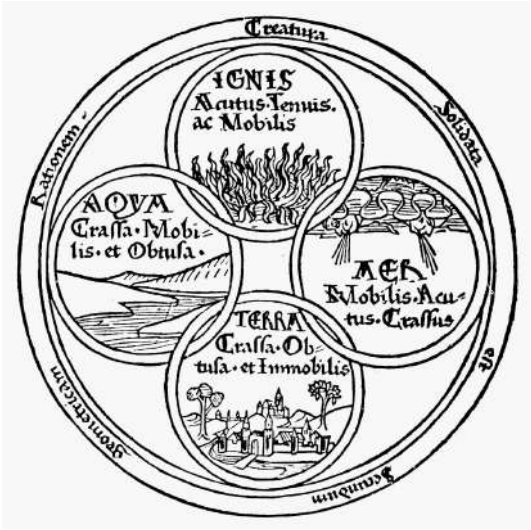
The Medieval period

In the same way as the earlier examples the examples available of the assignment of the elements from the middle ages can be divided into a least two kinds, those that order the elements in the Pythagorean order or the Sumerian. Even these show little consistency with their orientation as one would expect if they were assigned to the four directions. It seems that there was little agreement as to how the science actually worked and not surprisingly a little confusion as too which format was the correct one.
If we look a small selection of these charts we can see this variation and confusion.

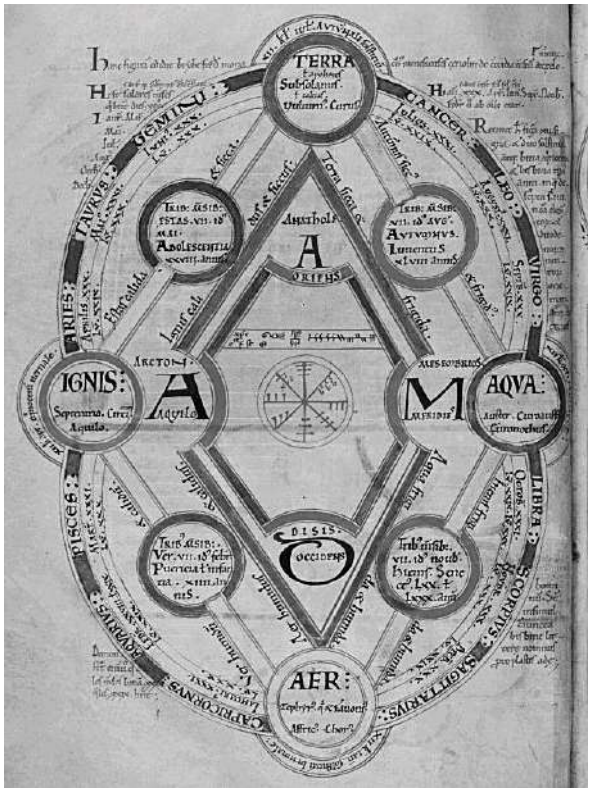
Above; A manuscript from the middle ages still expounds these same traditions. Mundus/ Annus/Homo 1472 (after a late 8th c, manuscript of De rerum natura), translated into English. Read anticlockwise for the path of the seasons.

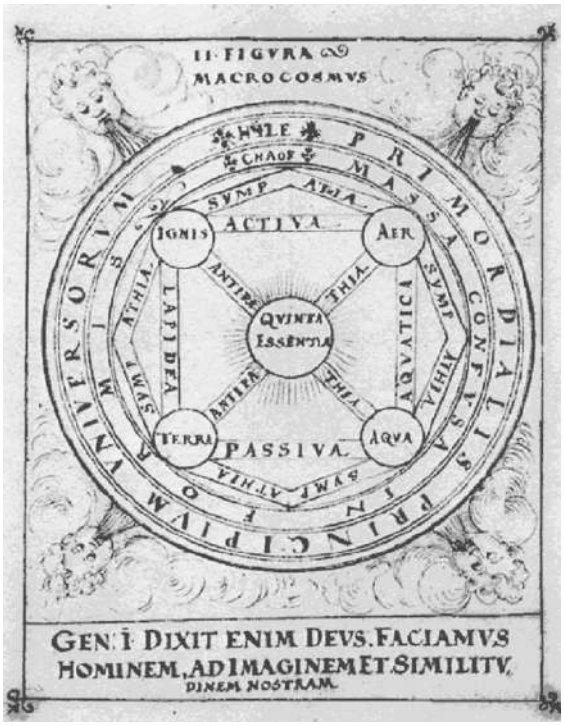
Fire -summer -North
Earth -Autumn- West
Water-winter- South

The Pythagorean order.



Above. Empedocles four elements (fire, air, earth and water), woodcut from an edition of Lucretius *De rerum natura*, published in Brescia by Tommaso Ferrando (1472). This is one of the few orders that still follows the Babylonian sequence combined with the correct directions aAbove. Various examples from the middle ages showing the arrangement of the elements.





Above. Various examples from the middle ages showing the arrangement of the elements.

Above left. The four elements. Read clockwise earth, water, air, fire to follow the seasons, solstices, equinoxes, signs of the zodiac and ages of man. However the directions are all mixed up. About 1000 AD. Miniature from English medieval manuscript MS Oxford St John's College 17, folium 7 verso. Above right. The same order only anticlockwise. Here the four winds are included in the imagery.

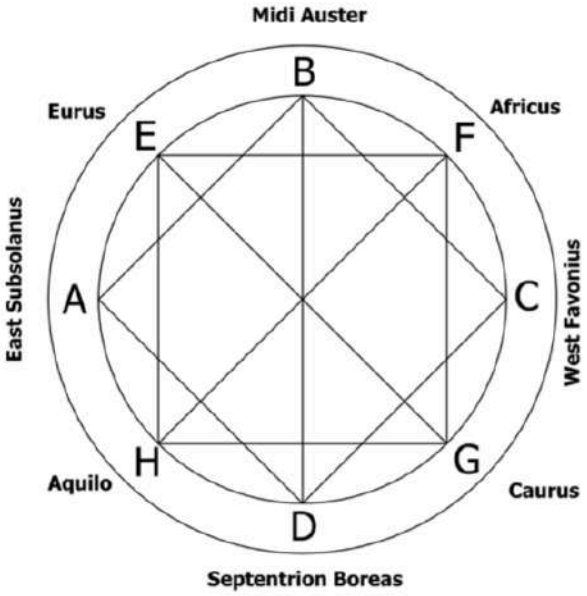
Quelle: Deutsche Fotothek

The four winds (revisited)

An interesting addition to this research is found below in a book on architecture and sacred geometry. It shows that there was a tradition of linking the winds with the “qualities” of dry, moist hot and cold. The names of the winds here are Roman suggesting that this is their derivation. I have long suspected that the ‘qualities’ that first turn up in Pythagorean doctrine were first used to describe the qualities of the winds that mark the cardinal points. Whether this is the true origin of the qualities or not remains to be seen. We have seen that the early Sumerian elements were also linked with the winds but the evidence of the qualities emerging from the properties of the winds is still missing.

moist and hot

Fire



Air

hot and dry

cold and moist

Earth

Water

Cold and dry

The names of the eight winds according to Roman tradition. I have included the qualities at their correct stations according to Philibert De l'Orme, and included the correct positions of the elements according to Aristotle. This is therefore the Pythagorean order with water opposing Fire.

Philibert De l'Orme, LES LIVRES D'ARCHITECTURE
Wind Direction of the four corners of the world.
Rotated Squares
Ad Quadratum Geometry
Chapter 7
Of these four main parts of the world four winds blowing directly appointed principal or cardinal knowledge is the point of East Subsolanus, marked the ensuing Figure A, where the quality and nature is hot and dry. In the West Favonius sale, noted by C, its quality being cold and moist, Midi, Auster, signed B, whose nature and quality wet and hot and Septentrion Boreas, marked D, where quality is cold and dry.
So much for four parts and corners of the world with their own domestic wind.
It should therefore be noted that the ancients still divided equally into four one each space between the aforesaid principal winds, and gave one each to own a wind superabundant. Whereby between Subsolanus and Auster, that is to say between East and South, or if you want between A and B also, they have located the wind called Eurus, marked by E, between South and West, Africus noted by F . , Between West and north, signed by G. Caurus, and between East and Septentrion Aquilo, marked by H.

Aristotle showed that one of the two Powers constituting an Element is dominant thus; Earth=Dry, Water =Cold, Air =Moist, Fire =Warm. Other philosophers, such as the Stoics, arranged them differently.

As to the origin of the qualities, from what are they derived? Where they named after the qualities of the winds? Maybe. The evidence is inconclusive. However a better contender has been staring me in the face all along though, the seasons. Summer is hot, winter cold, spring moist and autumn dry, it is as simple as this.
If this is true, the sequence of construction from first principles would be;

1. Establish the four directions from the movement of the sun, including the solstices and equinox.
2. From these mark the seasons.
3. From these define the qualities of each season, dry, cold, moist and warm.
4. In between these qualities then assign the four elements.

The six elements

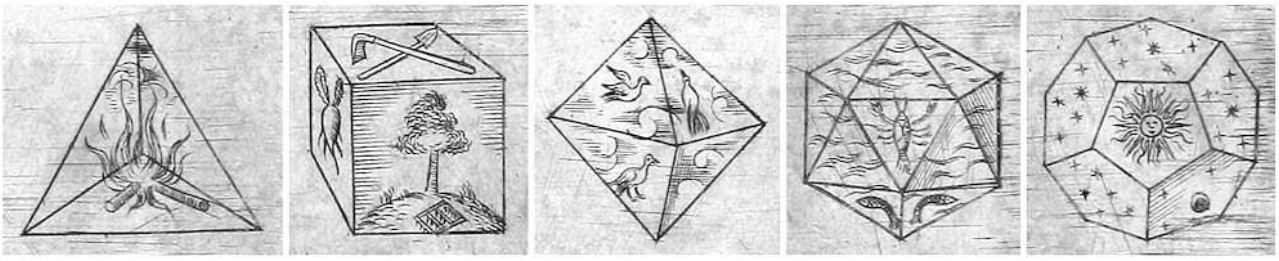
So far this study has focused upon the four elements that are most commonly found in ancient thought. This is however not the whole picture, as there is an extra dimension to this philosophy - literally. We saw how the establishment of ones position in space led to orientation of the cardinal points and how these were associated with the four elements. However the missing directions not referred to here are the extra ones of up and down. They were hiding all along in the centre of the cross. All together this would make six directions and therefore logically six elements. This was not lost upon the ancients who knew very well what they were doing.
Studying the six elements turns out to be a lot harder than the four. These extra two appear to be less well known and so may well have been reserved for the initiates of the mystery schools.

The Platonic solids

Plato and no doubt philosophers before him associated the elements with special solid forms that were found to be particularly significant to geometry. These became known to the Romans as the Platonic forms. They are defined as the only forms that fit inside a sphere with all corners touching the walls of the sphere. In other words they have a deep relationship to the circle. There are five of them in all which when we include the circle make six . Each one was assigned an element. This way of assigning the elements to the six

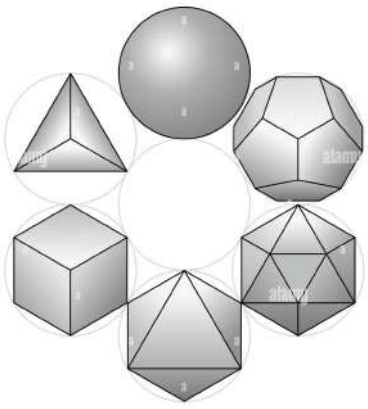
directions was extent in lands as far away as ancient India and other parts of the orient where the five or six elements were also known. In other words one may assume that this was seen as a universal truth.

Plato assigned the tetrahedron with the element fire, the cube with earth, the icosahedron with water and the octahedron with air. The dodecahedron- the fifth element was linked to the heavens. Why? Because it represented the upward direction that leaves the plane, that is the third dimension, the one pointing to the heavens.



Fire **Earth** **Water** **Air** **Heaven**

The dodecahedron also happens to have twelve sides that correspond to the twelve signs of the zodiac. What of the last direction that of downward? This must have been reserved for the circle against which all the other forms were compared. This stood for, not an element as such, but the void in which they were created, the primeval chaos, the watery womb from which all was begotten.

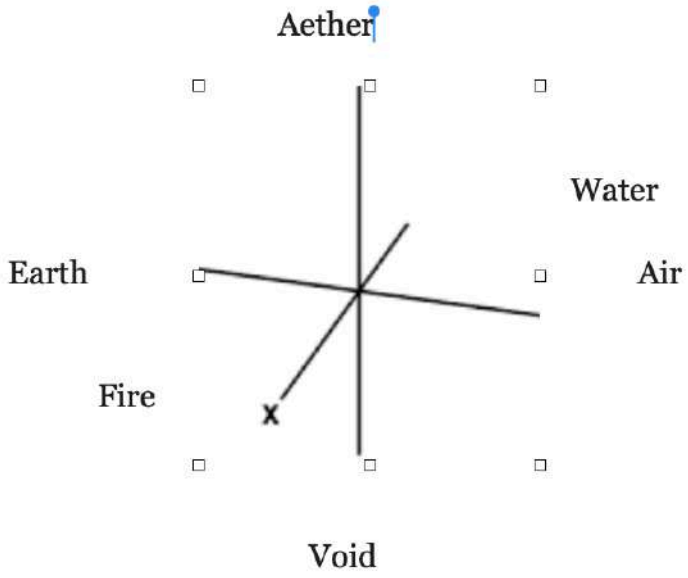


Above. the six elements arranged in a circle conform to the geometry of the flower of life as six around one. all these forms can be extrapolated from the circle.

The fifth element represented by the dodecahedron was known by various names; *aether, heaven, idea* (Hieron, a divine thing) as it was seen as the material that filled the region above the terrestrial sphere and was set apart from the material realm.

Proclus (412-487 AD) in his commentary on Timaeus, also connected the dodecahedron with the fifth element – Aether which was seen in ancient times as a rarified air. Perhaps this is because he follows Plato who in the in Cratylus, 410b wrote;

…But why should you not tell of another kind of gods, such as sun, moon, stars, earth, Aether, air, fire, water, the seasons, and the year?



The six elements form the basis of tree of life.

This is very much as if he was listing the elements and their accompanied attributes.

In the Orphic Rhapsodies 66 (fragments), we read;

“This Khronos of immortal resource, begot Aither [upper air] and great Khaos (Chaos, the Chasm) [lower air], vast this way and that, no limit below it, no base, no place to settle. Then great Khronos fashioned from divine Aither a bright white egg [from which Phanes was born].”

We see here that the aether was related to the void, or chaos, as the two primal elements of creation from which the cosmos was born. They are the ground, the matrix in which creation- and the four elements emerge. The aether resides in the upper atmosphere-the heavens as Plato saw it and indeed the void resides below as I had assumed, being the last remaining direction which is downward. Aether is the next most rarified substance after the void and so this would seem to be the most authentic and accurate title for the fifth element.

It is sometimes claimed that Aristotle, a student of Plato, in his Book “On the Heavens” introduced a "first" element to the system of the elements. Here he claimed that the four terrestrial classical elements were subject to change and naturally moved linearly while the first or primary element, located in the celestial regions moved circularly. It was neither hot nor cold, neither wet nor dry. With this addition the system of elements was extended to five and later commentators started referring to the new first one as the fifth and also called it *aether*, a word that Aristotle had used in *On the Heavens* and the *Meteorology*. But was Aristotle the author of this idea? It appears not. We have seen that long before Aristotle, Plato was familiar with this concept as well were the Orphic’s who’s tradition most likely predates both Plato and Aristotle. These concepts were not really new and my guess is that they were already long known to a select few.

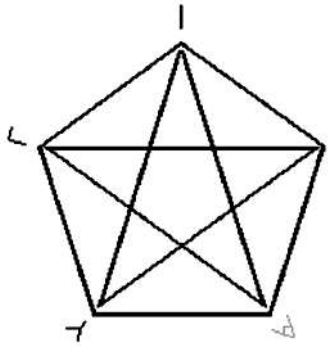
For example the “Pentemychos” literally the “five corners” or “five recesses” was the title of the cosmogony of Pherecydes of Syros who lived around the 6th Century BC. Here, the “five corners” are where the seeds of Chronos are placed within the Earth in order for the cosmos to appear. This is clearly a reference to the same tradition we read in the Orphic account proving that the tradition of the five elements predates Aristotle.

John Opsopaus (Phd) an expert on ancient Greek esoterica has a very interesting website filled with obscure information from which I will plunder some of his wisdom, as he obviously has a greater knowledge in this field than I. He tells us that;
The pentagram appears in the earliest writing of Mesopotamia (pre-cuneiform pictographic writing), c. 3000 BCE, as the Sumerian sign UB. Its meaning in the cuneiform period (by 2600 BCE) seems to be a Heavenly Quarter and also the four directions (forward, backward, left, right); the fifth direction was "above."

This interesting fact I have checked and is indeed correct, the earliest form of UB is indeed a pentagram sometimes translated as ‘direction’ or ‘region’ or to ‘raise up’.
This brings us back to the Sumerian elements being linked to the four directions as is explained in the beginning of this book. The idea of the fifth direction being towards the heavens is therefore seen to be a Sumerian invention and in all likelihood was also linked to the elements. We can safely assume therefore that the idea of the five elements predates Aristotle by several thousand years.

Opsopaus informs us that;

The Pythagoreans used it as a sign of recognition. They called the Pentagram Hugieia, which is usually translated "Health," but has more the sense of Soundness or Wholeness, and, more generally, any Divine Blessing.



Furthermore he informs us that they labeled the angles of the Pentagram with the Greek letters ΥΓΙΕΙΑ grouped into five sets thus; U-G-I-EI-A. This, or something very like it is found in Agrippa's De occulta philosophia (Lib. III, cap. xxi) where we
see an upright pentagram aligned with the Greek letters reading clockwise: (UGI?A). He concludes that the Pythagoreans labeled the Pentagram with the letters Υ-Γ-Ι-ΕΙ-Α (U-G-I-EI-A), sometimes clockwise, sometimes counterclockwise, and either placed on the points starting at the top (Alstedius, Kircher), or in the angles starting at the top right (Agrippa).

The letters labelling the corners of the Pentacle Y-Γ-IE-I-A "Health" are the first letters of Greek words for the Elements:

Υ (U)	Ὕδωρ (Hudor)	Water			
Γ (G)	Γαῖα (Gaia)	Earth			
I (I)	Ἰδέα (Idea)	Form/Idea, or		Ἱερόν (Hieron)	a divine, holy thing
EI (EI)	Εἰλη (Heile)	Sun's Warmth or	Θ (Th)	Θέρμα (Therma)	Heat
A (A)	Ἀήρ (Aer)	Air			

The shape of the pentagram then becomes an illustration of the relationships of the elements to each other. On the Mundane level we have Earth-Water-Air-Fire that form the lower part of the pentagram with spirit standing above them elevated into the heavens. This is in essence identical to the Sumerian cuneiform UB.

Letter	Element	Power	Age	Season	Moon
A	Air	Wet	Child	Spring	1st Q.
EI	Fire	Hot	Youth	Summer	2nd Q.
G	Earth	Dry	Maturity	Autumn	3rd Q.
U	Water	Cold	Old Age	Winter	4th Q.
I	Spirit	Divine	Death	Terror Time	New Moon

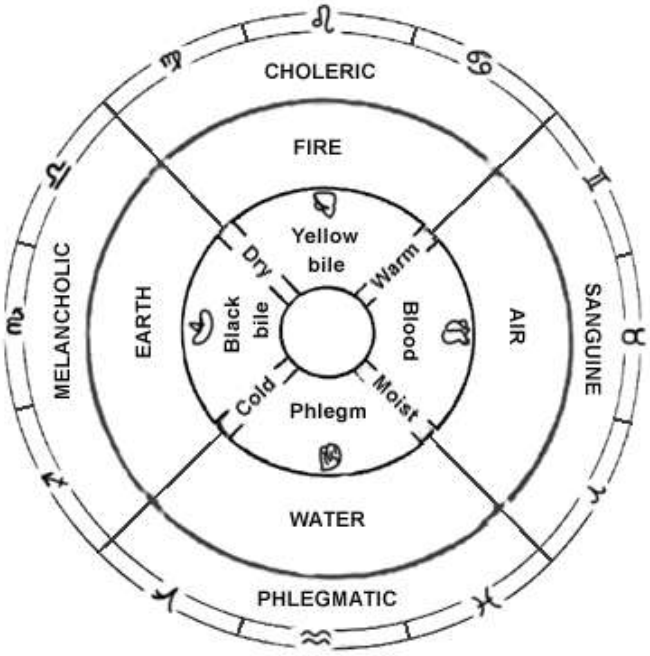
This chart above reveals the deeper symbolic associations of the pentagram as listed by John Opsopaus. To belabour the point- as Pythagoras also predated Aristotle by several hundred years we can confidently state that he was simply revealing what was already known. The Pythagoreans held the pentagram in high esteem but also kept it a secret showing it only to those initiates qualifies to appreciate its secrets.

