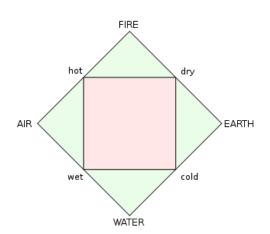
Constellations: Stars and Lore

Picture this: a warm summer night, laying on the grass, looking up at a vast, glittery dome, pointing out the constellations as if stitching a seam between the stars. All throughout history, many have looked toward the heavens for answers, sometimes taking the form of astrology. Constellations can be recognized from all over the world and have their own backgrounds and stories, but their origins are often shrouded and overlooked. Though many know a thing or two about constellations and the astrological zodiac, the history, origin, and purpose behind them is often overlooked or even completely ignored. For instance, today, when someone thinks of horoscopes, they'll probably picture a basic girl browsing a Buzzfeed article that tells them that if they're an "Aries", that they've "been working too hard!" and instructs them to "treat yo'self!" Perhaps taking a look at some constellations, both included and not included in the zodiac, could shed some (star)light on their origins, history, uses, and lore.



The Birth of Astrology and the Zodiac

The birth of astrology has origins dating back to ancient Egypt (or even back earlier to ancient caves in Europe), then spanning to the Babylonians, and eventually to Greece and Rome where the Greeks coined the term "zodiac", which means "circle of



animals". The western astrological zodiac as we know it today consists of twelve signs dividing the ecliptic into thirty-degree slices (the distance the sun changes position per month). Each of the correlating signs within a certain quadrant or elemental "house" on the ecliptic pertain to certain seasons (fire/hot, dry season, water/wet, cold season, air/hot, wet season, earth/dry, cold season as shown in the above chart). Each constellation consists of certain celestial bodies, some including one or more of the traditional five planets known at the time: Venus, Jupiter, Saturn, Mercury, and Mars, plus the sun and moon.

In regard to the zodiac, one thing that many perhaps do not understand is the difference between the zodiac signs and the zodiac constellations. Though they both are often associated with one another, the signs are in a set circular position while the constellations themselves are only loosely so. While the signs are said to reign over specific months/seasons, the constellations themselves have over time slowly drifted away eastward from their original positions, or rather, the equinoxes they had originally corresponded to have shifted. For example, though traditionally Capricorn would reign over the time period between December 22 and January 19 and Sagittarius November 22 to December 21, since these have shifted, technically presently Sagittarius would now be closer to Capricorn's original position. This isn't so much because the

constellations and stars have shifted, but rather because the sun has with the precession of the equinoxes. As such, technically, the signs and constellations no longer line up as they once did.

Even so, one thing that astrologers consider are "astrological ages". "An astrological age is a time period in astrology that parallels major changes in the development of Earth's inhabitants... corresponding to the twelve zodiacal signs. Astrological ages occur because of a phenomenon known as the precession of the equinoxes, and one complete period of this precession is called a Great Year or Platonic Year of about 25,920 years (Pisces (Astrology))."

The Egyptians created their own depiction of the zodiac in the Dendera, a planisphere carving in the ceiling of the Osiris chapel of the Hathor temple.

The Babylonians created their own account of astrology in the MUL.APIN.

One notable Greco-Roman astrologer, Ptolemy, circa 100 AD created his *Almagest* that lists 48 of the 88 constellations (including the zodiac) that we use today.

The Astrological Zodiac: Aries

The first sign of the zodiac, the ram, representing the hot, dry season between March 21 to April 19, its sign \ \text{P} \ depicting ram horns.

Aries was originally represented as a farmhand in Babylon and then became known as the ram, the symbol we use today. In Greece, the ram constellation

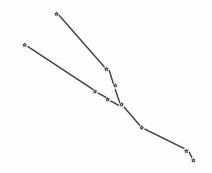


was based on the mythos of Chrysomallus, the flying ram from which Jason, leader of the Argonauts, obtained the golden fleece (a symbol of regality) from. Other cultures had their had their own associations: twin inspectors in China, a porpoise in the Marshall Islands, Mesa in Hinduism, Amon in Egypt, etc.

