

THE ZODIAC: COMPARISON OF THE ANCIENT GREEK MYTHOLOGY AND THE POPULAR ROMANIAN BELIEFS

DOINA IONESCU*, FLORA ROVITHIS**,
ELENI ROVITHIS-LIVANIOU***

Abstract: This paper intends to draw a comparison between the ancient Greek Mythology and the Romanian folk beliefs for the Zodiac. So, after giving general information for the Zodiac, each one of the 12 zodiac signs is described. Besides, information is given for a few astronomical subjects of special interest, together with Romanian people believe and the description of Greek myths concerning them. Thus, after a thorough examination it is realized that: a) The Greek mythology offers an explanation for the consecration of each Zodiac sign, and even if this seems hyperbolic in almost most of the cases it was a solution for things not easily understood at that time; b) All these passed to the Romanians and influenced them a lot firstly by the ancient Greeks who had built colonies in the present Romania coasts as well as via commerce, and later via the Romans, and c) The Romanian beliefs for the Zodiac is also connected to their deep Orthodox religious character, with some references also to their history. Finally, a general discussion is made and some agricultural and navigator suggestions connected to Pleiades and Hyades are referred, too.

Keywords: Zodiac, Greek, mythology, tradition, religion.

PROLOGUE

One of their first thoughts, or questions asked, by the primitive people had possibly to do with sky and stars because, when during the night it was very dark, all these lights above had certainly arose their interest. So, many ancient civilizations observed the stars as well as their movements in the sky. Besides, as they did not know what they really were attributed them magic, or even they deified them. Later, people gave names to the stars and using their imagination grouped them; so, the constellations were formed. This was made to find their position with a simple and easy way. The names people gave to the stars and constellations were related to local gods, heroes, monsters, etc. taken from their mythology.

From all ancient civilizations studied the sky, the Greek mythology is the one universally survived. The **48** constellations «*put*» by the ancient Greeks in the sky were recognized by the International Astronomical Union, *IAU*, and together with others mainly from the south hemisphere, formed the **88** constellation universally accepted today. The whole «*Greek sky*» is full of semi-gods, heroes, monsters etc.

* BA Bucharest University, Romania. Assistant Researcher, Astronomical Institute of the Romanian Academy, Str. Cutitul de Argint 5, Sector 4, Bucuresti, Romania (E-mail: doinaionescu36@clicknet.ro)

** BSc Athens Univ., Greece; MSc. Patras University, Greece. (E-mail: florov11@yahoo.gr)

*** BSc Athens Univ., Greece; MSc & PhD, Manchester University, England Assist. Prof. Dept of Astrophysics, Astronomy & Mechanics, Faculty of Physics, Athens University, Panepistimiopolis, Zoografos 15784, Athens, Greece (E-mail: elivan@phys.uoa.gr)

information for whom can be found in the Greek Mythology (e.g. Kakridis, 1986). Besides, it is believed that the way the ancient Greeks put the *constellations* in the sky is not accidental but it is made with a *systematic way* based on the two main circles of the celestial sphere: *Equator* and *Ecliptic*, (Fig. 1).

Moreover, it is said that the mythic Orpheus, *Ὀρφεύς*, son of the King of Thrace Oïagros, *Οἰάγρος*, and the Muse Calliope, *Καλλιόπη*, taught Astrology to the Greeks. He did so not directly, but together with *magic* and *mystery* to achieve his purpose, (Loukianos, «*About Astrology*», § 10). It is important and necessary to add that during that time the word *Astrology* had the meaning of *Astronomy*. Astrology comes from the Greek words *ἄστρον* = *star* and *λόγος* = *word*, while Astronomy from the Greek words *ἄστρον* = *star* and *νόμος* = *law* = *rule*, meaning the *laws* governing the stars', (mainly their movements). After the development of Astronomy, and later Astrophysics, Astrology restricted to the meaning given and attributed to this word today. That is: it is not a science, but a pseudo-science, which tries to connect and explain people's fortune with planets and constellations, and especially with the Zodiac.