This concept recurs also in the Alchemic tradition. Quintessence is the latin name of the fifth element used by medieval alchemists for a medium thought to make up the heavenly bodies. In addition to this two chemical elements representing metals were added: sulphur, "the stone which burns", which characterised the principle of combustibility, and mercury which contained the idealised principle of metallic properties. Another path that the elements followed through history is that of alchemy. The order used here is that of Astrology, that is

the Pythagorean order. Below is an example of how the elements alined with the alchemic view of matter.

The fact that the elements have now become three dimensional leads to a very interesting conclusion. We now have three worlds the heavenly level, the earthly plane which contains the four elements and the underworld. This is identical to the Sumerian view of the cosmos, the world being symbolically represented as a flat plane between the upper and lower 'Edins', the realm of the gods and the realm of the demons. This transforms the map of the elements into a symbolic tree with the stem being the vertical axis that penetrates the three worlds. This image is also a common way of imagining Ygdrasil the Sacred Tree of the Norse.

The elements their qualities, temperaments and humours.



Air

The qualities of air are movement, expanding and mixing. Its root is moist.

The Sanguine temperament is connected to the season of springtime and the element of air. Like a butterfly flitting about from one flower to another. There is a tendency to be fun-loving, to be happy go lucky, and to like change and diversity. Although the sanguine person can be very caring, if imbalanced, they can be superficial. They are also adaptable and can change according to the requirements of the situation.
Sanguine people are characterised by being happy, optimistic and by always seeking the company of others emotional and a little irrational , they change their minds easily leave things unfinished and rarely act with discipline guided by pleasure
Air is associated with the Sanguine humour of the blood, which distributes oxygen throughout the tissues of the body.
The word “sanguine” refers to a ruddy complexion in which the blood flows close to the skin. According to Aristotle, such people are warm and moist.

fire

The qualities of fire are sharpness action heat, light, expansion, uprising, burning purifying. Its root is warm.

In Plato's major cosmological dialogue, the solid he associated with fire was the tetrahedron which is formed from four triangles and contains the least volume with the greatest surface area. This makes fire the element with the smallest number of sides. It is built from three triangles, the ancient symbol for fire.

In alchemy the chemical element of sulphur was often associated with fire, its symbol was an upward-pointing triangle. The upward pointing triangle according to alchemy, is volatile and not fixed. It is seen as primary, expansive, radiant, hot and dry. Fire is sometimes ascribed the power of destruction and death. The Alchemists saw Fire as the first principle of Life and movement. Its properties are related to the Sun and the masculine principle. It is the will and determination of all matter, the Coagula.
fire is alined with the cardinal point of north and so related to the season of summer and the constellation of Leo. Heraclitus like many others considered *fire* to be the most fundamental of all elements as it gave rise to the other three. This makes sense as in Sumer fire was the element of Anu, the king of the gods and the primary deity.

The humour associated with fire is Yellow bile, an acid, was the humour identified with fire, since both were experienced as hot and dry.

The choleric temperament is marked by passion drive and enthusiasm. According to Plato he is mostly involved with the senses. Because of this they often fulfil the role of leaders and positions of authority. Choleric's are action-oriented forceful and goal driven. Typically in a person's life, the time when choleric tendencies are most present is in youth. Choleric people therefore tend to be energetic,“on-fire”, and enthusiastic.
They are quick thinking and practical, and strong-willed and extravert. Theirs is the straight line without diversions. Impatience is a strong choleric tendency especially of those who are least like them such as the phlegmatic. The Choleric temperament is self-confident, self-sufficient, and independent minded. They are decisive and opinionated and find it easy to make decisions for themselves as well as others. The Choleric does not like being told what to do. They like bright colours, lots of action and clear goals.

Earth

The qualities of the element earth are solidity, weight, hardness, immovability. Its root is cold.

Melancholic people tend to be apathetic, passive, sluggish and stubborn. Since Earth is the principle of structure, the melancholic focuses on physical reality and tends to be rigid and skeptical. In Aristotle’s terms, such people are cold and dry.

Plato- intuition. Aristotle- moral

People who are known for their melancholic temperaments are emotionally sensitive, creative, introverted, self-sacrificing, and perfectionists. fantasy and imagination play an important role, but also predisposed to feeling negative emotions, particularly sadness. Melancholics are associated with deep thinking, the earth and the season of autumn. They can be very compassionate or get stuck in self-pity. Melancholics have a rich inner life and are usually introverted and can be brooding. This also means that they can spend a lot of time quietly by themselves and even enjoy being alone. These are the ideal traits for an artist, a poet, or a musician. Melancholics equate with the age of maturity.
Earth is associated with the melancholic humour of black bile.

Water

The qualities of water are adaptability, lacking form of its own adopting that around it. Plato informs us that the phlegmatic is focused upon reasoning Aristotle says is logical and investigative. Its root is cold.

The Phlegmatic temperament is characterised by the apathy and lack of excitement. They enjoy comfort, to eat and sleep. They tend to be introverted and very perceptive. Routines are very important for the phlegmatic and they are usually even-tempered, although they can be very stubborn if pushed. they tend to let their feelings guide them. They tend to be somewhat shy and avoid being the centre of attention.

Water is associated with the humour of phlegm, which is found in the clear fluids of the body carried by the lymphatic system. Aristotle explains that Moistness is the quality of fluidity or flexibility, which allows a thing to adapt to its external conditions. The phlegmatic person is cold and wet in Aristotle's terms.
The phlegmatic aline with the season of winter and old age.

Conclusions

We have seen that *the order* of the elements is an important part of their symbolism and that this fact was known to the early philosophers who worked with them, as it is to astrologers today. If we examine the various examples written or illustrated throughout history, what at first appears to be confusion and inconsequence turns out to be the use of two major systems. These two orders represent two world views and therefore two canons, the Sumerian and the Greek, both of which can be found to be in use throughout history. This can be seen to hold true into the late Middle Ages and through into the Renaissance.

The elements are to be found in the oldest stories that we have, they are there in the earliest layers of the creation myths of various cultures as the primary division of creation into its constituent parts. A wider study would no doubt reveal other canons in Egypt, China, Japan and India to be variations upon this general theme and also to have played their role in the formation of these philosophies. For example the three 'gunas' of India, in use long before the system of humours was established in Greece, were also associated with the elements and follows the same basic logic. For the sake of sanity as well as brevity I am restricting this study to only a few of the major civilisations who used this system of thought.
We have seen how the theory of the elements began as a science to map mans place in the cosmos, allowing navigation and the mastery of time and how this was incorporated into mysticism, myth and religion. For the Greeks the elements were the underpinning of their teleology, their world view, and was used to explain the workings of nature and the

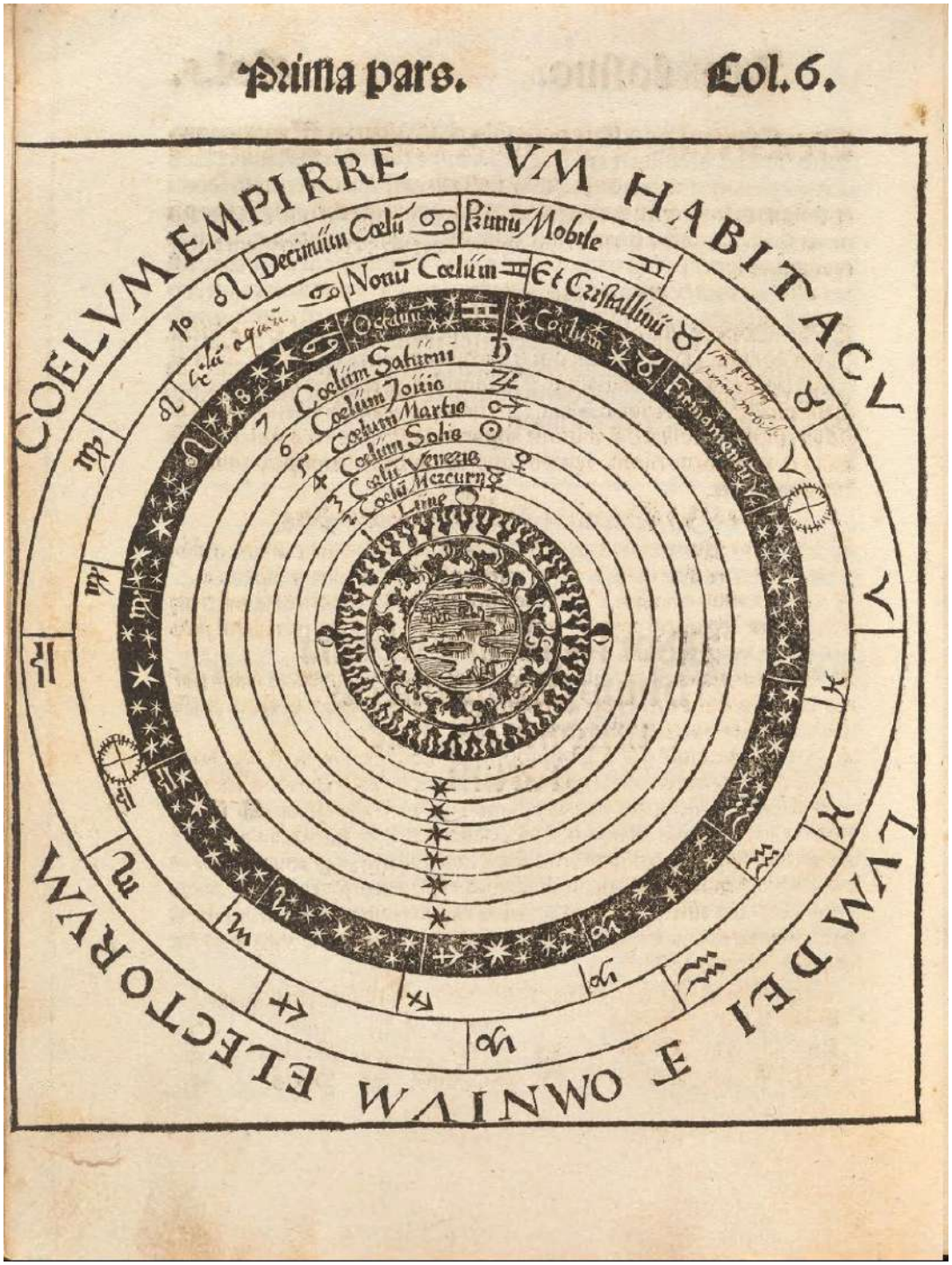
fundamental nature of creation. This leading eventually to a theory of medicine, the humours and an early form of psychology- the four temperaments. As inheritors of the Greek world view we have unwittingly inculcated a way of thinking that has influenced and indeed underpinned the science of our times.

That there are in fact six elements to the cosmos is a lesser known fact. The four directions plus above and below describe the axis of the world sometimes called the axis mundi, and together form the matrix of the Tree of life that spans the three worlds.

The next phase of creation and the next level of complexity according to these creation myths after the creation of the elements, was the generation of the cosmos, the planets, the earth, plants, its myriad creatures and the generations of mankind. Next we will explore how this process unfolds and the structures of the cosmos that the elements produce.

Chapter 3.

The celestial spheres and the tree of life



The composition of the heavens and how it was understood during the renaissance.

The celestial spheres

The above illustration from Peter Apian, Cosmographicus liber, Nuremberg 1524, p. 6. is one version among many of the cosmic order as it was understood in renaissance Europe. It represents a map of the universe and a theology in one and was known as the Celestial Spheres.

The celestial Spheres, or Celestial Orbs, were cosmological models that were known to be used by by Plato, Eudoxus, Aristotle and Ptolemy, they described the shape and form of the universe as they understood it. More over it incorporated a theology, as it describes the loci of heaven and of God in relation to the earth and man. This world view, this mythology can reliably be traced back at least to Ancient Greek times. It contains therefore many details of interest if one wants to understand how the ancients viewed the composition of the heavens from both astronomic point of view as well as a religious one.

If we take a good look at the illustration above we find that we can break it down into a series of rings each with a name or a symbol. The language is Latin and translates something like this;

The **Coelum empireum habitaculum dei** et **omnium electorum** (the Empyrean of God and the Elect)

Decimum Coelum Primu(m) Mobile = 10th sky (sphere), prime mover

Nonu(m) Coelum Crystallinum = 9th sky (sphere) of crystal

Octavium (coleum) Firmamentu(m) = 8th sky (sphere), firmament (of the stars)

COELV (COELUM) = sky (sphere) of:

SATURNI = Saturn

IOVIS = Jupiter

MARTIS = Mars

SOLIS = Sun

VENERIS = Venus

MERCURII = Mercury

LUNAE = Moon

Terra not named

Although versions of this “map of the sky” vary somewhat from author to author, this one is typical as it consists of ten numbered rings. The earth is neither named nor numbered which seems rather strange, a feature consistent across all exemplars. Why this is will become clear as we progress. But the earth *is* illustrated. In fact if we look carefully we see that

what at first sight appears to be simply the earth is in fact a series of rings its self. The outermost obviously represents fire, the second- air the third- a small ring of water and at the very centre -the element earth. These are the four elements from which the material realm was though to be composed. The order that they are arranged in was known as the Aristotelian order which runs from the lightest element to the heaviest, hence earth being at the very centre.
We have then ten numbered rings, eleven if we include the 'Empire of God' in the outermost layer, twelve if we include the Earth.
What do these rings represent? Initially it would appear that this is a map of the cosmos or solar system and indeed this is what it represented but it is also much more. It is at the same time a theological map of the structure of the metaphysical worlds and their relationships. it was only later that during the development of western astronomy it became interpreted as a physical map while the metaphysical aspects became neglected or reinterpreted to conform with the Christian world view. Adjustments were made therefore as time passed, in order to try to make this ancient scheme fit with the developing science and the religion of the times.

The Empire of God.

In ancient cosmologies such as these, the Empyrean Heaven, or simply the Empyrean, was the place in the highest heaven and the abode of God, which was supposed to be occupied by the element of fire (or aether in Aristotle's natural philosophy). The word derives from the Medieval Latin empyreus, an adaptation of the Ancient Greek empyros (ἔμπυρος), meaning "in or on the fire (pyr)". The highest god is a god of fire.
A text from the renaissance puts it so;

On the Nine Spheres of Heaven, from *Astronomia Teutsch Astronomei*, 1545:

Above the firmament is the ninth heaven or sphere/in the same heaven are God and God's angels/and all souls who are just/This ninth heaven is called Empirium/that is the fiery heaven/because it is a secret place of mighty power/and it is hidden from the people on earth/[it is] the throne upon which deity is sitting/a heaven of the uppermost trinity called Thronus/or the highest chair/he is a true Emperor/and a King of all kings/and a Master of all rulers/and in this ninth heaven there is no star and no planet/because this heaven is adorned with the highest Light of the brightness of God/and it is adorned in a way/that nobody may talk or write about it.

This text above declares that there are only nine rings not ten, as the author ignores both the "Crystal sphere" and the "Primium mobile". Here he also places the highest god sitting in "**a heaven of the uppermost trinity** called Thronus or the highest chair". Why will become clear as we progress. As a map of creation this realm is not numbered as God is the creator and was seen- not as part of creation, but as outside it, or beyond it.

Tenth circle- Primum mobile

This was known as the 'The first moved sphere'. The ring here shows the zodiac orientated with Aries marking the spring equinox as was traditional in the period circa 2000BC. Dante Alighieri (circa 1300 ad) tells us that the Motion was provided to the whole system of rings by the Primium Mobile, and that it was the fastest moving of all the spheres. The concept, it is said, was introduced by Ptolemy (170 AD) to account for the apparent daily motion of the heavens around the Earth, producing the east-to-west rising and setting of the sun and stars. So this ring provided the movement for the stars and planets as a whole but seems to be a more recent addition.

N**inth circle, the crystalline heaven**.
Astronomia Teutsch Astronomei, 1545:

…and therefore has God/who is the highest artificer above it/put another heaven/which is called crystal heaven/and this heaven has the shape and form of pure water/and frozen ice/ stronger than a crystal/and the cold of this crystal heaven withstands the warmth of the fiery heat/[and] a wheel is turning there/and God has set the firmament amidst the waters/and separates the waters from the waters/and it should not be understood that the crystal heaven is a heaven in itself/otherwise there would be ten spheres/but there are only nine. […]

Our Cosmographicus of "The celestial Spheres" does indeed give a number to this ring. In other examples from the period it is not numbered. It is therefore not so much a thing perhaps, as a divider of things, which reminds me of the waters that were divided from the firmament in Genesis.
This ring in is also marked with the signs of the zodiac, only this time it is of set from away from north by several degrees. This is deliberate but it's purpose to me is still unknown. Solar symbols can be seen to mark the equinoxes.

Eighth- firmament. "sky" or "heaven".
Again the zodiac is represented only this time a black night sky background is added with the stars included. The zodiac is again shifted a little further west.

Astronomia Teutsch Astronomei, 1545:
The eighth sphere is called the firmament of heaven/and therein are all the stars according to their order/and the stars are equal to the twelve signs of heaven/and it is said about these same stars that they are in the order of the xxxvi pictures in heaven/which is called firmament/and this is turned around more mightily than all the other wheels of movement/ and out of this fast rotation comes such mighty heat/that the stars and the air have too much heat in them caused by the heat and warmth/

The concept of a firmament first arose In Mesopotamian and was adopted by the Hebrews. It was the vast solid dome created by God during his creation of the world when he divided the primal sea into upper and lower portions so that the dry land could appear. In this layer the spinning stars are fixed into patterns- the zodiac- and the constellations and so do not wander around as the planets do. As such they are the fixed point against which all else is measured.

Then come the seven planets in a particular order. This was known as the Ptolemaic order, after the famous Greek Astronomer. But Ptolemy was not it's the author, its roots are much older. In our example the series runs so;

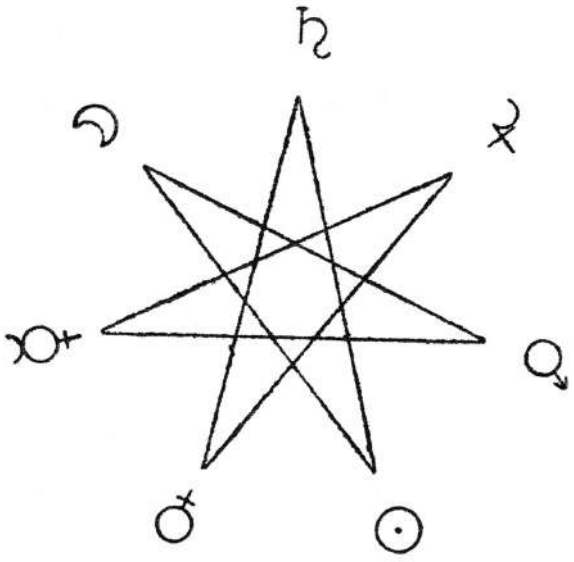
7. Saturn
6. Jupiter
5. Mars
4. Sun
3. Venus
2. Mercury
1. Moon

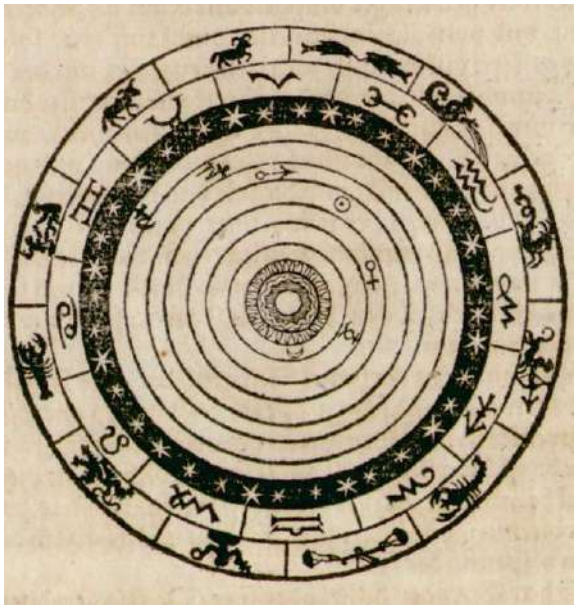
The earth. Not named or counted. Consisting of the elements. Fire, Air, Water, earth according to their weight, or solidity, per Aristotle.
This is the Sumerian model of the planets, based upon their astronomic observations. It describes the order of the apparent speed of the planets as they rise and set, relative to the stars, as seen from earth. It represented the standard scientific model of the heavens for thousands of years. It as based upon accurate measurement not of their relative distances but relative time. There are some intriguing things about this list. For example, the names we give the planets are Roman, more or less. The Romans like their predecessors named the planets after pantheon of gods. These all display a particular character and represent various archetypes, such as war, love, justice and so on. If we search through history back in time, across civilisations and cultures we see the names of these deities change but their

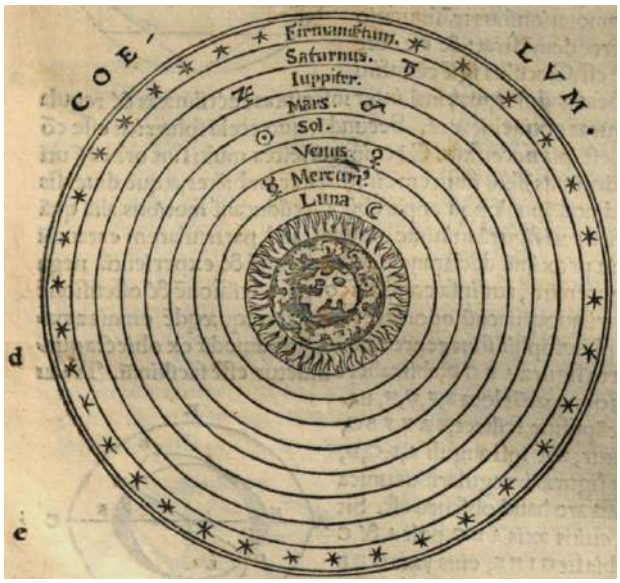
characters, their roles, remain constant, as does the planet to which they belong. The planet Jupiter's association with the god of thunder and lightening can therefor be traced all the way back to the earliest times.
We can see just how entwined we are with this ancient system of thought when we consider the names of the days of the week. The days of the week today are, in the English language, named after deities. These are a mixture of Norse and Roman gods and goddesses in a particular order. They also represent planets, as each deity was dedicated to member of the solar system.