The Astrological Zodiac: Taurus

The second sign of the zodiac, the bull, representing the cold, dry season between April 20 to May 21, its sign 👸.

Taurus has a rich history of very diverse and popular mythos from around the world, dating back to possibly the Upper Paleolithic era, ranging to



associations in Sumer as Innanna (goddess of fertility and war similar to the Akkadian/Assyrian goddess Ishtar) and the "Bull of Heaven" in Mesopotamia/Babylon. The "Bull of Heaven" was featured in the *Epic of Gilgamesh* when Ishtar sends the Bull (Taurus) to kill Gilgamesh (Orion), only to end up with Enkidu ripping apart and throwing its hindquarters back at her (becoming Ursa Major and Minor).

In Egypt, Taurus was associated with Hathor, the heifer goddess of love and happiness, and represented the concept of life and death as the sun during the vernal equinox (4000-17000 BC during the Chalcolithic/Early Bronze Age) had crossed over and penetrated the constellation, a "sacrifice' that led to the renewal of the land (Taurus (Constellation))."

During the same phenomenon, the Druids, high-class members of the ancient Celtic religion, had a festival to celebrate Taurus.

To the Greeks, Taurus has a few associations, one being Io, one Zeus's many lovers (since Greek mythology seems to enjoy depicting the king of the gods as even more oversexed than any god/goddess of love itself) who Zeus transformed into a cow to hide from his wife Hera. Another being the depiction of a white bull, a representation of Zeus himself. The Cretan

Bull, the seventh of the Twelve Labors of Heracles in which Heracles is tasked with capturing, can also be associated with Taurus.

In Mithraism, a Roman mystery cult from around 1 AD, they would sacrifice a bull, called "tauroctony", which is speculated to have ties to Taurus. It is unknown why.

To the Inuit, the constellation is the representation of a polar bear.

In ancient Hindu Vedic Astrology, the constellation equivalent is referred to as "Vrsabha" in Sanskrit.

The Astrological Zodiac: Gemini

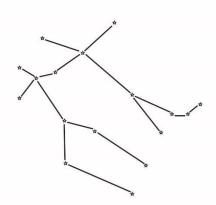
The third sign of the zodiac, the twins, representing the hot, wet season between May 21 to June 21, its sign $\boxed{\square}$.

In Babylon, it was known as the Great Twins,

Meshlamtaea ("One who has arisen from the

Underworld") and Lugalirra ("Mighty King"). They

were both associated with the Babylonian god of the underworld, Nergal.



In Greece, the constellation was based on the Dioscuri, the twins Castor and Pollux.

Though Pollux was immortal, Castor was not. When he died, as per request from Pollux, Zeus brought them together in shared immortality in the heavens.

Other ancient cultures had their own versions: two goats or two ages of Horus in Egypt, two peacocks in Arabian astrology, or the twins Romulus and Remus in Rome.

The Astrological Zodiac: Cancer

The fourth sign of the zodiac, the crab (sometimes a lobster), representing the cold, wet season between June 22 to July 22, its sign .

In Babylon, the constellation was represented by a crab, crayfish, or snapping turtle named MULAL.LUL.



To the Egyptians, it was a symbol of immortality as a scarab beetle.

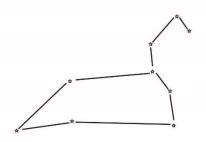
In Greece, it was based on the mythos of the crab Karkinos in Heracles's fight with Hydra. Hera had sent the crab to fight Heracles but just ended up getting stomped on and crushed. Even so, Hera granted the poor thing a spot in the heavens for trying its best.

Medieval astronomical manuscripts depict the constellation as a water beetle.

The Astrological Zodiac: Leo

The fifth sign of the zodiac, the lion ("Leo" being Latin), representing the hot, dry season between July 23 to August 22, its sign Ω .

From around the world, the lion was known as
Aryo to the Syrians, Artan to the Turks, Arye to the
Jews, Simha to the Indians, and Seror Shir to the
Persians.