Thus, concerning Greece the constellations, what they represent, how and who made them putting some persons or animals in the sky etc. all are well referred in their mythology and many other sources (e.g. Homer, «*Ἰλιάς*», «*Ὀδύσσεια*»; Hesiod, «*Ἔργα καὶ Ἡμέραι*»; Loukianos «*Whole Works*» etc.).

Regarding Romania, the one who synthesized the best Romanian folk mythical representations of the constellations and their relations to other peoples' mythologies was the astronomer Ion Otescu, in his masterpiece «*The Beliefs of the Romanian Peasants in the Sky and Stars*» the best book on Romanian popular mythology written so far. He knew them from his childhood as he lived a long time among peasants. Otescu drew up a map of the sky based on information gathered from folklore sources and sent it out to school masters in villages in Wallachia, together with a questionnaire asking them to place on the map the situation of the planets throughout the year, starting from March, (Fig. 2).

So, the aim of the following is a parallelism between the Romanian villagers' conceptions about the sky as Otescu (2002) collected them at the beginning of the 20th century and the ancient Greek myths.

THE ZODIAC

Among the constellations there are **12** lying in a zone around *Ecliptic* forming the *Zodiac zone*, or simply the *Zodiac*, (Figs. 1 & 3). The name comes from the Greek verb ζῶ = live, (ζῶον = an alive being, or creature, animal), because all these **12** constellations presented people or animals; even the Libra, as we shall explain later.

People's lives were organized for a long time around these 12 constellations, while each nation has its own legends and beliefs concerning these signs. All these

have nothing to do with *Astrology*, as people use this word today. On the contrary, this was so, because *Ecliptic* is used to define the *epochs*; and, as is known, the epochs (the 4 seasons) determine the various agricultural works people have to do during the year. Thus, the ancients denoted the beginning of an epoch according to the stars or constellations being then visible.

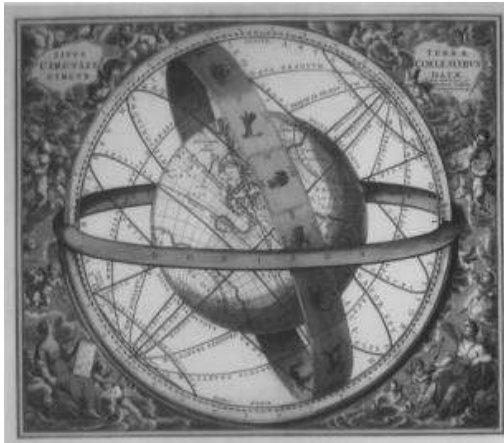


Fig. 1. The Equator and the Zodiac zone.

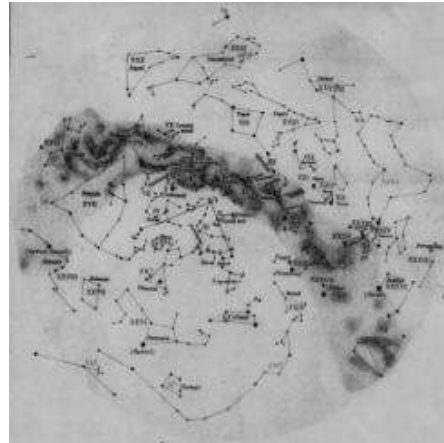


Fig. 2. Sky map (from Otescu, 2002).



Fig. 3. The 12 Zodiac signs represented on a coin.

Let us now present the 12 constellations forming the Zodiac, giving some information for them, and let us introduce their Romanian folklore meaning, what the ancient Greeks thought about them, and what they represented in the Greek Mythology.

ARIES

In this constellation there was the point where our Sun's apparent orbit, *Ecliptic*, meets the celestial *Equator*, i.e. the spring equinox. For this reason *Aries* is usually referred first, even if this is not so any more. Although this point has moved to the Pisces constellation we start with this constellation, keeping tradition.

The Romanian folks also call it the *Ram*, but the peasants can usually identify only its horns on the celestial vault of heaven. This constellation denotes either the *Jupiter being Amon-Zeus, Ἄμμων-Ζεύς*, or the golden-fleece, i.e. the *Chryso-Malus skin, or το Χρυσόμαλλο δέρας* in Greek. Because it was supposed that the ram with the golden-fleece, was sacrificed to Jupiter and transported into heaven, (Fig. 4).