Monday- Goddess of the moon.	Planet-Moon
Tuesday -God of war.	Mars
Wednesday-God of magic	Mercury
Thursday -God of thunder	Jupiter
Friday-Goddess of love	Venus
Saturday- God of wisdom	Saturn
Sunday-God of the sun	Sun

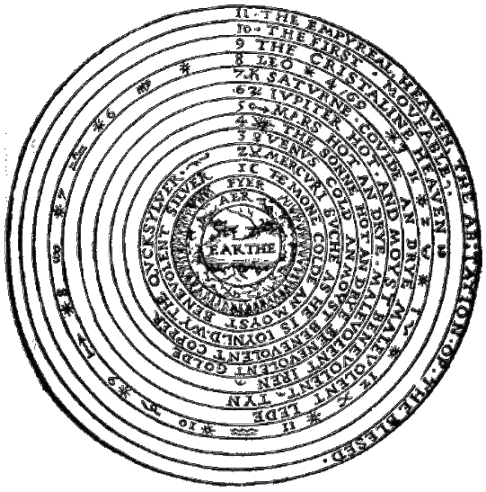
The seven day week, in this order, can also be can be traced back through the ages, to the earliest times. A simple trick with the use of a simple septagram reveals that these two orders are one. Follow the outside ring for the Ptolemaic order of the planets, or follow the inside septagram for the days of the week. Start with the moon.





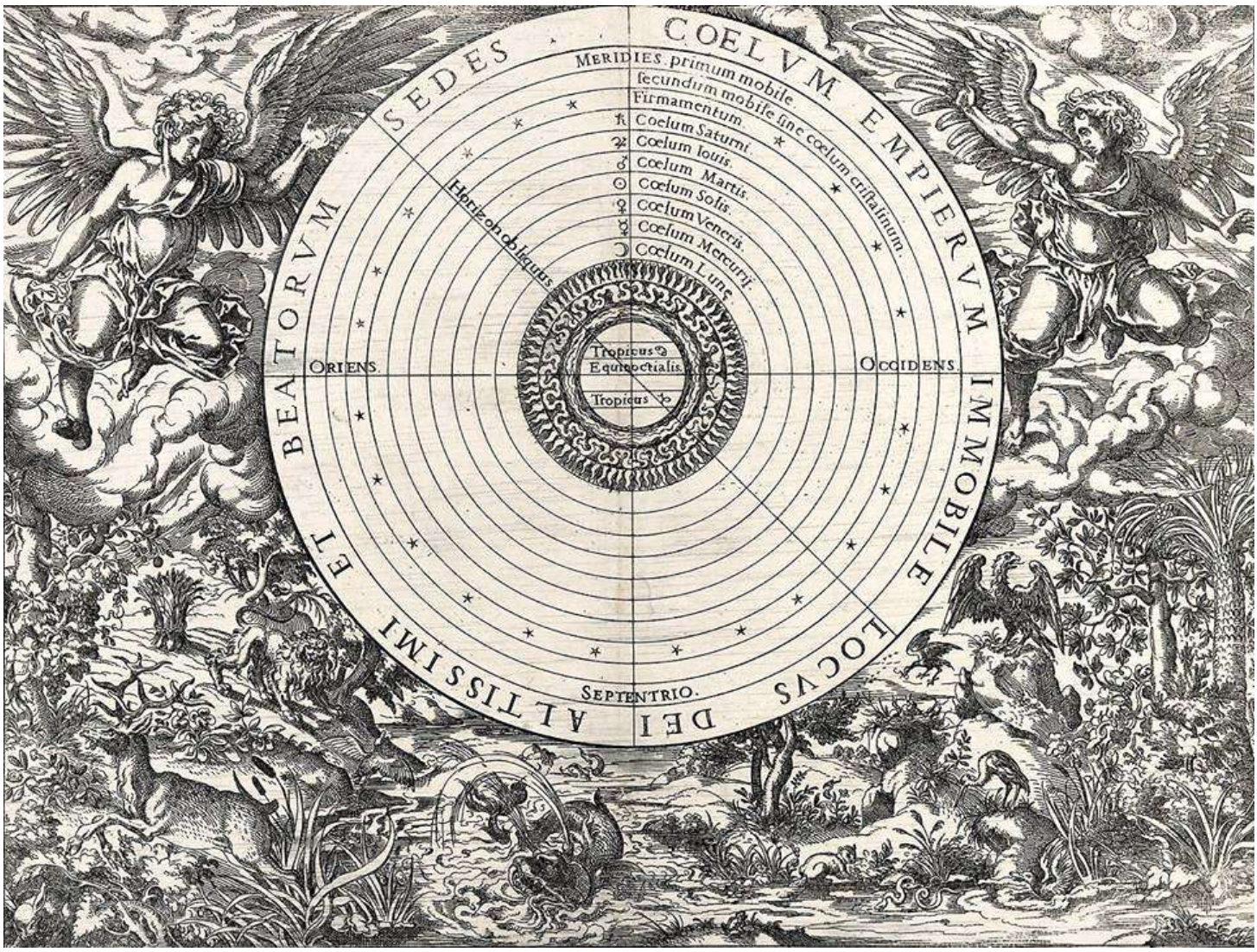


The days of the week are therefor part of a system based upon astronomic measurements of the speed of the heavenly bodies, and not just a random order of names.



The First Book of the Introduction of Knowledge, 1542. 10 rings ex earth

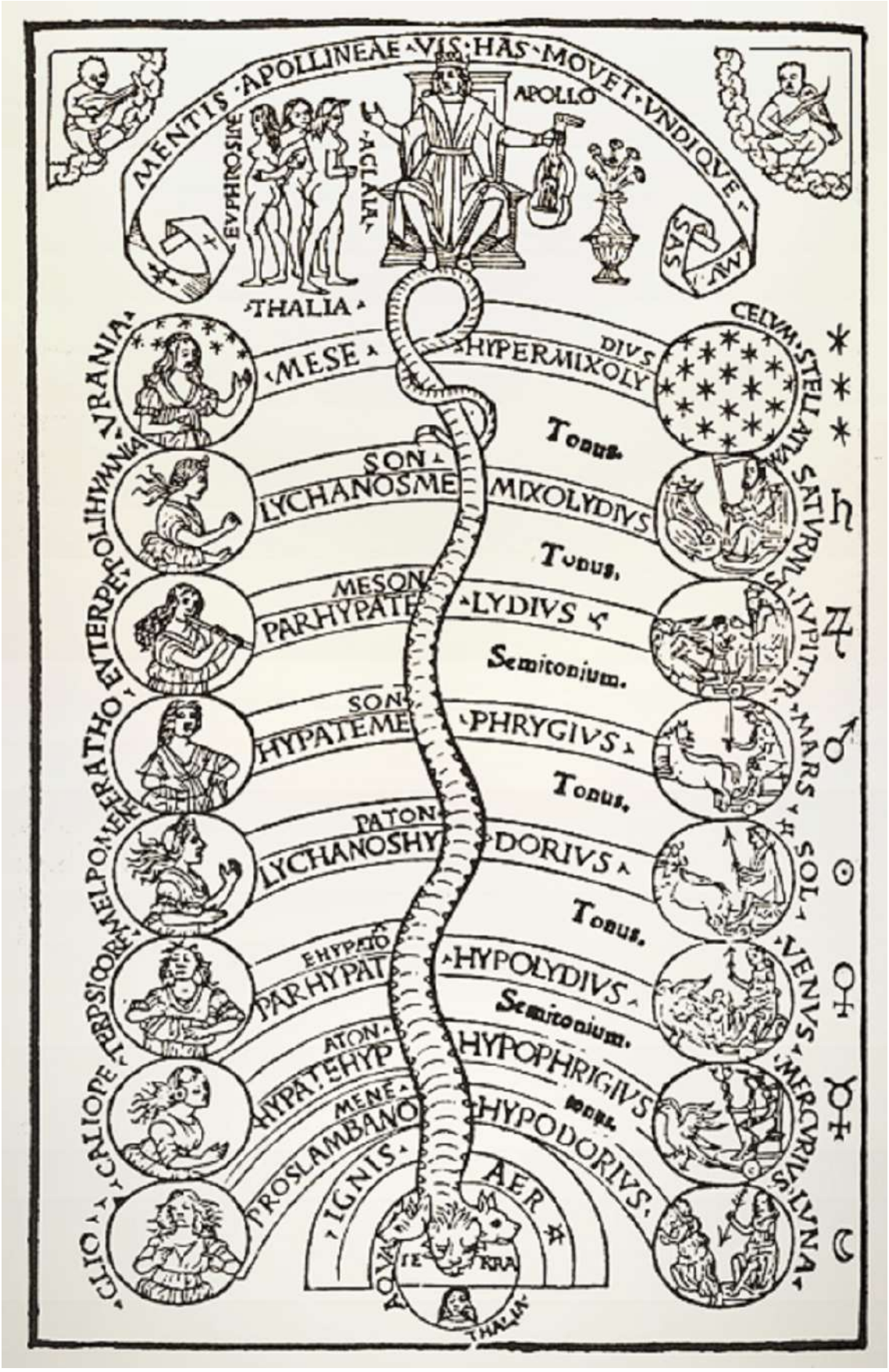
The Ptolemaic universe from Andrew Borde's 10 rings ex earth. Ten worlds Peter Apian's diagram of the celestial orbs from his 1539 work. 11 rings ex earth.



Above we see some other examples of Celestial rings. The lack of agreement between these examples seems to be limited to how many celestial rings there were. Some prefer nine or ten, others eleven. This is because some are counting the crystalline sphere, or the abode of God as a ring, a mistake we were warned against doing by the Astronomia Teutsch Astronomei.

It has long puzzled me as to why the earth is so often neither named or numbered, considering that they describes the order of the planets and stars one would naturally expect the earth to be included. As it turns out the Celestial rings are not an answer to the question, "how many planets are there and what is their order?". They are an answer to another question. "How many heavens are there and what is there proper order?" or "what is the composition of the heavens?" It is a geocentric point of view based upon the division of the sky from the earth, the first movement in creation according to many myths. From this

point on, earth was not part of the sky so was not seen as a cosmic body like the others. Ground and sky were distinct.



Sumerian origins

The Greek cosmos above, follows a similar pattern and can be seen to have influenced the celestial rings of the renaissance. Here Apollo the sun god rules in the highest heaven. He is the god of light filling the role as the element fire in our first example. Here there are seven planetary realms, the stars, the godhead and earth. Ten in total. Similar to the Celestial rings, each realm is dedicated to a power, or a realm of influence.

The Sumerians conceived the cosmos as seven heavens (and seven realms of the underworld). The sky was divided into three , and named after the three highest gods Anu and his children Enki and Enlil. Altogether this equals ten heavens, consistent with our celestial rings. These three gods together with Ki the earth Goddess were fundamental. They represented the elements of fire wind and water and earth. They were also the stars. The Way of Anu was the ecliptic, the path of the sun, the tropic of Capricorn was devoted to Enki, and the tropic of Cancer to Enlil. Each god a received a portion of the sky.
The lower gods equaled seven in number and were equated with the planets in a tradition that is continued via the Romans to this day.
These three highest heavens then found their way into the cosmologies of the Europeans to become the three heavens in the celestial maps we have been looking at.
They are also the origin of the crystalline ring.

The ancient Mesopotamians regarded the sky as a series of domes (usually three, but sometimes seven) covering the flat earth. Each dome was made of a different kind of precious stone. The lowest dome of heaven was made of jasper and was the home of the stars. The middle dome of heaven was made of saggilmut stone and was the abode of the Igigi, the lower gods. The highest and outermost dome of heaven was made of luludānītu stone and was personified as An, the god of the sky.

Jasper is likened to the clear heavens and a rain cloud and represents the lower heavens due to its greenish or bluish hue, the colour of the sky. The stone of the middle heaven is described as: "The stone whose appearance is like lapis-lazuli is named *saggilmud*-stone," The stone of the upper heavens is then described as “The stone whose appearance is red, covered with white and black patches and is named *luludānītu* stone.

(KAR 307: 30-8 and AO 8196 iv. 20-2 (possibly Kassite date, but not earlier)
The Upper Heavens are luludānītu-stone. They belong to Anu. He settled the 300 Igigi inside. The Middle Heavens are saggilmud -stone. They belong to the Igigi. Bel sat on the high dais inside, in the lapis lazuli sanctuary. He made a lamp of electrum shine inside . The Lower Heavens are jasper. They belong to the stars. He drew the constellations of the Gods on them. In the … of the Upper earth, he lay down the spirits of mankind.
'Bel' here is a later name for Enlil, so we can confirm that Enlil claimed the middle heaven.

Following this information we can rename each celestial sphere with its Sumerian counterpart. If we follow the logic of the above text we inevitably get the order below.

The ten rings of the Cosmographicus compared with the Sumerian crystal spheres.

10. The Empire of fire. ————Anu is the element of fire—luludānītu stone.
9. The first moved stars. ———-—Igigi Gods (Enki Enlil)—-Saggilmut stone.
(The Crystal sphere here divided the renaissance heavens).
8. The zodiac.—————————Stars ruled by Anu—————————-—-Jasper

The Sumerian planetary gods

7. Saturn———————————Enki
6. Jupiter ——————————-——Enlil
5. Mars———————————-———— Nergal
4.Sun———-—-———————————Utu
3. Venus———-———————————Inanna
2.Mercury———————————-——Ninurta
1. Moon———————————Nanna
The earth. Not named or counted.——-Ki

The Tree of life

It should be clear by now that our Cosmographicus represents a slightly corrupted and half forgotten Sumerian theology and astronomy. For the Sumerians this map of the cosmos was known as the Tree of Life. This order was the most sacred of all Mesopotamian icons, a

glyph that mapped the hierarchy and genealogy of the gods, together with the order of the metaphysical realms of heaven, earth and the underworld.

Although the Sumerian Sacred Tree can only be surmised, we have enough evidence based upon the later Akkadian material of what it might have looked like. There were variations in the order of the tree with time and place but these were usually minor and always operated with the given structure of the tree. This form shares many basic elements with our list of celestial spheres but orders the gods in a particular pattern. Anu presides at the top, the earth Goddess Ki below, with the gods in the correct (Ptolemaic) order in between. This is, (in my opinion), one of the original forms of the celestial spheres as it was known in esoteric Sumerian theology.

The Sumerian Tree of life

Anu1

10 Enlil **Enki 60**

20 Utu **Nergal 50**

Inanna 15

30 Nanna **Ninurta 40**

Ki 5

Erishkigal 14

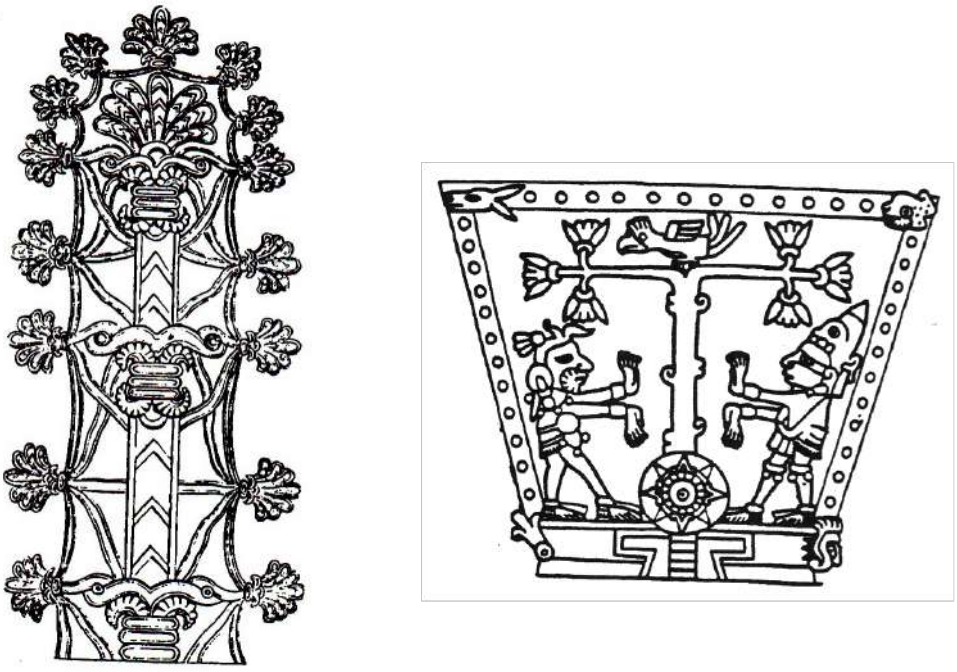
This is a list of the children of Anu and Ki, the Annunaki and a map of the mythology that we read of in the poems. Above resides Anu the father of the gods. Beneath him his two sons Enki and Enlil. Beneath them are their children, two siblings each making it a family tree. As these gods also represent the planets this order is the order of creation formulated in the Sumerian conception of the creation of the universe.

Chapter 4.

The Sacred Tree

As far as we can go into the past, as far as myth and image can reach, as far as history and relic can record we find the Tree of Life, a sacred cult concept present in the religious symbolism of ancient times. The Vedas show it to be a central part of their creation myth as do most of the great civilisations that grew up at this time such as Egypt, Sumer and China. We see it in reliefs carved into the rock, we see it in the stories they told, we see it in the symbolism of their creation myths. There are glimpses of it form earlier periods as old as 7000 BC of trees, snakes and other neolithic scratchings but nothing concrete or specific, just suggestions that the idea is very old and very durable.

The meaning of the motif of the sacred tree varies according to the time or culture but its over-all composition is strikingly similar. Jewish, Muslim, and Buddhist even Aztec art, all revere the tree.



An example of the Assyrian and Aztec Sacred Tree.

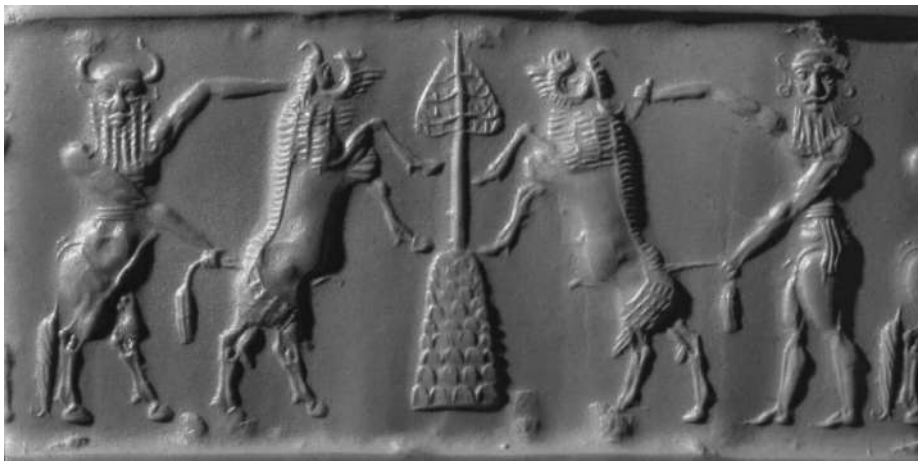
The Tree of life is familiar to us from Genesis, as the trees of knowledge and of immortality but these stories originated thousands of years before the Bible was written. One of the oldest examples can be found in Sumer. Here the Tree is part of the creation story too.