The significance of the constellation, then referred to as the "Great Lion", dates back to Babylon, Mesopotamia and Sumer where it was also represented by a lion. It was also

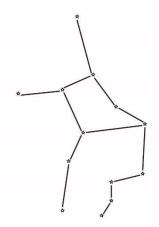
represented in the *Epic of Gilgamesh* as the giant with a lion face, Humbaba, who guarded the Cedar Forest where the gods lived and who of which Gilgamesh defeated.

In Greece, it's based on the mythos in which Heracles defeats the Nemean lion in the first of his twelve labors. The lion was believed to be invincible to weapons, so Heracles killed it with his bare hands and then Zeus congratulated him by putting it in the sky.

The Astrological Zodiac: Virgo

The sixth sign of the zodiac and second largest constellation, the virgin (depicted carrying a sheaf of wheat), representing the cold, dry season between August 23 to September 22, its sign .

In Babylon, it was associated with the goddess of fertility, Ishtar, and the goddess of grain, Shala, and



was part of the "Furrow" constellation which showed the maiden holding an ear of grain, the star Spica within the constellation meaning "ear of grain" in Latin.

The Greeks had several associations to the constellation. One was to Persephone, goddess of spring and harvest (and of the underworld). Another was to Demeter, goddess of wheat and agriculture. Virgo is also associated with Erigone, daughter to Icarius of Athens. Icarius in the Grecian mythos was friendly toward the god of wine, Dionysus, and Dionysus in return taught him the art of winemaking. Icarius shared his wine with his shepherds, but, unfortunately, this backfired and the drunken shepherds thought Icarius had poisoned them and killed him. When Erigone found her father's body, she hung herself. Dionysis then placed them both in the sky with Erigone as the constellation Virgo and Icarius as the constellation Boötes (the herdsman). Another mythos represents the constellation as Astraea. Astraea was the "last immortal to

abandon Earth at the end of the Silver Age, when the gods fled to Olympus – hence the sign's association with Earth (Virgo (Astrology))."

To Romans, the constellation was the goddess of fertility and agriculture, Ceres.

"During the Middle Ages, Virgo sometimes was associated with the Blessed Virgin Mary (Virgo (Constellation))".

The Astrological Zodiac: Libra

The seventh sign of the zodiac, the scales (the only inanimate object constellation), representing the hot, wet season between September 23 to October 23, its sign

☐. Not only does the constellation look like balancing scales, but is also representation of the autumnal equinox in which the hours of the day and night are balanced. It's generally believed to represent justice.



In Babylon, the scales were representation of the sun/justice god Shamash.

To Egyptians, the constellation was seen as a boat.

In a Grecian depiction, it was Themis's (Titaness of law) Scales of Justice, who of which is similar to today's Lady Justice.

Like Virgo, to the Romans, Libra was also represented as Astraea as her holding the scales at one point, but then separated into separate constellations.

The Astrological Zodiac: Scorpio/Scorpius

The eighth sign of the zodiac, the scorpion, representing the cold, wet season between October 24 to November 21, its sign .

The Greeks had a few mythos surrounding Scorpio. In one, Orion boasted to Artemis, goddess of hunting, that he was going to kill all animals on Earth.



Artemis wasn't keen on this and so decided to protect the animals and sent a scorpion to kill Orion. Zeus then put the two in the heavens, as a reward for the scorpion and as a shameful reminder to Orion. Another version of the tale recounts Artemis's twin, Apollo, sending the scorpion after Orion as Artemis, instead of becoming angry with, had taken a liking to Orion when he, instead of boasting, flattered her by complimenting her as a superior hunter. The movement of these constellations gives allusion to the tale as, in the summer, it looks as though Orion is fleeing Scorpio. Another Greek tale that mentions Scorpio tells of Phaeton begging to drive his father, Helios's, chariot of the sun. But, Phaeton caused more damage than a teenager taking the family car out for a joyride: flying too high causing the Earth to grow cold and too close to Scorpio who was ready to sting, in turn causing the horses of the chariot to panic and fly too close to scorch the Earth, creating the deserts in Africa. Zeus put an end to the joyride by striking the chariot.