According to the Greek Mythology, the flying ram with the golden skin is that god Hermes, *Ἑρμῆς*, had offered to Nefeli, *Νεφέλη*. The later gave it to her children Froixos & Helli, *Φροῖζος & Ἑλλη*, to escape when it was found out that their father, *Athamas, Ἀθάμας*, king of *Orxomenos, Ὀρχομενός*, and their step mother *Ino, Ἰνώ*, planned to kill and offer them to the gods. While, *Φροῖζος* and *Ἑλλη* flew away using the golden ram, *Ἑλλη* fell into the sea that named after her: Hellespont, *Ἑλλήσποντος*, from her name and the Greek word *πόντος* = pontus = sea, meaning Helli's sea.

It could also represent *Ἀπόλλων Κάρνειος Apollo Carneios* of the Dorian's *Δωριεῖς*. This was another appearance of god *Apollo*, who during the expeditions of the Dorian's marched in the first lines of the army like the ram walks ahead the flock of sheep. The adjective definition *Κάρνειος* comes from the soothsayer Karnos, *Κάρνος*, because god *Apollo* was their protector as being a soothsayer himself.



Fig. 4. A Roman coin from Antioch, Syria represents the zodiac sign of Ram.

TAURUS

Taurus represents the oldest zodiacal sign, the first one devised by man. Except stars, it also contains two well known star clusters *Pleiades*, (Fig. 5), and *Hyades*. The latter is the closest open cluster to our solar system, at a distance of **153 ly**, the brightest stars of which form a huge «V».

The group of stars called *Pleiades* was the husbandman's and shepherd's reference for time measuring before the calendar was invented. On the other hand *Hyades* appearance before Sun's rise denoted the end of summer and beginning of first **rains** in the Mediterranean area.

The Romanian peasants also make a separate constellation with the Pleiades stars. They generally call it the *Roosting Hen with Chicken*, or the *Small Hen* or just the *Hen*. The name of «*Roosting Hen with chicken*» is due to the fact that the constellation resembles a roosting hen followed by its chicken.

The Roosting Hen is the Romanian peasants' major constellation, which they follow also in the winter time, when it indicates the duration of day for them. Judging by the height of this constellation in the sky the peasants can always estimate the time of the day and night.

Hyades, the other distinct group of the Taurus constellation, represent a separate constellation with the Romanian people that is called *The Boars* or *The Pigs* and also *The Saw with Piglets*. It seems that nomination comes from Latin, for the Romans called this constellation *Suculae*, i.e. «*the Small Saws*». It may also come from the Greek «Υς», or the Homeric «Συς», which means «*Pig*».

According to Tales, Θαλής, Hipparchus, Ἱππαρχος, and Ptolemy, Πτολεμαῖος, *Hyades* were two, while Mousaios, Μουσαῖος, considered they were five. Generally there are various versions about *Hyades* and *Pleiades* and the way they were transferred to the sky. Mousaios for example refers that Aithra, Αἴθρα, born from Ocean one son, named Hyas, Ὑάς, and 12 daughters who loved him very much. Unfortunately, Hyas was killed during hunting, either by a lion, as is said by some, or by a boar according to some others. Hyas after his death was put in the heaven as a constellation; but his sisters were very sad for his death and were continuously cried. So, the gods who were regretting them, transformed **5** of them to *Hyades* and **7** to *Pleiades*, (the two star clusters), and put them in the sky next to their brother, (Presocratics, 2000). Of course both clusters contain a big number of stars; and the number **5** and **7** referred in the myth correspond to their brighter stars that people could easily observe. The **5** *Hyades* were: Faola Φάολα, Ambrosia Ἀμβροσία, Eudora Εὐδώρα, Koronis Κορωνίς and Polykso Πολυξώ, and their name comes from the Greek verb ἴω = *wet*, meaning that they bring the rain. On the other hand, the **7** *Pleiades* were: Alcione, Ἀλκιδώνη, Maesa, Maja, Μαΐα, Taegetes, Ταυγέτη, Electra, Ἠλέκτρα, Sterope, Στερόπη or Ἀστερόπη, Kelaino, Κελαινώ, and Merope, Μερόπη.