A commonality between the creation myths of Mesopotamia, India and Egypt and others is the idea that the universe was formed from the splitting of the cosmic egg. This egg gave birth to Father sky and Mother earth, from which all life emerged. It appears that it is this story that is being shown in many of the images of the Tree. Below the Tree we see images of the sacred mountain, mother earth while above is the god of light and sky. The gods of Sumer were known as the Anunnaki. The children of An and Ki, sky and earth. In the Sumerian creation story, like the bible, the creation of sky and Earth is followed by the creation of life, plants animals and man.

It is in this context that we find the Sumerian Sacred Tree.

The time gap between the first Eridu temple and that of the later compositions of the Sumerian epics which refer to it, is sometimes more than 3000 years – a period in history as long ago from the scribes who wrote the epics as it is far from the present day. It is therefore a dimly remembered past even for them. Often their poetry refers to this long ago time when their world 'the land between the rivers' was created. We can glean from the fragments left to us a glimpse of what the Sacred Tree represented to the early Sumerians. Some of the clues left to us are in the form of cylinder seals, tiny gems that when rolled in clay reveal their inscriptions. Other clues can be found in the stories they told.

Below we see the Tree as a conifer growing from the sacred mound that first arose from the primeval waters. A man and a 'god' hold each a bull that perhaps fertilise the tree.



Below. The Tree grows from the sacred mound flanked by bulls and eagles. (This symbol is also the letter for ‘plant’ in Proto Siniatic, or field, garden and plant in Ancient Egyptian.) A tripartite structure defines the Tree throughout its early history.

The Tree as palm with seven branches and fruit, flanked by a god, a king and snakes.

Akkadian 2000 BC. The gods of Edin. From left to right. Dumizi?, the Sacred Tree on the mound, Inanna, Utu, Enlil as eagle, Enki, and the two faced Ismud?

In each of these examples the Tree takes on a different form. A fir, a palm and a deciduous looking tree. Yet their context suggests that they represent the same thing. The theme of Tree, king, god, is one that we find repeated in many examples.

In an Akkadian/Sumerian poem we hear of the Sacred Tree at Eridu, Enki's city;

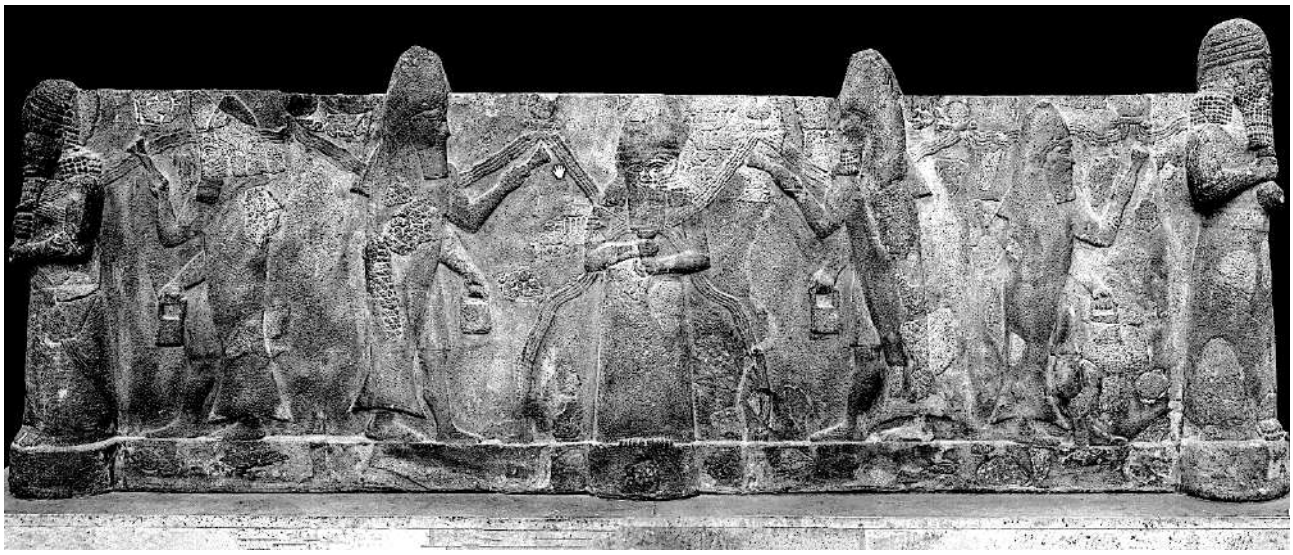
(In) Eridu a stalk grew over-shadowing; in a holy place did it become green;
Its root was of white crystal which stretched towards the deep;
(Before) Ea was its course in Eridu, teeming with fertility;
Its seat was the (central) place of the earth;
Its foliage was the couch of Zikum (the prim~val) mother.
Into the heart of its holy house which spread its shade like a forest hath no man entered.
(There is the home) of the mighty mother who passes across the sky.
(In) the midst of it was Tammuz. (Dumizi)
.....Fragmentary line.....
(There is the shrine?) of the two (gods).
Sumerian Akkadian bilingual

The Tree here represents the centre, it is an Axis Mundi, a world tree. As such it is compared to the three realms, the underworld, the centre earthly realm and the heavens, or the vault of the sky.
Tammuz or Dumuzid is the shepherd and a hunter who is found in the centre of the tree. He is the lover of Inanna the Goddess of love. The Great Mother is in the foliage of the tree. We learn that it is the shrine of the gods.

The tree has been divided into three parts. The root is mentioned, then the centre and then the heavenly foliage. This is because the world was divided into three parts also. The heavens, the earth and the underworld. The tree was the pole that joined them all.
If the Tree here has any affinity with the Biblical tree it should also be located in Eden. In the Talmud and the Jewish Kabbalah, the scholars agree that there are two types of spiritual places called "Garden in Eden". The first is rather terrestrial, of abundant fertility and luxuriant vegetation, known as the "lower Gan Eden" (*gan* = garden). The second is envisioned as being celestial, the habitation of the righteous, the "higher Gan Eden". Adam is said to have dwelt only in the *Gan*, whereas the higher Eden is said never to be witnessed by any mortal eye.
In Sumer there were three Edin's. The En Edin and the Ki-Edin which also mean higher and lower.
A third Edin, that of the underworld was ruled by Nergal.
The Tree is also mentioned in a Sumerian poem called Enki and the world order. Again we see that it is the Axis Mundi that resides in Eridu.

The great emblem erected in the Abzu, providing protection, its shade extending over the whole land and refreshing the people, the principal foundation (?), the pole planted in the ..... marsh, rising high over all the foreign lands. The noble captain of the lands, the son of Enlil holds in his hand the sacred punt-pole, a mes tree ornamented in the Abzu which received the supreme powers in Eridug the holy place, the most esteemed place. The hero proudly lifts his head towards the Abzu.

The tree is found at the centre of the earth because it is the the axis of the earth upon which it spins. The Tree, as part of a map of heaven and earth and the underworld, was the axis that joined them all. As such it represented an astronomical concept as well as a religious one. The tree marked the location of the pole, of the Great above, the seat of Anu and below, the Great below, the seat of Enki with man at the centre of the two extremes. The spinning of the earth or the turning of the stars which marked the pole was the basis from which all astronomy sprang, it was the pillar upon which all else rested. Yet this was also a metaphor for another layer of meaning. Not simply describing the the material world and mans place in it, it hints at another three levels of existence, the divine, the earthly and the demonic worlds, making it a map of the spiritual worlds as well.



In this image a basalt box from From Assur, Iraq. Neo-Assyrian period, reign of Sennacherib, 704-681 BCE. we see seven figures with Enki in the middle in the place where the tree of life is usually found. The four rivers that are often described as flowing from the under the tree in various cultures, are here emanating from the chalice that he is holding. Two Abgallu are collecting these waters and bestowing this as a blessing upon the deified kings standing at the ends. This could be seen as an early form of baptism that we are familiar with from other Middle Eastern literature. It is a magical transference of the power of the god to the king. Enki stands in the place where other later examples show the Tree.

As we have seen Eridu was held in the highest sanctity and also contained the Sacred Tree. Eridu is thought by many scholars to be the location of the Sumerian Eden, Edin in Sumerian. It was in Eridu also that mankind was created to tend the Sacred Tree. As the god of wisdom it was Enki who had the necessary skills to create mankind. A Sumerian poem describes how it was done.
His mother Nammu "brings the tears of the gods" before Enki and says;

Oh my son, arise from thy bed, from thy (slumber), work what is wise,
Fashion servants for the Gods, may they produce their (bread?).

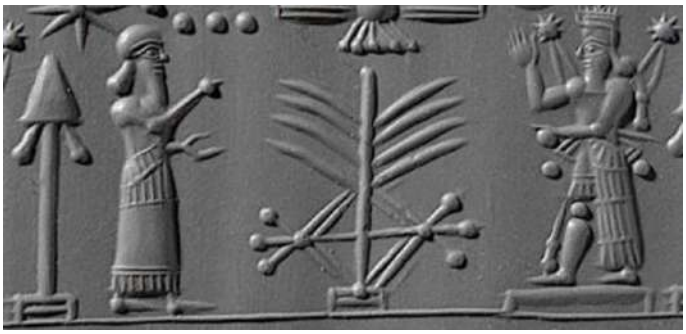
He tells his mother:

Oh my mother, the creature whose name thou has uttered, it exists,
Bind upon it the (will?) of the Gods;
Mix the heart of clay that is over the Abyss,

The good and princely fashioners will thicken the clay
Thou, do thou bring the limbs into existence;
Ninmah (Ninhursag, his wife and consort) will work above thee
(Nintu?) (goddess of birth) will stand by thy fashioning;
Oh my mother, decree thou its (the new born's) fate.

This poem describes how people are made from clay. They are made in the the Abyss, which is the Abzu, the sweet water pool of Eridu. There are echoes of this far away in Greece where it was Prometheus, the Titan god of forethought and crafty counsel, a Greek Enki, who was given the task of moulding mankind out of clay.
Other sources describe the creation of the first people-seven men and seven women. Amongst these are the "seven *apkallū* of *Eridu,* priests of Enki. They bring the arts of civilisation to Sumer, lay the foundations of the first cities and establish kingship. They are the priests that preside over the Sacred Tree.

So the Tree has many aspects, it is the Axis Mundi, the turning of the world, the place at the centre, a map of heaven and earth, the symbol of kingship and the laws of civilisation, a symbol of fertility. It is found in Eridu. The name for Eridu in Sumerian is Nun-ki, "The mighty place" In Sumerian cuneiform is is written like this;



Here it is rotated so it stands vertical. (Sumerian pictographs were all turned from the vertical when they became written as cuneiform.) This word is drawn in a manner that is almost identical to some of the images of the Sacred Tree. (Right). The square shape at the bottom means "earth", Which creates the image of a tree growing from the earth or mountain as is often seen in the impressions.

Above. Two palm trees and the ubiquitous sun/light symbol above the king.

Above. Abgal sages blessing the tree. Above the tree is the Assyrian symbol of the sun god. Here the tree is a stylised date palm. The protrusions are thought to be cedar pine cones. The priests are either blessing the tree by sprinkling water on it from the bags they carry, or alternatively fertilising it with pollen.

Some early examples of the tree (2000BC?) The sun rises next to two stars. A winged god, an Abgallu sage and king flank the Tree. Below. The Tree on the mound with the sun rising.

Above right. Shamash who presides over justice, rises over the tree, a young palm. The seated god hands the Mes of rulership to the king under the watchful gaze of the sun. 2000 BC. Below another version of the same theme.

The palm and the cedar

Many of the images we have of the Sumerian and Akkadian tree is shown as a date palm. This is not too surprising as not only was Eridu and it's environs a major exporter of dates but the tree its self was cultivated here from the earliest times around 4000 BC. For the Sumerians it must have played an important role in their everyday diet.
The very earliest-known date seeds were found however in the Indus Valley in settlements dating to the sixth millennium B.C. suggesting that date cultivation first originated in India and was later carried to the Near East.
A natural palm grove features an even split of half female and half male trees. Such groves rely on Nature to carry the males pollen to the females flowers via the wind or pollinating fauna. The Sumerians increased yields and established a practice still in use today: artificial pollination.
All this process required was to take the pollen of a male plant, and smear it onto the female's flowers. This not only ensured maximum yields but allowed cultivators to have a lot more of the productive female trees per acre in their groves than male ones.

Scholars have proposed that the Akkadian and Assyrian reliefs showing the Sacred Tree and its Abgallu priests are performing this very act, the artificial pollination of the date palm in a ritual form.

But there are also indications that there was another sacred tree other than the palm.
The Sacred Tree is the main theme of a poem featuring Innana written, according to Kramer, around 2000 B.C. but being a copy of a poem composed at a much earlier date. It begins in the traditional manner of many Sumerian poems by stating that this all happened a long time ago, when all was first created.

The Huluppu tree

In the first days, in the very first days,
In the first nights, in the very first nights,
In the first years, in the very first years,

In the first days when everything needed was brought into being,
In the first days when everything needed was properly nourished,
……

At that time, a tree, a single tree, a buluppu- tree
Was planted by the banks of the Euphrates.
The tree was nurtured by the waters of the Euphrates.
The whirling South Wind arose, pulling at its roots
And ripping at its branches
Until the waters of the Euphrates carried it away.

A woman who walked in fear of the word of the Sky God, An,
Who walked in fear of the word of the Air God, Enlil,
Plucked the tree from the river and spoke:
"I shall bring this tree to Uruk.
I shall plant this tree in my holy garden."

Inanna cared for the tree with her hand.
She settled the earth around the tree with her foot.
She wondered:
How long will it be until I have a shining throne to sit upon?
How long will it be until I have a shining bed to lie upon?"

The years passed; five years, then ten years.
The tree grew thick,
But its bark did not split.
Then a serpent who could not be charmed
Made its nest in the roots of the huluppu-tree.
The Anzu-bird set his young in the branches of the tree.

And the dark maid Lilith built her home in the trunk.
The young woman who loved to laugh wept.
How Inanna wept!
(Yet they would not leave her tree.)
…..
Inanna cries for help various times and is eventually saved by Gilgamesh.

Gilgamesh struck the serpent who could not be charmed.
The Anzu-bird flew with his young to the mountains;
And Lilith smashed her home and fled to the wild, uninhabited places.
Gilgamesh then loosened the roots of the huluppu- tree;
And the sons of the city, who accompanied him, cut off the branches.

From the trunk of the tree he carved a throne for his holy sister.
From the trunk of the tree Gilgamesh carved a bed for Inanna.
From the roots of the tree she fashioned a pukku for her brother.
From the crown of the tree Inanna fashioned a mikku for Gilgamesh,
the hero of Uruk.

In this beautiful poem the tree is described as situated in Inanna's "holy garden" which is found in Uruk. It appears that Eridu is not alone in its claim to being the home of the Tree. This tree, like that of the Bible, has a snake at its roots, but also a bird in its branches and "the dark maid Lilith" thought to be some kind of demon in it's middle, revealing the same tripartite division recognisable as the three worlds that we saw earlier. Inanna wants to make a throne or a bed from the tree which reveals its association with royalty and sovereignty. This is also a clue as to the species of the Tree that Inanna plants. The Sumerians prised cedar for its building properties but the palm was not, as its wood is poor and soft. If Inanna wants a throne it must be then good timber, suggesting that the tree here was imagined as a cedar. Cedar grew in the forests of the highlands.
In another fragment this idea seems to be confirmed; we read;

The Anunna the great gods, have taken up dwellings in your midst, and consume their food in your giguna shrines with their single trees.
"Black land, may your trees be great trees, may your forests be forests of highland mes trees! Chairs made from them will grace royal palaces!

From this we may conclude that each city has its Tree. It is single, indicating its sanctity. The cedar was the most renowned highland tree. Inanna made hers into a throne. The Mes tree is the throne. The Mes tree is a cedar.

The Tree at Eridu was also an oracle, a medium through which advice or prophecy was sought.
The Sacred Tree, by J. H. Philpot describes the cedar as the most sacred of trees;

A still more striking illustration of the antiquity of this conception is found in the account of the initiation of an augur given on a Babylonian tablet in the British Museum. The candidate is there made to descend into an artificial imitation of the lower world, where he beholds "the altars amidst the waters, the treasures of Anu, Bel, and Ea, the tablets of the gods, the delivering of the oracle of heaven and earth, and the cedar-tree, the beloved of the

great gods."(which their hand caused to grow) Here the earth-oracle and the tree-oracle are seen in very early conjunction; but the belief in the divine power inherent in the tree can be traced still farther back, for in a bilingual text of much earlier date we read of "the cedar-tree, the tree that shatters the power of the incubus, upon whose core is recorded the name of Ea," i.e. the god of wisdom.

While describing inscribed bricks from the Nippur ziggurat Peters (1904) tells us that:
"Among the bricks of other kings found by me in the ziggurat were those of Bur-Sin of Isin, 2600 B.C., who calls himself "the powerful shepherd of Ur, the restorer of the oracle tree of Eridu…"

Philpot (1897) adds;

… the sacred cedar of the Chaldaeans, which, besides being essentially a tree of life, employed in magic rites to restore strength and life to the body, was also "the revealer of the oracles of earth and heaven." Upon its core the name of Ea, the god of wisdom, was supposed to be written, just as the name of Ormuzd was first disclosed to man by appearing carved in the wood of his sacred cypress.

So there are indeed indications that the Tree was sometimes seen as a cedar and at others as a palm. In the later Assyrian and Akkadian reliefs the Tree is clearly a palm but the fruit being proffered by the sages is thought by scholars to be the fruit of the cedar, therefore combining both trees in one image.
Around the middle of the 2nd millennium the tree has changed. Akkadian power now rules the region. They have adopted and adapted the tree. This tree consists of a trunk with a palmette crown standing on a base and surrounded by a network of horizontal or intersecting lines fringed with palmettes, pinecones, or pomegranates. Eagle, human, or Abgallu sages and kings flank the tree, often a winged sun disk again hovers over the whole scene.
The Apkallu hold a tree fruit, most likely a cedar pine cone in one hand, and a container in the other. One panel shows two Apkallu administering to the sacred tree; in the next, an Apkallu has turned from the tree and bestows a king with the trees fruit, Clearly the king is conferred some special privilege. One theory is that he is perhaps blessing the king by anointing him, although scholars are still unsure what this gesture represents.

It seems that there was an element of ritual purification as revealed by the names of the objects they hold: banduddû ("bucket") and mullilu ("purifier"). In this case the fir cone would be dipped in the bucket of water before being shaken in order to ritually purify a person or object. Purification by water shaken from a plant as a blessing has been documented in many cultures through the ages and is still used in the form of baptism in christianity, the font being an essential part of the church architecture.

A Sumerian spell or incantation runs so ;

Take the bucket, the hoisting device with the wooden bail, bring water from the mouth of the twin rivers over that water cast your holy spell, purify it with your holy incantation, and sprinkle that water over the man, the son of his god. Then shall they rejoice with joy and be glad.

The king being blessed by the eagle Abgallu. Akkadian relief. The wings on the Abgallu denote a divine status. Again the tree appears as a date palm which is named Phoenix dactylifera. The cone is thought to be the fruit of the cedar, an evergreen tree held sacred by the Sumerians.

A priestly function of the Apkallu, as seen on the reliefs in palaces and temples, was to tend the tree of life. In this relief they transfer its sacred powers to the king. The Babylonian Epic of Erra contains describes this process;

"Where are the seven Apkallu of the apsu, the pure puradu-fishes, who are perfect in lofty wisdom like Ea's, their lord, who can make my body holy?"
Tablet 2, line 162.

But there is another message here. The priest is offering the king the fruit of the tree, albeit fruit from the cedar. It has been dipped in the sacred waters of the two rivers obviously the Euphrates and Tigris. Is this the food and drink of the gods? Instead of being forbidden to eat of the tree as we read in the Bible is he being offered it? After all we are told that Anu granted wisdom to Adapa, the first man;

He(Anu) granted him wisdom, but he did not grant him eternal life.
(The myth of Adapa)

Here for the first time we come across the idea that there were two trees, one that brought wisdom and one that brought life. Could these be the cedar and the palm?