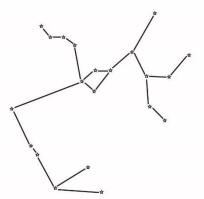
In Babylon, the signs for the constellation's name translate to literally "(creature with) a burning sting" (Scorpius).

To Grecians and in Arabic, Libra was seen as the "scorpion's claws".

The Astrological Zodiac: Sagittarius

The ninth sign of the zodiac, the Latin name meaning "archer", representing the hot, dry season between November 22 to December 21, its sign .

Bonus fun fact: the Wow! Signal, a spiked radio signal believed to be possible evidence of extraterrestrial life, had come from the direction of this constellation.



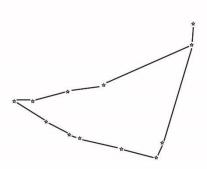
Like Gemini, the Babylonians had associated Sagittarius with Nergal, who, in addition to being god of the underworld, was also the god of war. Sumerians represented this constellation, Pabilsag, as they called it, as a bit stranger rendition of a centaur with a bow including "wings, with two heads, one panther head and one human head, as well as a scorpion's stinger raised above its more conventional horse's tail (Sagittarius (Constellation))." Perhaps the Sumerians included the use of psychedelics when depicting astrology, but that's just personal speculation.

The Greeks also depicted Sagittarius as a centaur, perhaps as Chiron who taught Achilles archery. Chiron is the half-man, half-horse offspring resulting from the mythos of Chronos transforming into a horse to disguise himself and cheating on his wife, Rhea, with the nymph Philyra. Another Greek depiction is of Crotus the satyr, inventor of archery. The constellation appears as though the arrow of the bow is poised in the direction of Scorpio's heart, the star Antares.

The Astrological Zodiac: Capricorn /

Capricornus

The tenth sign and smallest constellation in the zodiac, the sea goat (represented as such since Mid-Bronze Age and its name Latin for "goat horns"), representing the cold, dry season between December 22 to January 19, signifying the winter solstice, its sign \hat{\gamma}.



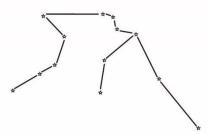
It has been depicted as a sea goat since the Babylonians deemed it the "Goat-Fish". The Babylonians/Akkadians associated it with their god of water and intelligence, Ea (previously known as Enki).

The Greeks symbolize Amalthea, foster mother who nurtured Zeus after his mother saved him from being devoured by his father Chronos, as a goat. Another myth associated with Capricorn is of the sea goat Pricus, father of the intelligent race of near-shore dwelling sea goats of whom the gods favored. Pricus was said to be created by Chronos and, like the god of time, could manipulate time, so when his kin ever ended up on dry land which would make them turn into normal goats, Pricus would reverse time to prevent this. Growing weary, he eventually allowed the sea goats to succumb to their fate and now spends his immortality with the stars. The goat headed god with a fish tail, Pan, is also seen as a representation of the constellation.

Hindu Vedic Astrology depicts the constellation as a crocodile or alligator.

The Astrological Zodiac: Aquarius

The eleventh sign of the zodiac, the water bearer, representing the hot, wet season between January 20 to February 18, its sign . It's associated with times of rain and floods in the Middle East.



The Greeks associated the constellation with

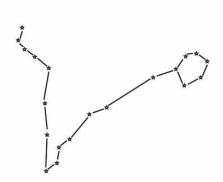
Ganymede, a Trojan hero. Zeus is said to have

developed and infatuation for the man (as he does with literally anything that has a pulse in

Greek mythology) and took him to serve as cupbearer to the gods.

The Astrological Zodiac: Pisces

The twelfth and final sign of the zodiac, the fish, representing the cold, wet season between February 19 to March 20, its sign \mathbb{H} . It dates back to 2300 BC Egypt when the first known record of the constellation was inscribed on a coffin.

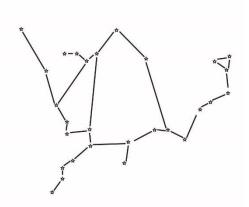


The Greeks had associated the constellation with the ichthyocentaurs, basically centaurs with fish tails.