There is also another acceptation according to which Pleione, Πλειώνη, was *Pleiades*' mother, from whom they were named. Although their name may come from

$\pi\lambda\epsilon\iota\omicron\varsigma$ = *much*, because many stars were collected together, or from $\pi\lambda\epsilon\tilde{\nu}$ = $\pi\lambda\acute{\epsilon}\omega$ = *sail*, because when they rise the sailing period started, which ended when they set.

Pleiades cluster is commonly called Poulia, *Πούλια*, by ordinary people.

Except the myth according to which the 12 sisters were very sad because of their brother's lost, there is another adaptation according to which the giant Orion, *Ὠρίων*, fell in love to Pleiades, or only to Pleione, and run after them trying to kidnap them. This continued for 5 years. So, they went to Zeus who transformed them to stars, but Orion continued to persecute them as a constellation in the sky. Thus, they fall into the ocean (sea) to avoid him.



Fig. 5. Photo of the Pleiades open cluster.



Fig. 6. Coin of Antoninus Pius, (138–161) AD, Zodiac series:
Venus in Taurus, Head of Antoninus Pius Diademed bust of Venus and star above bull.

Furthermore, in the Greek Mythology, Taurus constellation symbolizes either the Taurus which help Zeus to kidnap Europe, *Εὐρώπη*, and bring her to Crete, or Zeus himself who transformed to Taurus for the same reason. According to the first

acceptation, the Taurus remain at Crete, and it is the one with whom Pasifae, *Πασιφάη*, king's Minos, *Μίνως*, wife, born Minotaur, *Μινόταυρος*. Later Hercules captured and brought it to Mycenae, *Μυκῆναι*, from which it moved to Attica and was finally killed by the king of Athens Thisseus, *Θησέας*.

GEMINI / THE TWINS

The Gemini constellation has several bright stars, the brightest of which are *Pollux* and *Castor*. Besides, it has many binary stars, one globular and some open clusters, as well as some planetary nebulae.

The Romanian peasants reduce the entire constellation only to its two main stars called Castor and Pollux. They call them the *Twin Brothers* or simply the Twins, but more frequently *Romulus* and *Remus*, i.e. *Romulus* and *Rem*, as a token of the Romanian people's Roman ancestry.

The brightest stars of this constellation are *Castor*, *Κάστωρ*, and *Pollux*, *Πολυδεύκης*, i.e. the «*Discouroi*», «*Διόσκουροι*» according to the Greek Mythology. The name «*Διόσκουροι*», means Dias' sons, coming from the Greek words *Δίας* = *Jupiter* and *κοῦρος* = *son*. *Dioskouroi* were brothers of the queen of Sparta and king's Menelaus wife, the beautiful *Helen*, as well as of *Klytaimystra* who was king's Agamemnon wife. They were sons of *Δίας* and the queen's of Sparta, *Leda*, *Λήδα*. *Δίας* achieved his plane to have a sexual affair with *Leda* transformed to a swan, as shown in the pictures, (Figs. 7 & 8).



Figs. 7 and 8. God Dias transformed to swan to have a sexual interaction with Leda (Left: From a marble style; Right: From a Painting).

Dioskouroi had taken part to many exploits and travelled to various parts of the main Greece as well as to Greek colonies both in Magna Graecia as well as in Asia Minor. They had also taken part to the *Argonaut* expedition, where they

managed to save *Argo*, during a storm. Then, lights appeared above their caps, (hats, *pillei*), being the electric origin lights appeared during very bad weather conditions. They are those called «τελώνια» = «genies» or «demons» by common people. But the *Argonauts* thought they were *stars* sent by *Zeus*. Thus, *Dioskouroi* were considered as protectors of the sailors, and were presented wearing always their caps with *stars* above, as seen in the following old coin, (Fig. 9).



Fig. 9. Coin of Antoninus Pius, Zodiac series, Obverse: Head of Antoninus Pius; Reverse: Dioskouroi standing and holding sceptres, stars above them, eagle between them.