The god and king as the sacred tree

The sacred tree was a symbol that had many layers. On one level it stood for the king himself. Several Sumerian kings of the Ur III dynasty, circa 2000 B.C. are referred to in contemporary texts as "palm trees" or "mes-trees growing along abundant watercourses."
My king is like a huge mes-tree, [… ...] son of Enlil; this tree has grown high, uniting heaven and earth; its crown reaches heaven, its trunk is set upon the earth. He who is made to shine forth in lordship and kingship.

and also from the *Erra Epic* 1.153-155:
(Marduk addresses Erra:) *Where is the mes-tree, the flesh of the gods, the emblem of the king of the universe, the pure tree, august hero, perfect for lordship, whose roots reach hundred leagues.*

In Egypt the symbolism is explicit. The names and length of rule of each king was inscribed upon each leaf of the sacred tree. The tree its self symbolised the kings lineage, his family tree whose roots went back to the gods themselves. This is the tree of *lives*.

In the same way Enki and Ninki who were seen as the parents of the Anunaki gods together with Anu, are located at the base of the Sacred Tree, here referred to as a tamarisk tree.

Tamarisk, unique tree, tree of heaven. its roots (are) in the earth (they are?) Enki and Ninki from its branches / An, the priest / to the holy quay stretches out.
Sumerian incantations from Ebla

In Egyptian mythology Osiris was enclosed in the trunk of a tamarisk tree, which was later cut down and used as a pillar in the palace of the King of Byblos, he literally became as one with the Tree of Life. Over time the tree trunk was replaced by the imagery of the pillar which became known as the Djed Pillar or the the Pillar of Stability, another axis mundi. In Israel these pillars were known as Asherah, who is a Hebrew Goddess who can be traced back as the consort of Anu which the Israelites were admonished for worshiping. This is important as it shows that the Tree was seen as the consort of the sky god and therefore as an aspect of the earth goddess.

Because the Tree represented the axis of the three worlds, each god was assigned a position upon it that defined his seat or realm of influence. Anu who ruled the heavens and the North takes the place at the top of the the tree is the position of prime importance in the highest heaven. His is the seat of the pole star that place of stillness around which all turns. The Goddesses and his consort, as we have read, were the pillar and foliage and roots of the tree. Each of the major deities, as we will see find themselves a seat upon the branches of the tree.

This gives another layer of meaning to the later oracle trees of Greece. For example the oracle of the Pelasgic Zeus at Dodona in Epirus. Here again the god and the tree are one.

Here in a grove of oaks there was a very ancient tree, believed to be the actual seat of the deity, whose responses were interpreted from the rustling of its branches, from the murmur of the sacred spring which welled forth at its foot, or from the drawing of the oracle lots kept in an urn beneath it. The origin of the oracle is lost in prehistoric gloom; probably it existed earlier than the worship of Zeus himself.
The Sacred Tree, by J. H. Philpot

A text from Shuruppak runs;

Tamarisk tree of An, From all its branches it is pure. Tamarisk from your roots Enlil and …..emerge.

The Tamarisk was held in high reverence and was thought to have magical properties. It is also known as the salt cedar as it grows in salty conditions.

The food of the gods

The sacred tree of the Mesopotamian religions can in many instances be seen to bear the fruit of the pomegranate (*Punica granatum*) as can be seen below, a food associated sometimes with the underworld and often with fertility. Sometimes the fruit is a pine cone, most likely that of the cedar, as can be seen in various examples. We have seen the Tree is also a date palm, dates therefore are also a fruit associated with the sacred Tree.
There are several myths that tell of the food and drink of the gods and its magical effects. One of the effects is to impart immortality. In the myth of Adapa he is sent to heaven and warned by Enki not eat or drink of the divine food as he is told it will kill him.

Sacred Tree with pomegranate fruit.

They will show thee. When thou standest before Anu
Food of death they will set before thee,
Eat not. Water of death they will set before thee, Drink not.

In this poem we learn that Adapa, the most wise among the Anunnaki was granted him wisdom, but not eternal life. Just like Adam, Adapa was given knowledge but ate not of the tree of eternal life.
Adapa is told by the god Enki, not to eat or drink of the divine food. Only Adapa obeys in fear for his life and is told by Anu;

" Come, Adapa, why hast thou not eaten, not drunken?
Now thou shalt not live."

He has been tricked by Enki and has missed his chance to become immortal. This poem offers an explanation as to why Man possesses wisdom but not the immortality of the gods. It also shows us that the concept of the food of the gods bestowing both immortality and knowledge is traceable to Sumer. Like in the Biblical account of Genesis, the first man is lied to by the god. The food of the gods does not bring death as is claimed.

Other references to the divine food can be found in the Descent of Inanna. Here the food of the gods is described as grain and water which revives Inanna but which is refused by the servants of Enki.

They were offered a river with its water -- they did not accept it. They were offered a field with its grain -- they did not accept it. They said to her: "Give us the corpse hanging on the hook." Holy Erekgigala answered the gala-tura and the kur-jara: "The corpse is that of your queen." They said to her: "Whether it is that of our king or that of our queen, give it to us." They were given the corpse hanging on the hook. One of them sprinkled on it the life-giving plant and the other the life-giving water. And thus Inanna arose.

They did not accept the food of the underworld because once partaken one can never leave. This very theme is echoed in the Greek story of Persephone was eats the food of the under world the pomegranate and so is forced to stay there for half the year.
In "The Assyrian Tree of life" the Assyriologist Parpola informs us that:

in Iraq pinecones and pomegranates are traditionally symbols of unity. In Christian symbolism, the pomegranate represents "multiplicity in unity as the Church, with the seeds as its many members" and, secondarily, "regeneration and resurrection" (J. Baldock, The Elements of Christian Symbolism [London, 1990], p. 108)

He adds also that;
"*the pine fruit represents "immortality, longevity; victory". (de Vries, Dictionary, p. 367)*

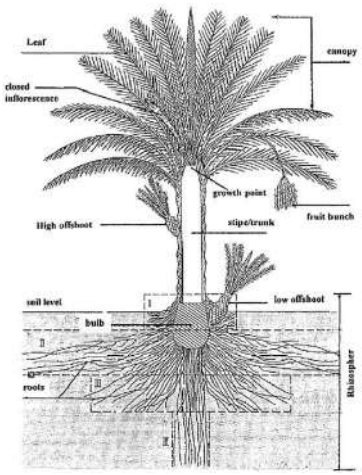
from which we might derive; Multiplicity in unity and immortality or longevity through regeneration and resurrection.

Assur as the sun god presides over tree of life. The kings are being offered the fruit of the tree and are anointed with holy water by the divine Abgallu sages. The sages are divine because they are winged and have a triple horned crown. These are the prototypes of the angels from Hebraic myth who guarded the Tree. For the Babylonians, the Tree of Truth (synonymous with the Tree of Knowledge) and Tree of Life were said to guard the eastern gate of the heavens and therefore were associated with the sun and it's rising. The kings are holding what looks like poppy.

According to the Sumerians there were two sacred trees. One provided wisdom and one eternal life. Mankind, we are told gained one but not the other. This too we find in Genesis.

The story of the Book of Genesis, continuing this tradition, places the first man and woman, Adam and Eve, in the Garden of Eden where they may eat the fruit of many trees, but are forbidden by God to eat from the tree of knowledge of good and evil.
In Genesis 3, a serpent tempts the woman:
And the serpent said unto the woman, Ye shall not surely die: For God doth know that in the day ye eat thereof, then your eyes shall be opened, and ye shall be as gods, knowing good and evil.—

Desiring this wisdom, the woman eats the forbidden fruit and gives some to the man who also eats it. They become aware of their "nakedness" they have become self conscious. When confronted, Adam tells God that Eve gave him the fruit to eat, and Eve tells God the serpent deceived her into eating it. God then curses the serpent, the woman then the man, and expels them from the Garden before they can ate of the tree of eternal life. Again, as in Sumer, the story could be seen as an explanation as to why man has wisdom but not eternal life.



The Assyrian tree, as we have seen, becomes more symbolic, more abstract. The Palmettes, smaller versions of the original tree now surround the tree like an orchard. There is often a bell shape around the main stem joining these side growths. What could this represent? We can see (right) that this budding process actually occurs in nature, when the palm tree buds off to form new side growths. This can occur at any point along the trunk of the palm. By Assyrian times the amount of palmettes has grown considerably.

We find in Ezekiel a description of the Sacred Tree as it was portrayed in Assyrian times. It is as if the writer has seen the inner most sanctum of an Assyrian temple and the Sacred Tree that adorns it.

Ezekiel 41
…In visions of God he took me to the land of Israel and set me on a very high mountain, on whose south side were some buildings that looked like a city…
…In the space above the outside of the entrance to the inner sanctuary and on the walls at regular intervals all around the inner and outer sanctuary 18 were carved cherubim and palm trees. Palm trees alternated with cherubim. Each cherub had two faces: 19 the face of a human being toward the palm tree on one side and the face of a lion toward the palm tree on the other. They were carved all around the whole temple. 20 From the floor to the area above the entrance, cherubim and palm trees were carved on the wall of the main hall.

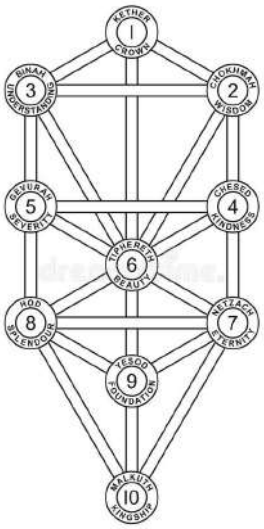
This is a description of a temple very much like the reliefs found in Assyria, which are also found throughout the whole palace of Assur. The writer describes the figures that we have seen flanking the tree as Cherubim. Here too it is the palm tree that takes the place of the most holy of emblems, the centre of the holy of holies.
It has been noted by scholars that the writer is using a form of prose called a 'lament' which is directly copied from a Sumerian style known to the priesthood of Nippur. This suggests that the author might have had access to the interior of the sacred chambers and is reporting what he saw.

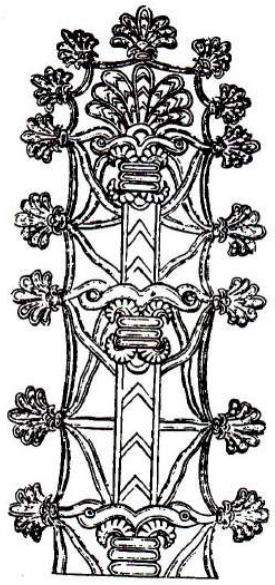
As we have seen several deities have their place in the Tree. Anu above Inanna in the centre and in some versions, Enki below. We also know that the Sumerians classified their deities as a hierarchy, a family tree that grew with time. As the palmettes of the Assyrian tree are known to grow from the main stem, could these palmettes represent the gods children and their rightful positions upon the tree? In order to answer this question we must explore another tree, that of the kabbalah.

The Sefirotic Tree

(also known as the Tree of Knowledge) of Jewish Kabbalah represents a mystical diagram that symbolised divine world order, an image of god and an image of the ideal man. It could be said that the entire structure of Kabbalah revolves around this diagram. If we compare it to the Assyrian or Akkadian Sacred Tree we see that their forms resemble each other in many ways.

Naturally one wonders if one could be related to, or derived from, the other.



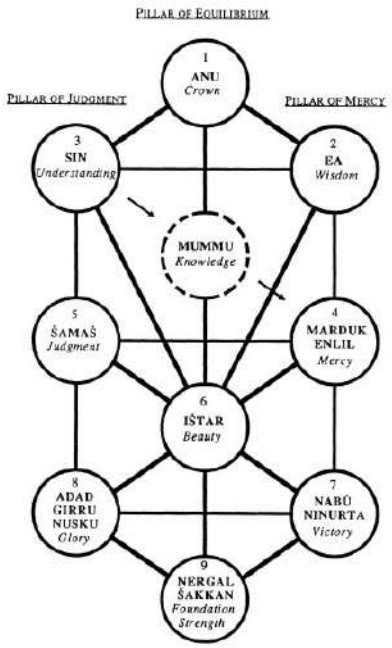


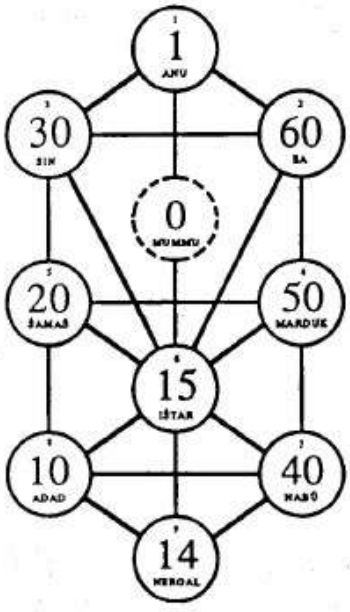
The Sefirotic Tree **The Assyrian Tree**

The roots of this concept and the emergence of Kabbalah as a doctrinal structure, can be reliably traced to the Middle East in the 1st century A.D. but can be traced no further. However a number of central Kabbalistic doctrines are explicitly attested in Mesopotamian esoteric texts. Rabbinical learning can be seen to have many influences from Mesopotamian thought, much of which was learnt during their time in Babylon.
The Sefirotic Tree derives its name from elements called Sefiroth, literally “countings” or “numbers,” represented in the diagram by circles numbered from one to ten. They are defined as attributes through which the transcendent God manifests Himself. Traditionally

they represent both the angelic and planetary qualities arranged in the so called Ptolemaic order, an order that has its origins in Sumer.
The Sefirotic Tree has a dual function. On the one hand, it is a picture of the macrocosm. It gives an account of the creation of the cosmos, in three successive stages by the Sefiroth emanating from the transcendent God. On the other hand, the Sefirotic Tree, can also refer to man as a microcosm, the ideal king created in the image of God. We have already seen that both these points are true of the mythic tree, so symbolically the two trees are also comparable.

Simo Parpola an esteemed finish Assyriologist has made this comparison and come to the conclusion that these two trees were once one. He found that the Akkadian gods and their qualities matched perfectly to the qualities ascribed to each Sefirot. Furthermore each god, according to Akkadian thought, represented a number in the Middle and Neo-Assyrian standard orthography. When the gods are matched to the sefirot these numbers are arranged over the sefirotic tree in such a way such that they that describe the divine genealogies of the gods known from late 2nd and early 1st millennium texts, patterns that are consistent with Akkadian mystic thought.





Of the gods found in Parpola's diagram, Anu, king of Heaven, occupies the crown; Ishtar-Inanna representing all female deities, is in the middle of the tree. She resides in her throne,

her bed, as we have read in the poem “The Huluppu Tree”. Nergal, the lord of the underworld is to be found in the base of the trunk. The remaining gods are arranged to the right and left sides of the trunk in a corresponding way, with sons lined under their fathers. In other words, the tree is composed of three successive generations of gods appearing horizontally as interrelated trinities. For example Ea, who’s number is 60 was the father of Marduk (50) who fathered Nabu (40). We should notice however that for a list of the major gods Enlil is conspicuous by his absence. This will be addressed later on.

As these gods are planetary gods we can turn them into their Roman counterpart, which for the most part is not controversial: Parpola’s sefirot/god comparison translated to the Roman names of the planetary gods.

1 Anu with Crown	The stars
2 Ea with Wisdom	Saturn
3 Sin with Understanding	Moon
4 Marduk with Mercy	Mars
5 Samas with Judgment	Sun
6 Ishtar with Beauty	Venus
7 Nabu and Ninurta with Victory	Mercury
8 Adad with Glory	Jupiter
9. Nergal with Foundation	?
10. kingdom	?

We can then compare these to the planetary assignments in the sefirot according to Kabbalah.

Parpola’s sefirot/god			Traditional sefirot assignment
The stars	1 Anu with Crown	?	The Fiery heavens
Saturn	2 Ea with Wisdom,		The fixed stars. The zodiac.
Moon	3 Sin with Understanding,		Saturn
Mars	4 Marduk with Mercy,	?	Jupiter
Sun	5 Samas with Judgment,		Mars
Venus	6 Ishtar with Beauty, and		Sun
Mercury	7 Nabu and Ninurta with Victory		Venus
Jupiter	8 Adad with Glory		Mercury
	9. Nergal with Foundation.		Moon
	10. kingdom		Earth

Certainly not much too compare as they seem to have little in common and are certainly not alined with each other. So when we compare the Ptolemaic order of planets traditional assigned to the sefirot and the Akkadian planetary gods assigned by Parpola there seems to be a misalignment. (See above). Only Marduk as a possible Jupiter and possibly Anu are alined. However if we move the right column, the Kabbala assigned planets up a notch, this happens;

			The Fiery heavens
	1 Anu with Crown. Rules zodiac.		The fixed stars.
Saturn	2 Ea with Wisdom,	yes	Saturn
Moon	3 Sin with Understanding,	No	Jupiter
Mars	4 Marduk with Mercy,	yes	Mars
Sun	5 Samas with Judgment,	Yes	Sun
Venus	6 Ishtar with Beauty,	Yes	Venus
Mercur	7 Nabu with Victory	Yes	Mercury
Jupiter	8 Adad with Glory	No	Moon
	9. Nergal Foundation.	?	Earth
	10.?		

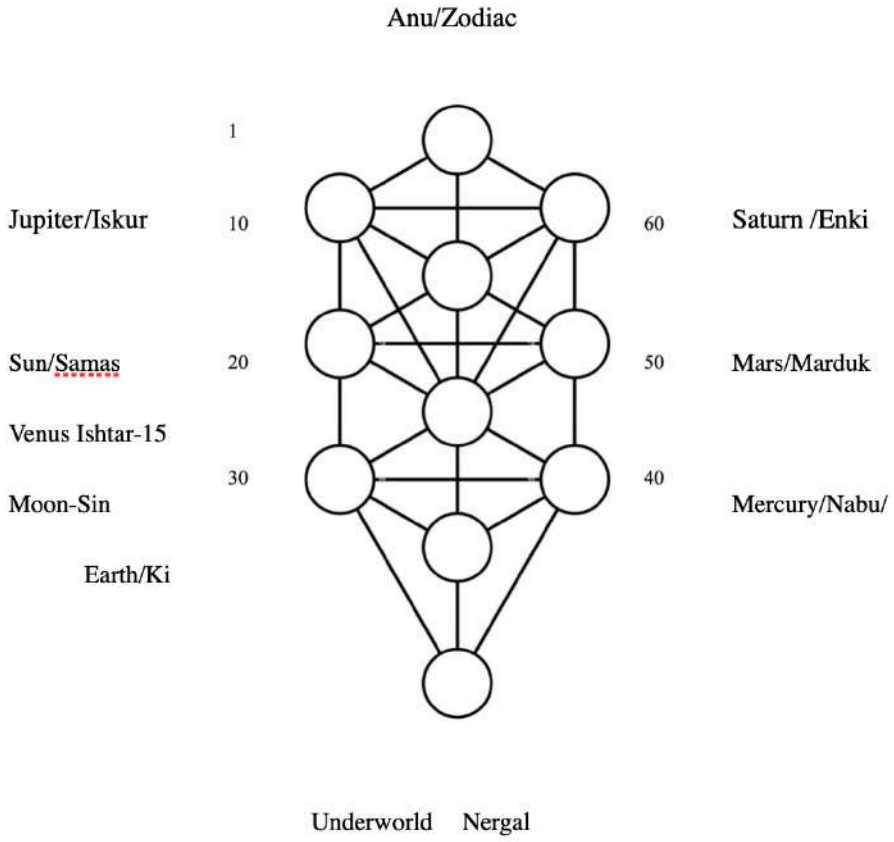
Anu is now in his rightful place as the zodiac and fixed stars. The other planets have fallen into line with the possible exception of Marduk who is at one time associated with the role of Jupiter. In earlier periods however his role was less important and he only achieved this high status during the Babylonian period. There are still some inconsistencies in the alinements. For example in the late Babylonian astral-theological system Nergal is related to the planet Mars but here we see him alined with Earth. This may well be because as a fiery god of destruction and war and death, Nergal later became a god of the underworld. Still there are problems with Sin, god of the moon and the storm god Adad. For example Parpola tells us that each side of the tree follows father son relationships. However this is not so for Adad who is the son of Anu. He is therefore in the wrong place.
However If Adad and Sin switch places this happens….

?	?	The Fiery heavens
1 Anu with Crown.	yes	The fixed stars.
2 Ea with Wisdom,	yes .	Saturn
3 Adad with Glory	yes	Jupiter
4 Marduk with Mercy,	yes	Mars
5 Samas with Judgment,	yes	Sun
6 Ishtar with Beauty,	yes	Venus

7 Nabu with Victory	yes	Mercury
8 Sin with Understanding	yes	Moon
9. Nergal Foundation.	?	Earth/ Underworld?
10.	?	

We have now created an almost perfect match between the two lists of planetary gods and in doings so revealed a potential flaw in Parpola's arrangement. How does this new arrangement compare to the qualities of the Sefirot? Adad now takes the qualities of Understanding and Sin of Glory. This inversion of Sin and Adad causes an inversion of the numbers on the left side of the tree, the numbers now create a wheel that can be read in one direction beginning with Anu and ending with Enki.