Some associate Pisces with Jesus as "the birth of Christ is said to be a result of the spring equinox entering into the Pisces, as the Savior of the World appeared as the Fisher of Men (Pisces (Astrology))" and a symbol of Christ being a fish.

Ophiuchus

The unofficial thirteenth zodiac, the Greek name meaning "serpent bearer", depicted as a man wrestling a snake (the constellation Serpens), and its sign [b]. It has sometimes been recognized as the thirteenth constellation of the zodiac since it's one of thirteen that crosses the ecliptic between November 30 to December 18, but not the thirteenth sign.



While Babylon did not refer to this constellation specifically, they instead had a constellation referred to as the "Sitting Gods" within the same celestial area.

The Greek poet Aratus is recorded to have the earliest known mention circa 315 BC of the Ophiuchus constellation in one of his poems:

"To the Phantom's back the Crown is near, but by his head mark near at hand the head of Ophiuchus, and then from it you can trace the starlit Ophiuchus himself: so brightly set beneath his head appear his gleaming shoulders. They would be clear to mark even at the midmonth moon, but his hands are not at all so bright; for faint runs the gleam of stars along on this side and on that. Yet they too can be seen, for they are not feeble. Both firmly clutch the Serpent, which encircles the waist of Ophiuchus, but he, steadfast with both his feet well set, tramples a huge monster, even the Scorpion, standing upright on his eye and breast. Now the Serpent is wreathed about his two hands — a little above his right hand, but in many folds high above his left (Ophiuchus)"

Another Greek association with Ophiuchus was the depiction of the god Apollo fighting with the Oracle of Delphi's snake guard, Python. A Greek/Roman mythos also tied to the

constellation is that of Laocoön, Trojan priest of Poseidon, who was attacked by sea serpents sent by the gods as punishment for trying to warn other Trojans about the Trojan Horse.

The Romans had another association of Ophiuchus as reference to Asclepius, a healer who learned how to be immortal by observing a serpent using herbs to heal another but met his demise when Jupiter killed him to prevent all humans from becoming immortal. Jupiter then created the constellation as recognition.

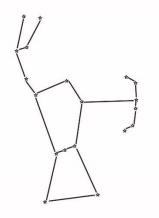
Medieval Islam refers to Ophiuchus as the "snake charmer" circa 1000 AD.

The so-called "thirteenth zodiac", since the publication of Walter Berg's *The 13 Signs of the Zodiac* in Japan, the serpent bearer is called *Hebitsukai-Za*. The thirteen-zodiac system has since been referenced in popular culture such as in the *Final Fantasy* video game series and the *Fairy Tail* anime and manga series.

Orion

Orion has a diverse history dating back as far as 38,000 years ago in the Upper Paleolithic era with reference to it found on a carving on mammoth ivory in an ancient European cave.

In Babylon during the late Bronze Age it was referred to as "Anu's Shepherd", the god of all gods.



Also, as referred to previously, there was also association of Orion as Gilgamesh in the *Epic of Gilgamesh*.

Egyptian astrology associated Orion with the father of gods Sah (also associated with Osiris), who was in turn associated to Sopdet (also associated with Isis, Osiris's wife), or the star Sirius which can be found directly southeast following Orion's Belt.

Hayk, the Armenian founder, was also associated with Orion.

Orion was first mentioned as a shade appearing before Odysseus in the underworld in the Grecian tale of Homer's the *Odyssey*. Orion is also said to be the son of Poseidon and Euryale and, as a result, could walk on water. In such a myth, Orion had walked to the island Chios. He ended up getting a little too hammered and assaulted the king's daughter, Merope, and the king Oenopion gauged out his eyes. He then, still kind of tipsy, went to Lemnos only to get redirected by Hephaestus's servant Cedalion to Helios the sun god to heal him. After which, Orion, even though drunkenly attacking the king's daughter was his own fault, went back to Chios for revenge but didn't find the hidden king. He then went to Crete where the previously mentioned tale of Orion stomping on Scorpio took place. "However, Ophiuchus, the Serpent Bearer, revived Orion with an antidote. This is said to be the reason that the constellation of Ophiuchus stands midway between the Scorpion and the Hunter in the sky (Orion (Constellation))."