Besides, as they had travelled a lot, they were worshiped in various places. It is worthwhile to mention what happened when the Latin and the Tyrinians, although they already were Roman citizens, continue making predatory invasions against the Greeks. Firstly Alexander the Great, *Μέγας Αλέξανδρος*, and later Demetrius the besieger, *Δημήτριος ο πολιορκητής*, sent back to Romans the arrested brigands emphasizing that it is contradiction in their Forum to have sanctuary of *Dioskouroi* to honour them calling them their saviours and at the same time to send brigands against Greece, i.e. against the fatherland of those who honour, (Stravo, E chapter third, §5, C 232).

Epimenides and others refer in their myths that *Dioskouroi* were not two brothers, but man and woman, (Presocratiens, 2000).

CANCER /THE CRAB

The Cancer constellation is represented by a huge crab in almost all sky charts, except this of Hevelius (1687), who puts a lobster in its place. This constellation consists of rather faint stars, so it can be found by the aid of one of the two open clusters it contains: **M44**, *Praesepe*, and **M67**. The **M44** cluster is in the middle of *Βασιλίσκος*, the brightest star of *Leo* and the two brighter stars of *Gemini* constellation. The other cluster, **M67**, is found almost in the middle distance between *Βασιλίσκος* and *Προκύων*, i.e. the brightest star of *Canis Minor*.

It is mentioned that the open cluster **M44** is visible with naked eye, when the weather conditions are good, and it was known to ancient astronomers like Ptolemy, Aratos, Eratosthenes, who called it «Φάτνη» = «Manger», while it was named «Αχλύς» = «Haze», or «Νεφελοειδής» = «Nebula like» by Hipparchus.

On the other hand, it is worthwhile to refer that Ptolemy observed from Alexandria, Egypt, an occultation, (eclipse), of the star δ **Cnc** by the planet Jupiter occurred on 3 September **240 BC**, and registered it in his famous work «Μεγάλη Μαθηματική Σύνταξις», or simply «Μεγίστη» = «Al Majesty».

The Romanian peasants call it the *Crab* and it is associated with the following folk legend: When Jesus Christ was crucified His torturers wanted to stick four nails into His body, namely two in the two palms, one in His two feet crossed and a longer fourth nail into the navel. However, the crab stole the longest nail and slipped away with it running backwards. Later, Jesus Christ as a token of gratitude blessed the crab that it should be served as blessed meal both on fasting and meat days. And also in remembrance of his brave deed, Christ decided that the crabs always walk backwards and that he also be raised in the sky in the constellation that bears its name.

There are some who believe that Crab's position in the Zodiac, which corresponds to the summer solstices, is not accidental. Because Crab is in the place at which the Sun starts its *backward* movement in the sky, exactly as the crabs walk.

In Greek mythology the Crab, (Fig. 10), represents the huge crab sent by goddess Hera, *Ήρα*, to bite Hercules when he was trying to kill Hydra, (Fig. 11). Hercules managed not only to kill Hydra, but also to step on and squeeze the huge crab. So, Hera put the crab in the sky as a constellation to reward it for its services.



Fig. 10. Coin of Antoninus Pius, (138–161) AD, Zodiac series: Moon in Cancer; Head of Antoninus Pius Draped; bust of Selene in crescent Moon & star above crab.

Besides, according to Plato followers, Crab was «*Η Πύλη τῶν ἀνθρώπων*» i.e. «*The Humans' Entrance*» from which the souls come down from the sky entered to human bodies.

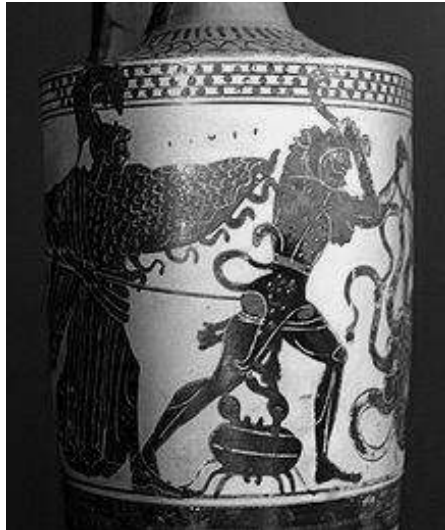


Fig. 11. Hercules while tries to kill the Hydra, the huge crab bites him, (Scene from an ancient amphora, Louvre Museum).