It seems indisputable then that the Sephirotic Tree and the Akkadian Tree are related to each other, in fact the first is derived from the later. Only somewhere someone misattributed the sefirot's planetary positions on the Tree. This is most likely to have occurred during the Tree's transition from Babylonian to Hebrew Theology. The diagram below shows how the God/number symbolism now is arranged.



This number system seen above was used in Akkad. There were however other systems used in different cities at different times. From the evidence we have at least two systems can be recognised, that of the Babylonian and that of the laterAssyrian/ Akkadian
The major difference between these systems, as far as I can tell, lies in their numeric assignments to Anu and Enki. The Assyrian model gives Enki the number 60, the later bestows this number on Anu. Enki then takes the place of Nabu and Marduk, gaining in power, shares the sefira with Iskur/Addad, putting him in the sefira of Jupiter.

We can be confident that this arrangement is correct as we have several methods of checking. One is planetary and the order they take, the other is numerically, which number they have and this order and the last is genealogically, the family relationships of the gods. For example as we know that Enki and his twin brother of Adad, who were the sons of Anu, a relationship perfectly described by their positions upon the tree. (However, in Sumerian literature Iškur is sometimes the son of Enlil). As a god of storms Adad/Iskur alines in his rightful position as Jupiter. In other texts Adad is the son of the moon god Sin and brother of Shamash and Ishtar, a relationship also supported by our tree. These disagreements were no doubt due to the fact that the gods rose and fell in dominance along with the political and civic history of Babylonia, which means that the tree was constantly evolving. This makes reconstruction of their positions particularly difficult, especially with the family relationships in mind.
So that is the left side of the tree what of the right? Nabu is identified with the planet Mercury which is alined correctly and was the son of Marduk who was the son of Enki. This confirms our gods positions on the tree so far.

As much of Akkadian and Babylonian culture was derived from Sumer we might expect to find that this system finds its origin here. There are clues that the Tree in its early forms (as can be seen at the beginning of this book), is associated with the gods. Many early examples show a variation with three or seven leaves. The Assyrian palm also has seven leaves. We may assume that this refers to the three main gods, Anu Enki and Enlil and otherwise the seven major Anunnaki gods. From its inception then, at least as far as the evidence will take us, there is a poetic allusion to the generations of the gods in the design of the Tree. The next question then is can we reconstruct a hypothetical Sumerian tree from the evidence presented? Let's see.
In order to do this we must find a replacement for Marduk who was an Akkadian god. We must also address the absence of Enlil a major god missing from the tree. It seems clear that

as both Enlil and Marduk claimed the number 50 that they both can be assigned to this sefirot.

Sumerian Sacred Tree version 1

Anu1

10Iskur — Enki 60 Ea

20Utu — **Enlil 50**

Inanna15

30Nanna — Nabu 40

Ki 5

Erishkigal?

But now we have a relationship problem. Enlil fathered Nanna, Utu/Shamash, Ishkur/Adad, and Nergal and was not a son of Enki and as such obviously belongs on the other side of the tree. Enki and Enlil were brothers not father and son, so Enlil's place here seems wrong. Enlil and Marduk here aline with the planet Mars revealing their martial qualities, however as storm gods they both have claims to being alined with Jupiter. Marduk the warrior, in the Neo-Assyrian period eventually became the king of the gods and so took the place of Jupiter/Iskur and is assigned the number 10. Clearly Enlil the oldest of the storm gods finds his true place in the sephirot of Jupiter. In Sumerian literature Iškur is the son of Enlil. Enlil's place would then have been taken by Ninurta who is known to have been assigned the number 50 also and was a god of war as well and associated with the planet Mars. This gives us the tree below.

Sumerian Sacred Tree 2

Anu1

10 Enlil — Enki 60

20Utu — **Ninurta 50 son of Enlil?**

Inanna15

30Nanna — Nabu? 40 son of Marduk

Ki 5/

Erishkigal?

But again we have a relationship problem. Ninurta was the son of Enlil not Enki.

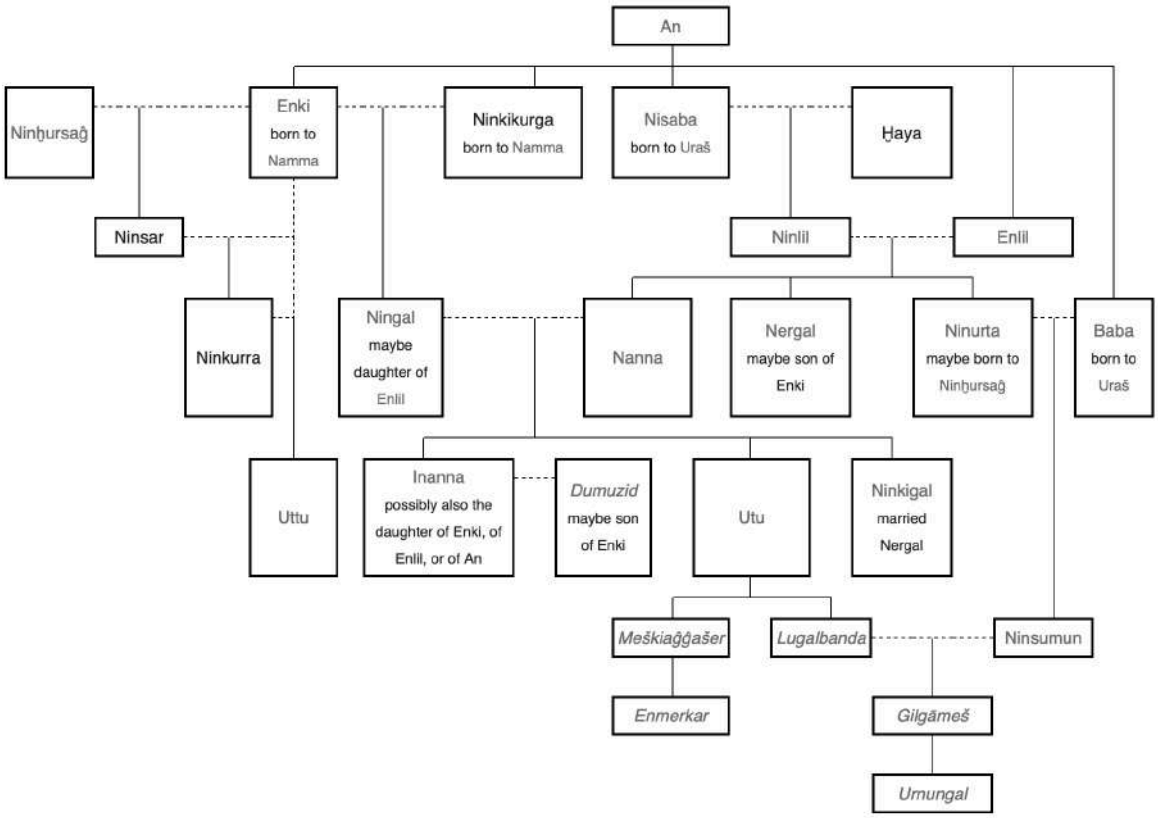
In Mesopotamia the gods were linked to planets. "*Marduk (represented by the planet Jupiter), Ninurta (Mercury), Nergal (Mars), Shamash (the sun), and Sin (the moon)*" (Taylor 2006). In Babylon Ninurta was Mercury. To quote a fragment "Mercury whose name is Ninurta travels the (same) path the Moon travels." Originally a god of scribes from Sumer, Ninurta's place is the sefira of Mercury who is also a god of scribes. There is a single instance of the number 40 being used to write the name of the god Ninurta in Neo Assyrian times and now we see why. He is the original Nabu.
This leaves is with the question who took the place of Mars? Nergal is the obvious choice, a god of death and war since Sumerian times. There is even a poem of his marriage to the goddess of the underworld Ereshkigal marking his transition from the god of the planet Mars to god of the dead. That he was the son of Enki conforms to our tree but the father of Ninurta was Enlil which does not. Another problem with this is that there are no attestations of Enlil having the number 10 or Nergal 50. Never the less this then becomes;

Sumerian Sacred Tree 3

Anu1

10 Enlil	Enki 60
20Utu	**Nergal 50**
Inanna15	
30Nanna	Ninurta 40
Ki 5	
Ereshkigal?	

Although some of the numbers at this point seem a little uncertain I think the gods are in their correct places. Upon further research I found that indeed there are suspicions that Nergal is the son of Enki and that Ninurta is Nergal's brother. This hereditary tree chart from Wikipedia below also confirms the position of Enlil.

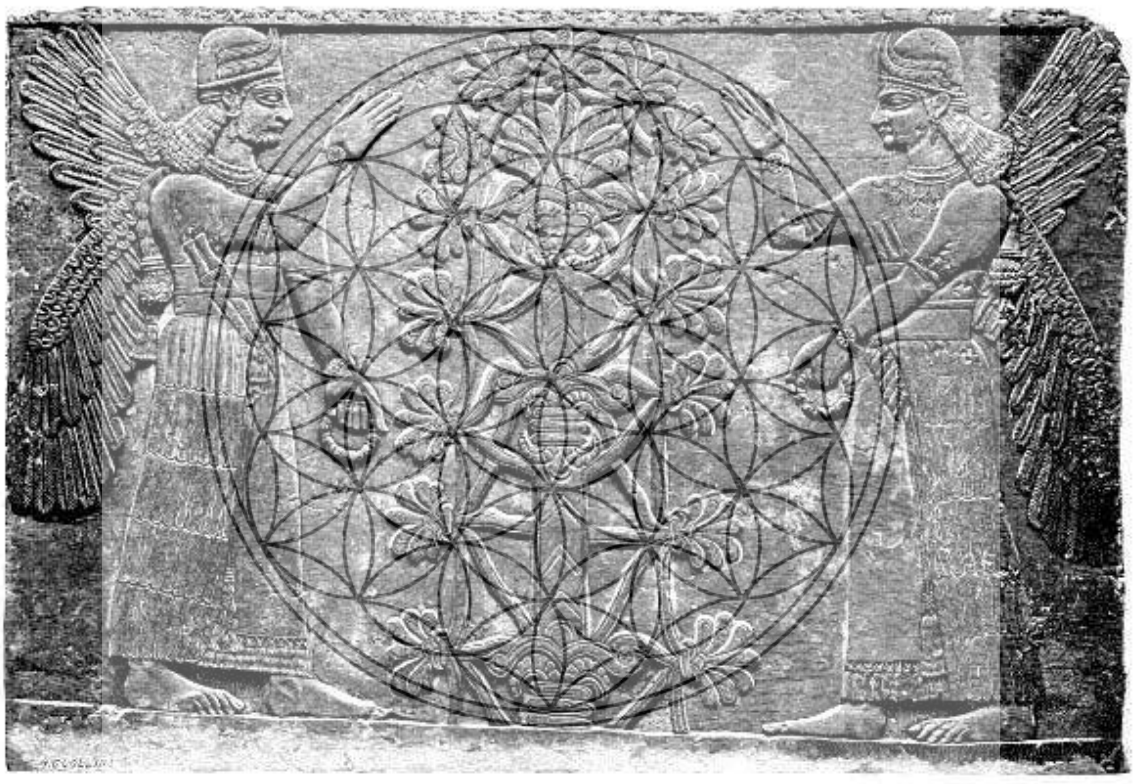


The geometric tree

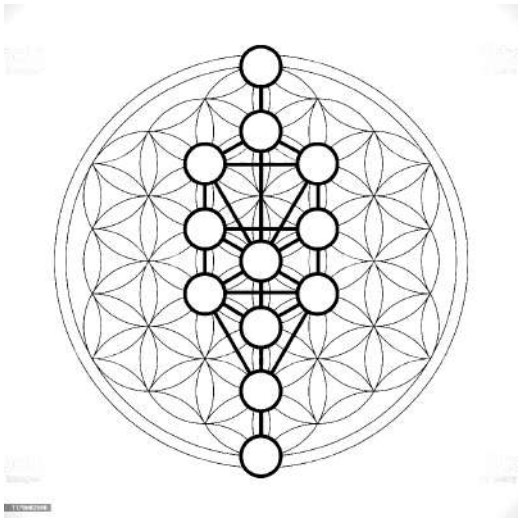
Another link compounding this connection is that these two Trees, the Hebrew sefirotic tree and the Assyrian reliefs, are derived from the same geometry. The Sefirotic tree in its purest form is a direct consequence of a particular form of geometry held in high esteem by the ancients and in particular the Kabbalah. This we have seen in the previous chapter. It is called the Flower of Life, and its symbolism is deeply entwined with that of the Sacred Tree. This too is a creation story, as its progressions describe the creation of the many from the void in seven steps, familiar from both Sumerian and Hebrew theology. The surprise is then not that the flower of life can be found in Hebrew theology, it is that it can be found in the Assyrian.

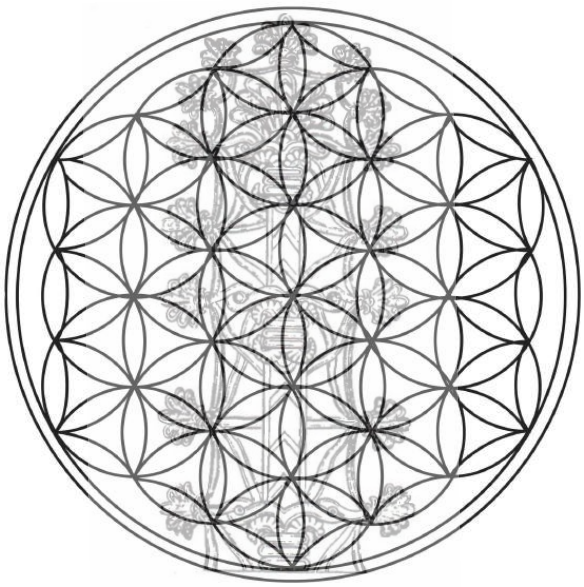
The first and simplest expression of the flower of life is the circle, the mother of all form, from which all the Platonic solids can eventually be derived. As the circle is multiplied around its self, it creates what is known as the Seed of life. It looks like a six seeded fruit.

When the same process is repeated again another stage is reached which is called the flower of life, within which can be found the Tree of life. All these names were chosen to express the metaphor of the stages of plant growth that the geometry represents. Below I have shown an Assyrian relief with the flower of life overlaid and in doing so revealed the underlying structure of the relief. Since earliest times the Tree has had a tripartite structure including a tripartite aspect to the trunk. (the three worlds).This is also true of the flower of life as it is three circles tall. If we match these three circles with the three divisions of the Tree, the rest of the geometries aline themselves with the remaining structure of the Tree. The bell shape, the palmettes and many of the connecting ribbons all conform to the geometries of the flower. The placement of the figures are also consistent with the these geometries in that they just touch the edges of the flower. I have also lain over the Sephirotic Tree of Kabbala to illustrate how it conforms to the same geometries of both the flower and the Assyrian tree. This is easier to see when the overlay can be faded in and out as in some text programs. I am convinced therefore that this was the underlying matrix used to define the composition of the relief. The conclusions that can be drawn from this are manifold. Firstly that the geometries of the flower were known and used in Assyria. Secondly that they were held to be sacred and also that they were associated with the tree of life shown on the relief. I have shown that the flower of life and the tree of life as seen in Akkadian art are parts of the same puzzle.



ASSYRIAN GODDESS BEFORE THE SACRED TREE, NIMRUD.





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Above left. The Sefirotic Tree is a design extrapolated from the flower of life showing a perfect fit. Below right, as is the Akkadian sacred tree. We can now see why the tree has often this particular bell shape. It is derived from the geometries of the flower of life.

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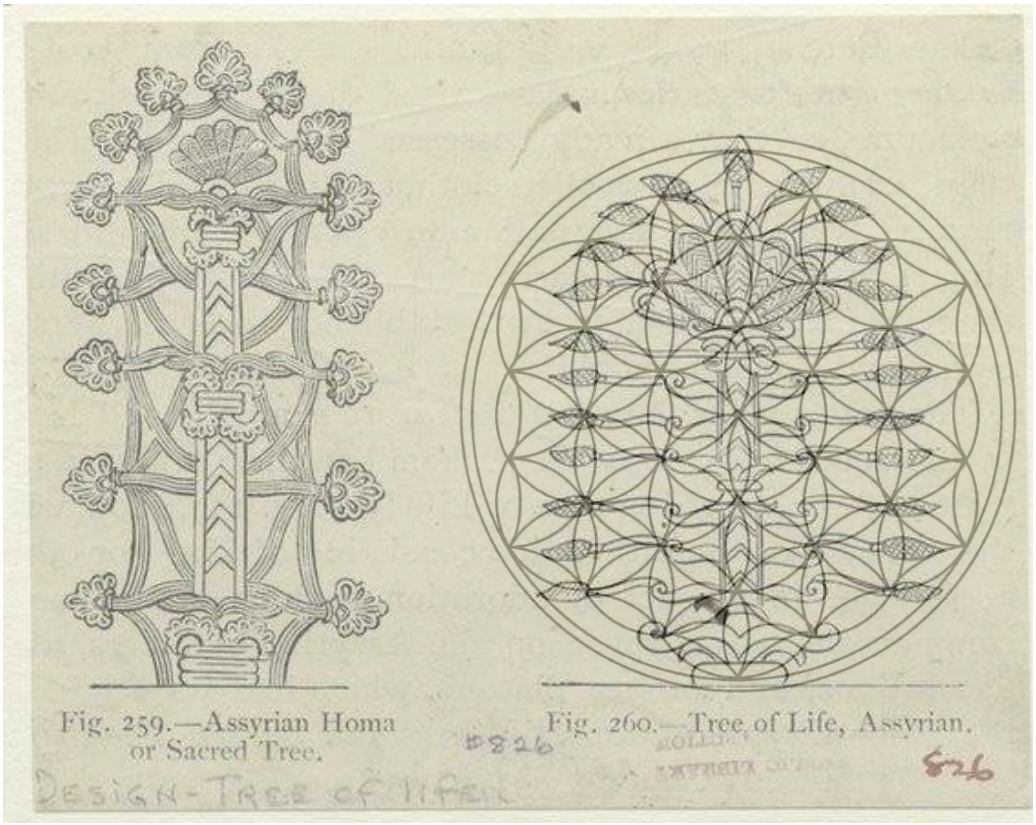


Fig. 259.—Assyrian Homa or Sacred Tree.

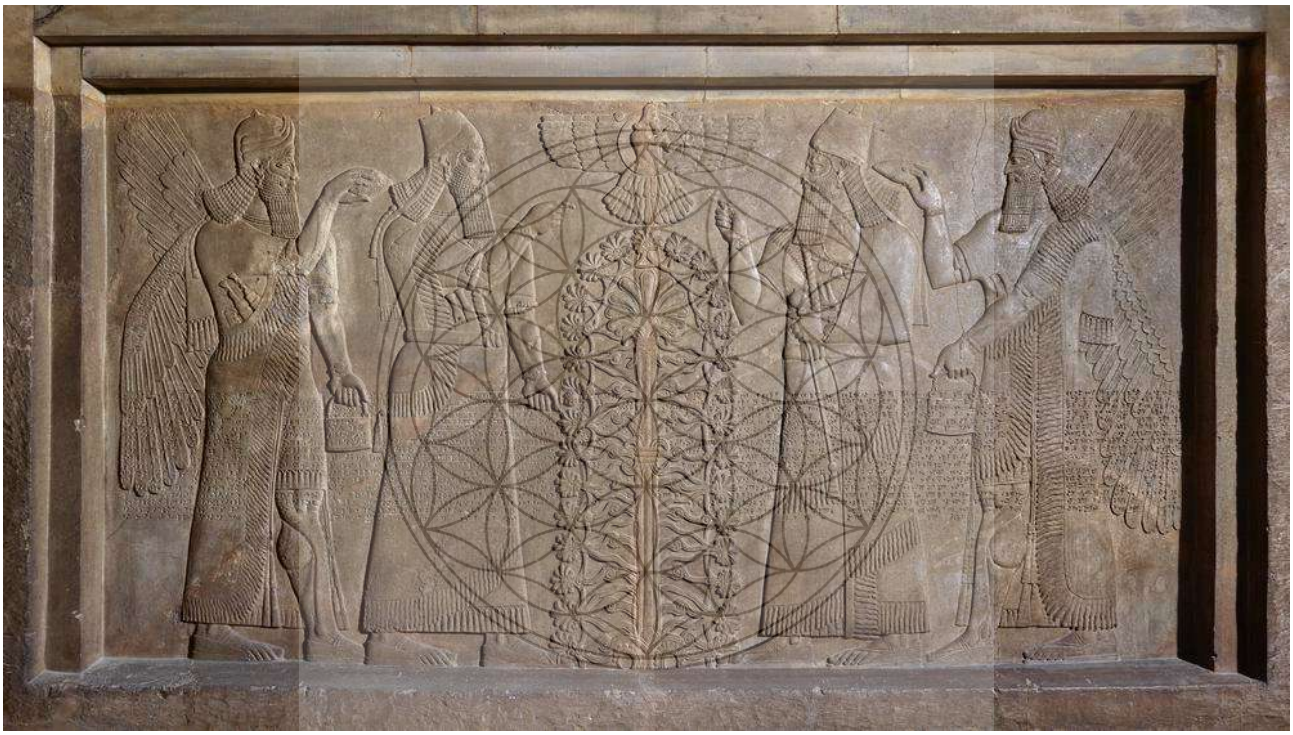
Fig. 260.—Tree of Life, Assyrian.