Orion was referred to as the "giant" to medieval Muslims. The star Saiph in the constellation in Arabic means "sword of the giant".

The Hungarians had a few names for Orion: the "Archer", the "Reaper" (the bow being instead seen as a scythe), the "judge's stick" (just Orion's Belt), and, from a Hungarian myth, Nimrod, the greatest hunter.

In Hindu Vedic astrology, Orion was called Mriga the deer.

To the Scandinavians, Orion's belt was called quite a few things: "Frigg/Freyja's distaff", "Väinämöinen's scythe", and "Kaleva's sword".

The Chukchi in Siberia depict the constellation also as a hunter with a bow.

The Seri in Mexico refer to Orion's belt as "hunter" and the stars within the constellation as "mule deer", "pronghorn", and "bighorn sheep".

The three stars of Orion's belt are also recognized in Spain/Latin America but as the "Three Marys", or, in Puerto Rico specifically, the "Three Wise Men".

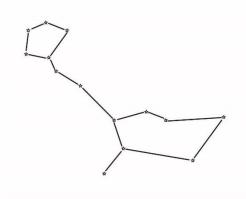
To the Chippewa tribe in North America, refer to Orion as the "Winter Maker" since, to them, signals that winter is coming. Conversely, the Lakota tribe refer to the combination of Orion's belt and Taurus as a bison. The bottom part of the Orion constellation as the hand of a chief, a symbol of peace among gods and humans. The Hand was said to be torn off of a chief by one of the gods as punishment for being selfish. The chief's daughter offered the reward of marriage to her to whomever could retrieve the Hand of the chief. "Fallen Star", a warrior born from a star and a human, managed to do so.

In Polynesia, Orion is associated with Heiheionakeiki, a giant huntsman.

Cetus

Cetus the whale or, in some cases, the sea monster, resides near the other aqueous constellations like Pisces and Aquarius.

To the Greeks, Cetus was named after the sea monsters that Perseus and Heracles defeated (one interpretation of Perseus's tale tells of him defeating



Cetus by turning the sea monster to stone using Medusa's head). They had also depicted it as a fish, serpentine fish, whale, or even shark, sometimes with a muzzle, long ears, horns, legs, or tentacles.

Johann Bayer, a German 17th century astronomical cartographer, referred to it as a "dragon fish".

Cetus has also been associated with the whale in the biblical tale of Jonah where Jonah is swallowed by a whale.

Draco

Draco the Dragon is circumpolar and can be seen year-round circling the northern star. For this reason, in some cases it's associated with the ouroboros, a circular snake or dragon swallowing its tail symbolizing infinity.

In Greek mythology, the constellation could be associated with the dragon Ladon, guardian of the Hesperides', nymphs', golden apples, who was defeated in Heracles's eleventh labor in order for Heracles to take the apples. Another Grecian/Roman tale tells of Minerva, goddess of wisdom, strategy, and war, defeating the dragon, a giant in opposition to the gods, and throwing its head and it getting caught in the heavens.

Caelum

Unlike the rest of the constellations on this list,

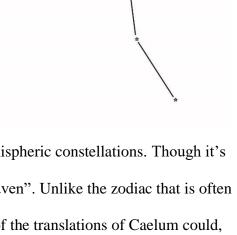
Caelum, the chisel (originally Caelum Scalptorium,

"engraver's chisel"), doesn't really have much history or

mythos at all surrounding it. Nicolas Louis de Lacaille, a

French astronomer circa 1750, included this

constellation, as both burin (engraving) and echoppe



(etching) chisels, in his own cartography of the southern hemispheric constellations. Though it's unrelated to another Latin translation of the word as "sky/heaven". Unlike the zodiac that is often used for horoscopes to tell a person's future, a combination of the translations of Caelum could, subjectively, be metaphorical for creating one's own destiny.

Ptolemy Northern Constellations Sphere



Ptolemy Southern Constellations Sphere



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Individual constellation pictures and picture of zodiac circle created by me

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