Moreover, according to some others in this constellation there was «*The Moon's House*», as the Moon was put there during its creation. It is possible this acceptance to be represented in the Roman coin of Fig. 10.

THE LION

The constellation lies on *Ecliptic* being far away from the galactic plane.

The Romanian folks rarely call it the *Lion*. It is more often called the *Horse*. In Romanian popular tradition it is called more frequently the Great Horse, the Small Horse being another name given to the constellation *Pegasus*, (Fig. 12). Actually, north to the Leo constellation there is another, rather small and consisting of faint stars only, called the *Small Leo*. It was introduced by Hevelius in 1690 and lies between *Ursa Majoris* and *Leo*.

According to the Greek Mythology, Lion was born by the monster Chimera, *Χίμαιρα* after she had sexual affair with Orthos, *Ὄρθρος*, son of two other monsters: Typhon, *Τύφων*, and Exidna, *Ἐχιδνα*. Moreover, it was raised by goddess Hera, *Ἥρα*, who later left it free in Nemea's forests. The Lion constellation seems to be the apotheosis of the Lion killed by Hercules.

It is also said that Nemea's lion was born from the goddess Selene, *Σελήνη*, after a big earthquake and fell to Earth. Epimenides, *Ἐπιμενίδης*, refers in a poem: «... *Selene who throw far away -to Nemea- the wild lion, following venerable Hera's order, and which was tamed by the theism strength of Hercules hands*».



Fig. 12. The Lion constellation.



Fig. 13. Leo from Antoninus Pius Zodiac series coins
(Obverse: Antoninus Pius head; Reverse: lion with star above).

The star Regulus of this constellation is called «*Basiliscos*», «*Βασιλίσκος*», i.e. «*the small king*». The Latin nomination of «*regulus*» is due to Copernicus. Regulus is the Latin synonym of the Greek *Βασιλίσκος*. This star is also called «*The Heart of the Lion*».

VIRGO

This constellation is called the virgin, and is connected with a young virgin girl. It is known for a huge cluster of galaxies that contains.

The Romanian people call this constellation «*The Virgin*» and they believe that it represents the Virgin Mary, the Mother of Jesus Christ. They also believe that its brightest star, *Spica*, through its whitish colour, is a symbol of the Virgin's immaculate heart.

According to the Greek Mythology this constellation represents Persephone, *Περσεφόνη*, daughter of Zeus and Demeter, *Δήμητρα*, also known as «*Κόρη*». The name *Virgin* = *Παρθένος* comes from her virgin mother, who was the mother Earth goddess, the universal mother, the goddess of earth's fruitfulness. Because Demeter is the Greek *Δήμητρα*, i.e. *Δη* and *μήτηρ*, or *Γη* = earth and *μήτηρ* = mother, i.e. the mother earth. Virgo is usually presented holding a branch of palm with one hand and ear wheat with the other, as reaping goddess. For this reason, the Greeks call the brightest star of this constellation, i.e. *Spica* as mentioned above, «*Στάχυ*», because *στάχυς* is the Greek word for the ear wheat.

Moreover, according to Aratos, *Ἄρατος*, this constellation represents goddess Astraea, *Ἀστραία*, daughter either of Zeus and Themis, *Θέμις*, or of the titan Astraos, *Ἀστράος* and the titaness and goddess of dawn Eos, *Ἥως* or *Ἐως*. As during the war of Zeus with the Titans, Astraea was with Zeus' side, he gave her the jurisdiction to cast his thunderbolt to the target. So, she became goddess of justification as her mother Themis. Thus, she was often called the «*Divine Justice*», which still remains as the well-known phrase: *Θεία Δίκη. Φωκὴ θα πέσει να μας κάψει* «*Divine justice, fire will fall to burn us*».