Above. A mixture perhaps of the symbols of immortality, the palm and the cedar. In ancient Egypt, in Babylon and in Greece the pine cone was an image of divinity and of immortality as it is a fruit the evergreen tree. The abundance of its seeds refers to fruitfulness and to the generative force of life. Again the composition can be seen to rely entirely upon the Flower of life for its major elements.

The creation myths of Sumer, Assyria and Genesis are generative myths, stories of how multiplicity emerged from the void. They describes how the generations of the primordial gods emerged from unity. This same story is told by the flower of life, where in seven stages form unfolds from unity.

This form of geometry was known as Sacred Geometry and has roots in ancient thought where number and geometric form has a mystic and philosophical meaning. Being aware of this thematic similarity, I looked for other possible correspondences between the Tree of life as depicted in Assyrian art and the flower of life from the geometric tradition.

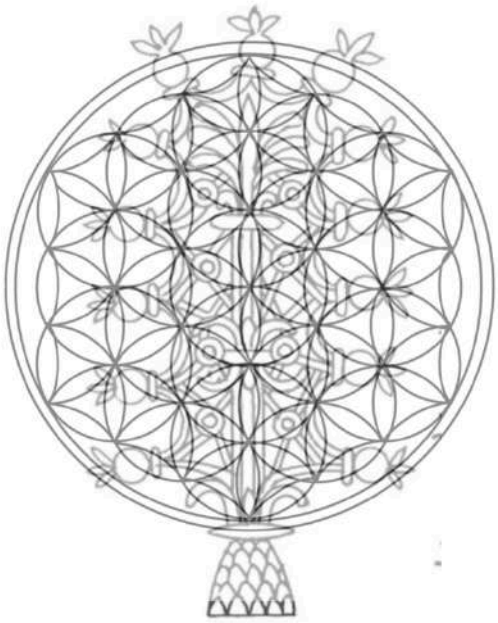
The result is astounding. Taking a variety of art works from the Assyrian period I found that the Flower clearly was the template from which the designs were drawn. In each case the tree its self is clearly defined by the geometries of the flower and explains the unusual bell shape so common in images of the Tree from even early periods. As the names suggest, both the geometry of the Flower of life, the Tree of Life and the Assyrian sacred Tree can be seen to be part of single structure, a common philosophy.



In this Assyrian relief the composition relies upon the flower for its rhythm, proportion and composition including the symmetry of the figures. The placement of the god of light at the top of the design precisely conforms to the geometries of the flower.

We have seen then how various designs of the Tree, although different from each other, all conform to the geometric underpinning of the Flower. It is well known that there was a esoteric and secret teaching associated with Babylonian mysticism. It looks very much as if the flower was part of this tradition.

Below. If the Flower is placed in such as way so that the three circles of the central pillar match the three divisions of the Tree, then the fruit of the tree will also match with the outer petals of the Flower as does the central column. Also the central pillar of the tree is described by the central pillar of the flower.



Evidence that the flower of life geometries were known to the Assyrians and held in the highest esteem, is shown in the imasge on the right. In the throne room of Assyrian king Ashurbanipal, in the North Palace Nineveh, Iraq, is the Flower of life design on a door lintel and many other panels around the room.

Below. Applying the same technique of comparison by transparent overlay, to a Indus valley seal (6000 BC?) reveals a similar result. The design conforms quite accurately to the flower of life, again creating the bell shape in which the god(dess?) resides. This suggests a bridge a much earlier date in which the Sacred Tree was seen in terms of geometry and geometry seen in terms of the sacred.

The Sumerian Tree of life

Anu1

10 Enlil **Enki 60**

20 Utu **Nergal 50**

Inanna 15

30 Nanna **Ninurta 40**

Ki 5

Erishkigal 14

As we saw in the previous chapter this is a list of the children of Anu and Ki, known as the Annunaki and a map of the mythology that we read of in the poems. Above resides Anu the father of the gods. Beneath him his two sons Enki and Enlil. Beneath them are their children, two siblings each making it a family tree. As these gods also represent the planets this order is the order of creation formulated in the Sumerian conception of the creation of the universe. One has to get used to this habit of layering meanings over each in order to combine the diverse aspects of reality into one simple icon or cannon but when one does you begin to see the wisdom of it, as allows an ever expanding complexity to be represented in a very simple form.

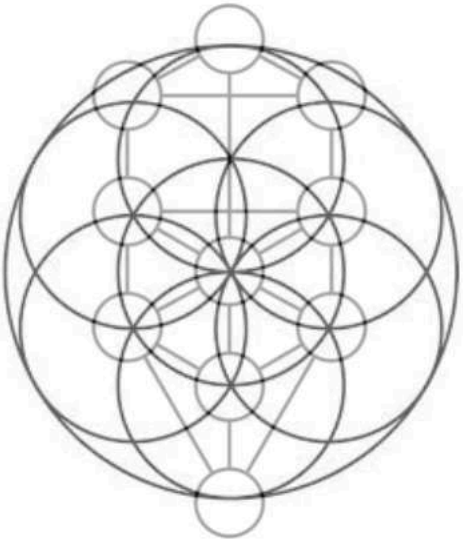
If we look at this image as if it were a tree, in the central stem of the tree can be found Innana and Ki, the mother and daughter goddesses. In the underworld resides the dark goddess Eriskigal showing us that the tree its self is composed of the triple goddess as the supporting and generating principle. The branches at either side then contain the male gods.

We have also seen how the Tree of life according to the Hebrew tradition of Kabbalah is read in a particular manner. A zig zag pattern is followed to read the sephira, or the branches, in the correct order. If we follow this pattern in the above tree we do indeed read

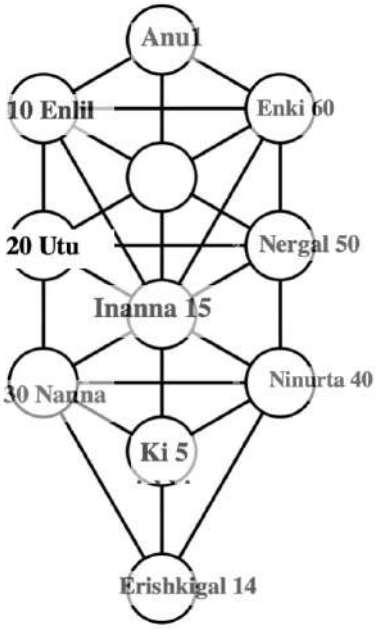
off the planets in their correct “Ptolemaic” order. This is possible because the kabalistic tree is in fact derived from the Sumerian.

Traditionally the Akkadian gods carried sacred numbers with them. Often this number is also the day of the month when the god would be celebrated. There is a strong geomantic aspect here that is obscure, that is, an ancient numerology is at play, a symbolic connection between number and word. These Sacred numbers have been included to show the numerological symbolism invoked by the gods. For example it is well known that the Sumerian system of counting was in base six and ten. This is reflected in the numbers of Enlil 10 and Enki 60 and Anu1, the primary triplicity. The numbers also create a movement anticlockwise beginning with Anu 1 we descend into the underworld then ascend reaching Enki 60 and so to complete the cycle of incarnation from heaven to earth and back again to heaven. By playing with the sacred numbers we find that reading horizontally they all add up to 70. The central column adds up to 30. We do not however have a number for Eriskigal, this is alas unknown at this time. We do know the number for Nergal who eventually supplanted her. Assuming he adopted her number, we may hesitantly assign to her the number fourteen, Nergal’s number.

So the celestial spheres common in the renaissance are the remnant of an ancient Sumerian theogony, the generations of the gods which is the Tree of Life. This map is a complex and sophisticated plan of creation. It maps both astronomic truths - the speed of the planets, the days of the week, as well as spiritual or metaphysical worlds of heaven earth and the underworld. It maps the microcosm as well as macro as it records the genealogy of the gods as well as the order of the creation of the universe.
If we examine this icon geometrically, as did the Kabbalists, we find that it matches the form below right. This is the Kabbalist tree of life and its shape is taken from the geometry on the left. In other words the positions of the gods upon the tree are determined by the map of interlocking circles shown below. How these two images are related and the geometry that produces them is described in detail in the next chapter.

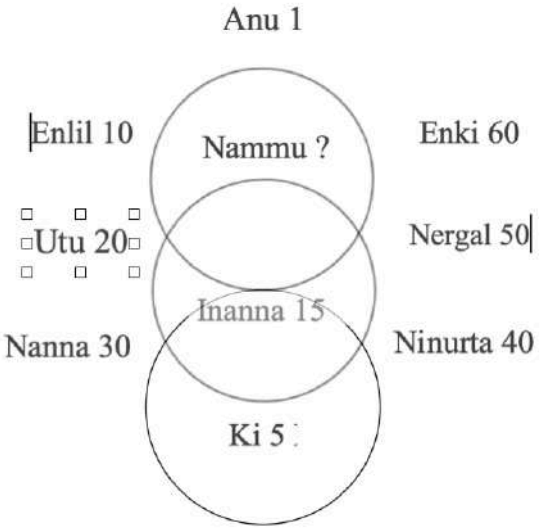


The seed of life and the tree



The tree of life

We can see that the gods, when displayed upon this set of circles (right) are linked by paths, essentially the paths found in the interlocking circles (left). The paths describe many subtle relationships between the gods and their associated planets, including their family relationships. We can also see that there is a deity missing beneath Anu, an empty space that remains unclaimed. If the complex icon on the right can be simplified to the seed of life upon the left, can this seed also be simplified even further? Indeed it can.



If we reduce the geometry to its most simplest elements we find we have no less than three interlocking circles necessary to reveal the positions of all the deities. These are the three worlds of heaven earth and the underworld each of which is presided over by a goddess.

We can now see that is is a Goddess that we are missing, as she completes the series of goddesses of the central tree. This is Nammu the Goddess of the primordial chaos, the first womb from which all emerged at the beginning of time. Why? Because she resides in the centre of the primary circle, the void, that was split to initiate the process of creation, so her position poetically rhymes with the story of creation. She is also the only major deity from the creation myth not yet to have a position upon the tree. It seems that we can interpret the myths of Sumer primarily as geometry and in so doing reveal a hidden dimension to the stories. We are beginning to glimpse the use of geometry as metaphor for myth, a glimpse that is only confirmed by further analysis.

At the root of this design is the vesica, the geometric equivalent to the vulva and the ultimate symbol of the sacred feminine.

If we refer back to the seed of life we see that Inanna is in the centre of the tree at the centre of the petals of the flower. This reminds me of a Sumerian poem where we hear of the Sacred Tree at Eridu, Enki's city;

(In) Eridu a stalk grew over-shadowing; in a holy place did it become green;
Its root was of white crystal which stretched towards the deep;
(Before) Ea was its course in Eridu, teeming with fertility;
Its seat was the (central) place of the earth;
Its foliage was the couch of Zikum (the prim~val) mother.
Into the heart of its holy house which spread its shade like a forest hath no man entered.
(There is the home) of the mighty mother who passes across the sky.
(In) the midst of it was Tammuz. (Dumizi)
.....Fragmentary line……..……..……..
(There is the shrine?) of the two (gods).

Sumerian Akkadian bilingual

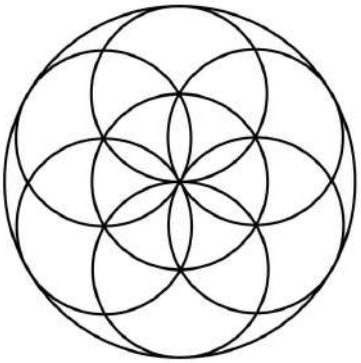
The Tree here represents the centre, it is an Axis Mundi, a world tree. As such it is compared to the three realms, the underworld, the centre earthly realm and the heavens, or the vault of the sky. Tammuz or Dumuzid is the shepherd and a hunter who is found in the centre of the tree together with "the mighty mother who passes across the sky". He is the lover of Inanna the Goddess of love and the planet Venus. The Primeval Mother is in the foliage of the tree, as we can see from our illustration this is Nammu. We learn that the sacred Tree is the shrine of the gods as indeed it is. It is a simple matter to see the similarities between this poem and the geometric tree of the gods. These three rings then are the three worlds of heaven earth and the under world, they are the geometric truth hidden in the myth.

We have established many of the positions of the gods upon the tree but not all. Some remain without a specific geometric point to define them. This can only be done with drawing four more circles taken from the four points of intersection and thus producing -necessarily- the form known as the seed of life.

The seed of life then becomes a metaphor for the Annunaki, the seven great gods who we are told in the myths, are in the belly of Nammu the primal goddess. This we are told in the Babylonia creation myth Enuma Elish;

When Apsu and Mammu Their waters were merged into a single mass…. The gods came into being in the midst of them.

The position of Erskigal is confirmed in an11th century CE Byzantine Empire writer, Psellus, Commentary on the Chaldean Oracles:



In the definition of the Chaldeans, Hekate occupies an exactly intermediate order and assumes the role of the centre relative to all powers. And to her right they put the source of the souls, and to her left the source of the virtues.

The Enuma Elish describes how the "The confraternity of the gods was established". and how the belly of Tiâmat was troubled and "stirred up to its uttermost depths".

Each of the seven circles here therefore represent one of the Sumerian primary deities held within the belly of the primal goddess. As each of these gods is equated with a day of the week it is easy to see how this image became associated with the seven days of creation found in Genesis.

Chapter 8. The Sacred Tree in Enoch

Another important nexus of information about the Sacred tree is one of the patriarchs from the Bible called Enoch. He was considered the author of the Book of Enoch. The name of Enoch חֲנוֹךְ *Ḥănōḵ*) derives from the Hebrew root חנך (*ḥ-n-ḵ*), meaning to train, initiate, dedicate, inaugurate, which is exactly the role he takes in the Book of Enoch as he learns the secrets of the angels and becomes their scribe.
We have seen how the Sacred Tree in Sumer shares much with the Sacred Tree from the Bible. This is because they are both part of the same tradition, although altered by time and place. The stories of Enoch are also from this same tradition, they too preserve accounts of events in Eden and they too have their originals in Babylonia as we shall see.

Enoch also turns up in the Kabbalah tradition as an important figure, eventually to be renamed as the Archangel Metatron for his achievements. The last culminating phase of the development of the flower of life is called Metatron's cube another link between Enoch and the Tree of life.

In the Book of Enoch he is shown the Sacred Tree that he finds in the garden of Eden which he locates upon mount Hermon in the Lebanon range. He describes the garden and the trees he encounters. The chapter starts with a description of the general environment:

Chapter 24

1. *I went from thence to another place, and saw a mountain of fire flashing both by day and night. I proceeded towards it; and perceived seven splendid mountains, which were all different from each other.*

2. *Their stones were brilliant and beautiful; all were brilliant and splendid to behold; and beautiful was their surface. Three mountains were towards the east, and strengthened by being placed one upon another; and three were towards the south, strengthened in a similar manner. There were likewise deep valleys, which did not approach each other. And the seventh mountain was in the midst of them. In length they all resembled the seat of a throne, and odoriferous trees surrounded them.*

On the surface this text is hard to understand or to make sense of. Mountains are never strengthened or placed upon one another. However once we realise that the ziggurats of Sumer were often referred to as mountains and were indeed meant to symbolise them it becomes a lot clearer. For example the word Ziggurat in Sumerian translates as "hursanggalam"  or "great mountain". We can imagine the later Hebrew scribes being confused by this. Sumerian literature is full of these references to their 'splendid holy mountains". This looks very much to me therefore as a translation error. As each of the seven gods had his/her own temple city in Sumer and Enoch describes seven mountains this interpretation looks like a reasonable interpretation.

Once we understand this, the whole paragraph of Enoch turns from gibberish and becomes a clear description of the magnificent ziggurats of Babylon or Sumer. After all mountains do not need to be strengthened by being placed on upon the other, but the ziggurats were stepped in exactly this way each of the brightly coloured tiers representing one of the seven planets.

Having established this we can therefore place Enoch in this passage somewhere in Mesopotamia, most likley Sumer. The later part of the passage makes this quite clear, he is indeed in Sumer which borders on the Erythræan sea, that is today known as the Persian gulf. *From thence I passed on above the summits of those mountains to some distance eastwards, and went over the Erythræan sea.*

Enoch continues with his description of the Sacred Tree he sees there;

3. Among these there was a tree of an unceasing smell; nor of those which were in Eden was there one of all the fragrant trees which smelt like this. Its leaf, its flower, and its bark never withered, and its fruit was beautiful.
4. **It's fruit resembled the cluster of the palm.** *I exclaimed, Behold! this tree is goodly in aspect, pleasing in its leaf, and the sight of its fruit is delightful to the eye. Then Michael, one of the holy and glorious angels who were with me, and one who presided over them, answered,*
5. And said: Enoch, why dost thou inquire respecting the odour of this tree?
6. Why art thou inquisitive to know it?
7. Then I, Enoch, replied to him, and said, Concerning everything I am desirous of instruction, but particularly concerning this tree.
8. He answered me, saying, That mountain which thou beholdest, the extent of whose head resembles the seat of the Lord, will be the seat on which shall sit the holy and great Lord of glory, the everlasting King, when he shall come and descend to visit the earth with goodness.

This last sentence might be a reference to the ziggurat at Nippur, the seat of Enlil, as the 'Lord of glory' might well refer to his position on the sefirotic tree, being in the sephira named 'glory".

9. And that tree of an agreeable smell, not one of carnal odour, there shall be no power to touch, until the period of the great judgment. When all shall be punished and consumed for ever, this shall be bestowed on the righteous and humble. The fruit of this tree shall be given to the elect. For towards the north life shall be planted in the holy place, towards the habitation of the everlasting King.
10. Then shall they greatly rejoice and exult in the Holy One. **The sweet odour shall enter into their bones; and they shall live a long life on the earth, as thy forefathers have lived; neither in their days shall sorrow, distress, trouble, and punishment afflict them.**
11. And I blessed the Lord of glory, the everlasting King, because He has prepared this tree for the saints, formed it, and declared that He would give it to them.

Enoch is describing here the tree of long life, or the Tree of Life as it is known. This is the tree that granted immortality that is given only to the few.

“Its leaf, its flower, and its bark never withered,” Perhaps because it is a palm or an evergreen, a coniferous such as the cedar. Or is it because he is actually referring to one of the stone reliefs that we know depict the Sacred Tree?
Enoch appears from the subsequent description to be flying as he passes above the ‘mountains’ and travels large distances. He then leaves the seven mountains and travels east over the Erythræan sea which is the ancient name for the Persian Gulf, the sea adjacent to Sumer. In this way he comes to another garden which holds another tree. This is the tree of knowledge.

Chapter 31

1. After these things, surveying the entrances of the north, above the mountains, I perceived seven mountains replete with pure nard, odoriferous trees, cinnamon and papyrus.
2. From thence I passed on above the summits of those mountains to some distance eastwards, and went over the Erythræan sea. And when I was advanced far beyond it, I passed along above the angel Zateel, and arrived at the garden of righteousness. In this garden I beheld, among other trees, some which were numerous and large, and which flourished there.
3. Their fragrance was agreeable and powerful, and their appearance both varied and elegant.
The tree of knowledge also was there, of which if any one eats, he becomes endowed with great wisdom.
4. It was like a species of the tamarind tree, bearing fruit which resembled grapes extremely fine; and its fragrance extended to a considerable distance. I exclaimed, How beautiful is this tree, and how delightful is its appearance!
5. Then holy Raphael, an angel who was with me, answered and said, This is the tree of knowledge, of which thy ancient father and thy aged mother ate, who were before thee; and who, obtaining knowledge, their eyes being opened, and knowing themselves to be naked, were expelled from the garden.

Both Enoch and Sumerian texts refer to the strong fragrance of the tree. The tree of long life is compared to a palm, the tree of knowledge to a tamarind with fruit like grapes but they both seem unfamiliar to Enoch. There are many reasons to suppose that this text is originally a Sumerian account which I will go into in more detail at another time. Here it will have to suffice to say that what is being described may well be a first hand account of temples of Sumer and their sacred Trees before the Great Flood.
The patriarch Enoch was as well known to the ancients. Besides giving his age (365 years), the book of Genesis says of him that he "walked with God," and afterward "he was not, because God had taken him" (Gen. 5:24). The Book of Enoch describes his service to the

angels and his studies under their tutorship. He becomes a go between for the gods the Giants and men when the mingling of “divine” and human bloodlines brings violent consequences. Shernihaza, the leader of the angels lured 200 others to cohabit with women. The offspring of these unnatural unions were giants, monstrous beings who laid waist to the land. For this reason God determined to imprison the angels until the final judgment and to destroy the earth with a flood.

Other texts with clear links to Sumer contain the same narrative and elaborate upon the same themes. For example The Book of Giants found at Qumran retells part of this story and elaborates on the exploits of the giants, especially the children of Shemihaza, Ohya Hahya and Gilgamesh, who is the Babylonian hero and subject of a great epic written in the third millennium B.C. This suggests again that the stories found in Enoch themselves may be derived from Sumerian or Babylonian originals.

To strengthen this view is the fact that Enoch too has his counterpart in Sumerian history and has been found to be the equivalent of the Sumerian first priest, EN.ME.DUR.AN.KI ('High Priest of the ME's of the Bond Heaven-Earth’). Emmeduranki was a Sumerian king of Sippar, and a priest dedicated to the sun god god Shamash hence his age in the Bible being given as 365 years, the length of the solar year. An Akkadian/ Sumerian myth tells of him being taken to heaven by the gods Shamash and Adad and taught the secrets of heaven and of earth. In the Sumerian king lists Enmeduranki appears as the seventh name, whereas Enoch is the seventh figure in the list of patriarchs in Genesis. Both of whom were said to have been taken up into heaven. His name can be found in the Sumerian king lists.

En-men-dur-ana became king; he ruled for 21000 years.

The chronology of his reign being just before the great flood is a perfect match to the events related in Enoch. Enmeduranki ruled over the city of Sippar, as we know that Sippar became prominent around 3000 BC this gives us a possible date for the period when Enmeduranki ruled. The suspicion that these two figures were one and the same has been known to scholars for some time. There is however another even older contender for the role played by Enoch.

A Sumerian tablet known the the ‘Bet Mesiri’ lists the Abkallu- the first men who presided over the Sacred Tree. One of these Abgal priests, again the seventh sage on the list, is named as Utuabzu, "who ascended to heaven.” Utu is the name of the Sumerian sun god, he is the equivalent of the Babylonian Shamash served by Enmeduranki. So again we have the seventh priest linked to the sun who ascended to heaven. Furthermore this is the Abgal priest who lived just before the Great Flood, making his chronology perfectly in line with that of Enoch. As these priests were said to have issued from Eridu which was established according to archeology circa 5000 BC and the fact that they were the first ‘humans’ we

might assume an even earlier date for Enoch. These details suggest that although the names may change they all refer to the same historical figure. Both Enoch and various Babylonian/ Sumerian sources therefore tell the story of a priest who was favourite of the gods, a scribe, and a keeper of the divine secrets. Fragments reveals that he was of 'pure descent' that is, he was related to the first man- Adapa the Sumerian Adam and as such could claim to be of the bloodline of the gods. As an Abgal priest he was said to be *"a benediction priest of the king, a long-haired priest of Šamaš as fashioned by Ninhursagga"*, In other words he was one of the first men created by the earth goddess *Ninhursagga* again confirming his role as one of the first humans.

This makes the book of Enoch a reworking of an earlier Sumerian account of a historical figure who as a priest of the sun god had access to the Sacred Tree and was intimate to its secrets.

We now have a better understanding of what the Sacred Tree meant to the Sumerians and the cultures that they influenced. Its role in the creation myths shows it to be symbolic of the vegetal and animal kingdoms, including man, that were created by Anu and Ki at the beginning of time. As such it stood primarily for fertility it was synonymous with the Great Goddess, who, as we have seen takes pride of place in the midst of the Tree. It is also clear that it was a genealogy, a family tree of the dynasties of the gods and the planetary realms that they ruled over.
We see that the symbolism of the tree is entwined with that of the seed and flower of life, a cycle of geometry that is found at the core of the designs of the tree its self. The philosophy of the flower very likely developed eventually into Kabbalah as we know it today, suggesting that a careful look at Kabbalah may tell us much more about the theology of ancient Sumer.
In particular there is a literature where both Enoch and Kabbalah meet, called Merkaba, which we will have to explore if we are to get closer to the roots of the Sacred Tree.

First of all though I want to explore, however superficially, the sacred tree as it was understood in Ancient Egypt as the many similarities lend deeper insights to its nature in both cultures.

The Sacred Tree in Egypt

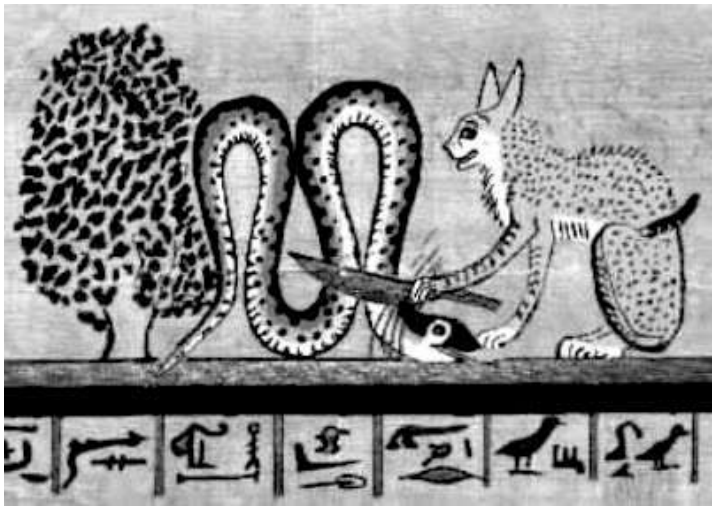
In Egypt they called the sacred tree the Ished tree, which was believed to grow on the primal mound at Heliopolis and was linked to both wisdom and eternal life. Inscriptions at Ramesses' II temple at Thebes (c. 1300 BC) picture Thoth (the god of wisdom) seated on a throne and Sheshat (a goddess writing) both writing on the tree's leaves. They are recording the name and the length of the reign of the pharaoh.

Like the Sumerian, the Egyptian creation myth tells that the Tree of Life grew out of the Sacred Mound, its branches reached out and supported the star and planet studded sky, while its roots reached down into the watery abyss of the Netherworld. The source of four rivers was believed to be located at the foot of the Tree of Life, providing water for the world. The four rivers are oriented according to the cardinal points of the compass and are associated with the four elements. Water -North, Fire - South, Air - East, Earth - West. Surprisingly though these are arranged in a very different way from the Sumerian cardinal points, while the over all metaphor is the same.

We can recognise this tradition of four rivers for example in the Bible at the location of Eden as well as the four rivers emanating from the cup of Enki in Sumer. We see then that the Egyptian and the Sumerian stories were in effect the same myth expressed in subtly different ways.

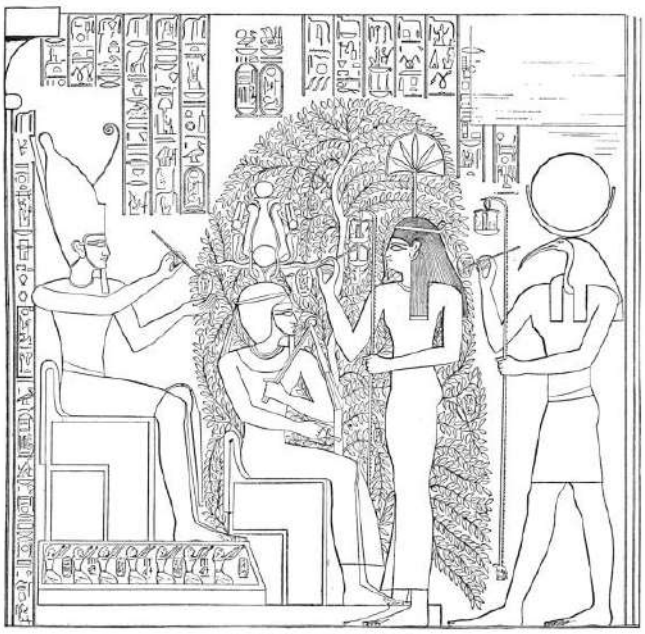
Apep was a giant serpent who guarded the sacred tree of life and who represented the forces of chaos, threatening the divine order and attempted to prevent Ra from bringing the sun into the sky each day. What few accounts there are of Apep's origin usually describe it as being born from Ra's umbilical cord. Mau an aspect of Ra in the form of a cat or sometimes a rabbit, battled against Apep to prevent him from taking control of the Tree of Life.

The solar deity or hero slaying the serpent is a theme that has echoed throughout history and can of course also be seen in Sumer, where Gilgmesh is said to slay the serpent who lives in the root of the Huluppu tree. This is the archetypal metaphor of the eternal struggle of the light and dark forces of order and chaos that we find in many cultures. The evil serpent at the root of the tree then is not a Hebrew invention but goes back to the foundational myths of common origin. In Scandinavia Nidhug a dragon gnaws the root of the Tree.



Mao the cat slaying the serpent of chaos with the tree of life behind him.

The Tree of Life is deeply connected with the Egyptian creation myth and the nine gods of the Ennead of Heliopolis. It was located in the Sun Temple of Atum Ra at Heliopolis and said to have arisen from the first mound when Ra Atum, the Sun-god, appeared at Heliopolis. It was a seen as a symbol of knowledge of the Divine Plan or the equivalent to a map of destiny.



APOTHEOSIS OF RAMESES II.

According to an Egyptian myth, Set became jealous of his brother's enormous power. So, he had a coffin made that fit Osiris' proportions. Then, he threw a party. During the festivities, Set invited everyone to try out the coffin, saying he would give it as a gift to whomever it fit

best. When Osiris tried it out, Set slammed the lid shut and threw the coffin into the Nile. The coffin drifted down the Nile and out to sea, eventually washing up on the coast of Byblos in Phoenicia. There it got lodged in a giant sycamore tree. Over time, the great tree grew around it, eventually enveloping the coffin.

One day, King Malcander of Byblos came upon the tree and noticed a lovely scent emanating from its trunk. He liked the tree so much that he had it cut down and made into a pillar in his palace. Meanwhile, Isis was still looking for her long-lost husband. In her quest, she eventually made her way to the court of King Malcander. When she passed the pillar in which Osiris was entombed, Isis could smell the sweet fragrance emanating from it. When the king realised that she was a goddess, he told her she could have anything in his kingdom. Naturally, Isis asked for the pillar, which the king graciously gave to her. Isis returned the pillar to Egypt and planted it in the ground.

This story illustrates, amongst other things, the idea that the king and the sacred pillar and the tree are one thing. The Ished tree has been identified as the Persea, (Mimusops schimperi) of the Laurel family, of the Lebbek, Other Sacred trees in Egypt have been identified as the Tamarisk, the Acacia and the Sycamore tree mentioned in the myth above. This tells us that is indeed the Tree of life that Osiris is found in. In another myth the first gods were born under the sacred acacia tree of the goddess Saosis, identified with Hathor, and Horus was also said to have emerged from it. The acacia of Heliopolis was a tree in which life and death was decided upon, similar to the Ished tree. Eating the fruit of the sacred Ished tree of life was a guarantee of eternal life. The Bennu Bird is said to have resided in its branches.

From these examples it becomes clear that Egypt and Sumer shared much in regard to their myths and stories of the Sacred Tree, so much in fact one wonders if they both could have developed from a common original. This can be equally said of ancient India. In Indian tradition the myth of the sacred tree is, in its general conception, identical to that of Sumer. The garden of Indra was situated on Mount Meru, on the confines of Cashmere, and contained five sacred trees which sprang from the primeval waters. Under these trees the gods took their ease, enjoying the fruits that conferred immortality. The Harappan's had the peepal tree and the babool which was also an acacia tree.

The sacred tree then was a symbol that incorporated the diverse aspects of creation into one coherent form, a key that mapped reality and its complexities into a simple metaphor. As

said above it is a symbol of knowledge of the Divine Plan or the equivalent to a map of destiny.
In his visionary work “The Temple of Man” John Michell explains this perfectly;

The visionary quest for a simple formula to express the one creative process that governs the entire range of cosmic motion is now generally regarded as the chimera of an earlier, more credulous age. Yet, even though it may appear to have no reasonable justification, the vision of a comprehensive world system remains an eternal poetic truth, an infallible stimulus to the imagination and thus a potential influence in human affairs. In former times, when little distinction was made between the physical and the psychological needs of a healthy society, the natural human longing for a
true understanding of the cosmic order as the model for a perfectly harmonious way of life was more generally appreciated. The most cherished possession of every race was its sacred canon of cosmology, embodied in the native laws, customs, legends, symbols and architecture as well as in the ritual of everyday life. The inner secrets of this life-giving tradition were preserved in the
principal temple, which both sheltered and displayed the sacred canon; for the temple was itself a canonical work, a model of the national cosmology and thus of the social and psychic structure of the people.

These similarities extend way beyond the orient and can be found in the stories told by the Norse peoples, who it is said by anthropologists have preserved their culture more or less as it was from a time when they left the east and traveled north with the expanding Indo European tribes thousands of years ago. Here too we find the Sacred Tree along with other clues to its nature and symbolism.

The Norse tree

“The chief and most holy seat of the gods,” say the Eddas,

“is by the ash Yggdrasil. There the gods meet in council every day. It is the greatest and best of all trees, its branches spread over all the world and reach above heaven. Three roots sustain the tree and stand wide apart: one is with the Asa; the second with the Frost-giants; the third reaches into Niflheim, and under it is Hvergelmer, where Nidhug a dragon gnaws the root from below. But under the second root, which extends to the Frost-giants, is the well of Mimer, wherein knowledge and wisdom are concealed. The third root of the ash is in heaven, and beneath it is the most sacred fountain of Urd. Here the gods have their doomstead. The Asa ride thither every day over Bifrost, which is also called Asa-bridge.

There stands a beautiful hall near the fountain beneath the ash. Out of it come three maids. These maids shape the lives of men and we call them the Norns. On the boughs of the ash sits an eagle, who knows many things. Between his eyes sits the hawk, called Vedfolner. A squirrel, by name Ratatösk, springs up and down the tree and bears words of hate between the eagle and Nidhug. Four stags leap about in the branches of the ash and bite the buds. The Norns that dwell by the fountain of Urd every day take water from the fountain, and clay that lies around the fountain, and sprinkle therewith the ash, in order that its branches may not wither or decay.... In Valhal there is a chest, kept by Ithun, in which are the apples that the gods must bite when they grow old, in order to become young again."

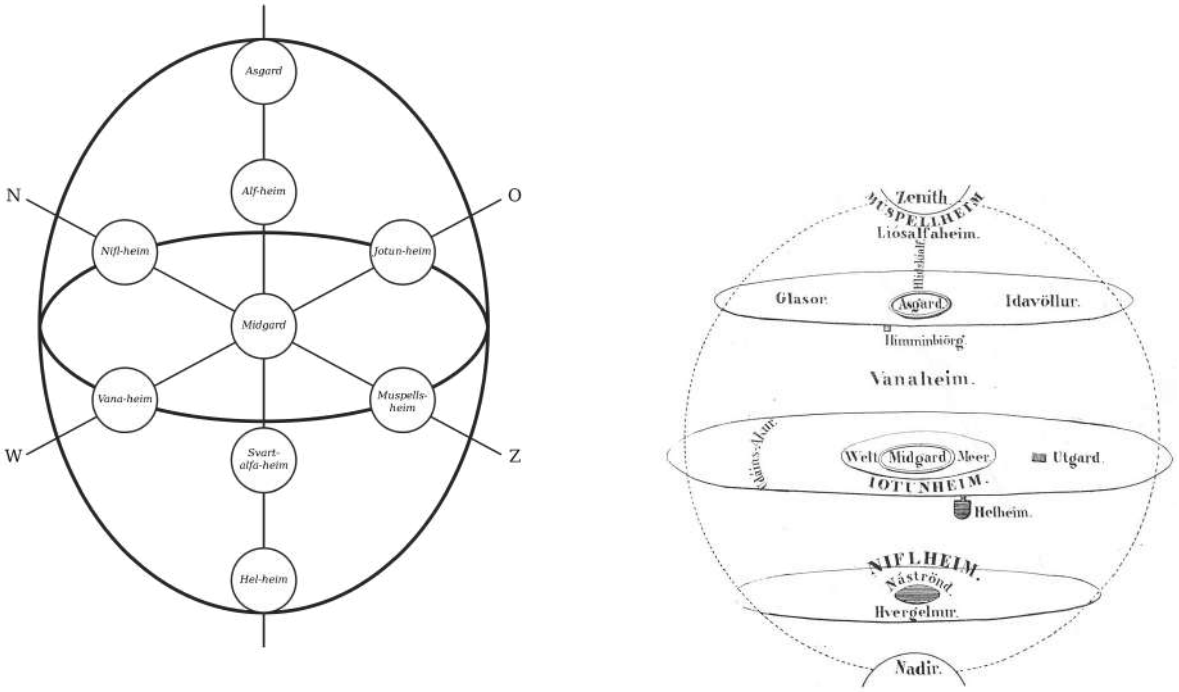
In Norse myth there are nine realms or worlds. They, like those of Sumer, are held in the branches and roots of the world tree. These realms are the home of different kinds of beings, such as Asgard the home of the Gods and Goddess's, or Jotumheim the home of the giants. The number nine is an important number in Norse mythology, and its significance can be found in other poems in the Edda's. The nine worlds, rather like the nine celestial rings are a description of the nature of the cosmos as the Norse saw it. Each world was ruled by a different race of beings.

1. Asgard or Godheim (Home of the Gods)
2. Midgard or Mannheim (Home of Men)
3. Alfheim (Home of the Elves)
4. Jötunheim (Home of the Giants)
5. Vanaheim (Home of the Vanir)
6. Hel (Home of Urd and the Blessed Dead)
7. Surts Sökkdalir or Utgard (Southern World of Fire)
8. Hoddmimis Holt (Home of Mimir and the Dwarves)
9. Niflhel or Niflheim (Northern World of Ice, Realm of the Damned)

Interpretations of this cosmic map vary as the poems seem to flounder when it comes to a clear structure. I have found this one below (source wiki commons) that seems to me the most authoritative. It also reveals the same structure as the Middle Eastern in that it places midgard, the land of men, that is earthly realm as a four fold plane alined to the cardinal points, and with the heavenly realms above and the demonic below just as we saw in the Sumerian and Egyptian Trees. The pattern here is also highly suggestive of the sefirotic tree found in kaballah.

In *Gylfaginning* by Snorri Sturuson we read;

The Ash is greatest of all trees and best: its limbs spread out over all the world and stand above heaven. Three roots of the tree uphold it and stand exceeding broad: one is among the Æsir; another among the Rime-Giants, in that place where aforetime was the Yawning Void; the third stands over Niflheim, and under that root is Hvergelmir, and Nídhöggr gnaws the root from below.



Above. The Norse Tree of Life as an extension of the elemental plane into the third dimension.

Some conclusions

We have traveled through several creation myths all the way from the seed that formed the universe, the cosmic egg, to the tree that grew from the first ground. Typically the next stage of becoming is the creation of man and his civilisation, which was patterned upon the same theme and led to the advent of farming and the growth of the first cities. What much of this material shows is that the oldest layers of mythic history were shared by diverse cultures that spanned the continent and appear to have originated from the same roots. We have also seen that at the heart of this philosophy is an ancient science that viewed the world through a unification of metaphor and logic. These philosophies laid the foundation of our culture

and our science which grew like a new shoot from this old stem. Our concepts and systems of direction, time and much else besides are directly taken from this ancient genius and have survived in an almost unbroken chain since the dawn of history.

These words are an attempt to reconstruct some of this ancient science in a way that hopefully reveals its internal consistency and its symbolic sophistication. I believe that I have shown that the ancients thought in terms of geometry, a science that they interpreted symbolically as well as mathematically. For them myth, metaphor and science were one thing, or at least equally valid ways of describing the same underlying truth. Although much of this forgotten science remains still hidden or lost I hope to have made some progress in cleaning the dust of the shards and putting them back into some semblance of a whole.

Below. The tree of life from an Armenian inscribed megalith, showing that it was at one time understood as a map of the six dimensions.