Ἀστραία was goddess of justice and virginity and for this in Greek she was also referred as *Δίκη*, that is the personalization strength of justice and the right human behaviour.

In Hesiod's work «*Theogony*», *Δίκη* is referred as one of the three *Χάριτες* = *Charmers*, while later she appears as daughter of *Χρόνος* = *Time*, meaning that she was born in a specific time, through ages. Finally, *Δίκη* is found to be Jupiter's and Themis daughter daughter and *Ἀνάγκης* sister (*ανάγκη* = *need*). The name *Δίκη* comes from the «*root*» *δικ* and is relative to the Greek verb *δείκνυμι* with original meaning *show the direction, show the way*. While, finally got the meaning *διώκω* = *persecute*. Thus, *Δίκη* was connected to the very old custom of driving out from a community the guiltier. For this, *Ἐρινός*, the ones who persecute the criminals, were considered as *Δίκης* assistants.

It is supposed that Astraea came to Earth to live with people during the golden-age, which for this is called *Astraea's age*, too. But, when during the iron-age, people did not pay any attention to the right and started to commit crimes then, she went to heaven and formed the Virgo constellation, (Ovid, «*Transformations*»). Near by there is the Libra constellation, which is the justice symbol.

The ancient Greeks called also Virgo constellation *Parthenos Athena*, the famous maiden goddess, who was called Minerva by the Romans. She was also the goddess of wisdom and it is worth mentioning that in the Romanian nomination of this constellation there is a hint to the attribute of virginity of the Greek goddess of wisdom.

LIBRA

Today Libra is the only constellation neither being and not presented by an animal; this was not so in early times. To be more specific: in classical antiquity Libra was called the «*Scorpio's bites*» = «*Χηλαί του Σκορπιού*» = «*Δαγκάνες του Σκορπιού*». Because, the presentation of the near by constellation, *Scorpio*, and especially its bites reached up to two brighter stars of the present constellation of *Libra*.

The name Libra = Ζυγός was given by Hipparchus, Ἰππάρχος, and was kept up today. It is believed that he named it so, because at Hipparchus times this constellation showed the *equality of day and night duration*, as it was at the place of the autumn equinox, and the Greek word ζυγός means *balance* or pair of *scales*. Due to the phenomenon of lunar-solar precession, the Virgin constellation is now at the autumn equinox position.

Later, Libra symbolized justice, which the ancient Greeks attributed either to Zeus, or to *Themis* or even to their daughter *Astraea*, as already referred.

The Romanians call Libra the *Balance* or the *Scales* and believe that it is the scales with which Jesus Christ will weigh the people's deeds at Judgment Day.

On the other hand, Virgil who wanted to flatter Caesar Octavian August, refers that Scorpio put aside to leave space to Octavian (in the sign of the Zodiac in which the Sun was when Octavian was born) either to rest after his death, or to put there the symbol of his well-known justice. So, Libra became the symbol of justice.

SCORPIO

Scorpio is one of the oldest constellations, and the biggest one, as in the past it contained Libra, too. In its area there are many spherical clusters, and nebulosity.

The Romanian folks call it the Scorpio woman with a bloody eye and stretched claws.

Possibly, Scorpio was put in the sky by people from rather warm regions, where this reptile is well known and where this constellation rises high enough above the horizon. The Romanian peasants seem nevertheless familiar with this reptile, although they have never seen it nor are able to tell what it really looks like. They imagine it is a fiery being with awesome claws and a great thirst for blood.



Fig. 14. Coin of 25 BC, time of Augustus, from Cyprus; Capricorn & star / Scorpion & star.

In Greek mythology *Scorpio* symbolized the scorpion sent by Apollo to bite and kill the famous hunter *Orion*, because the latter was in love with Apollo's sister goddess *Artemis*. Besides, there is another acceptance: scorpion was sent by Γῆ = Gaia to kill Orion, because he had boasted that there was not animal to escape from his arrows. Independently from who sent scorpion to bite Orion, both died: one from scorpion's bite and the other by Orion's arrow. Then, Zeus put them in the sky as constellations, but at exactly opposite directions in the sky, so when one raises the other sets.

Finally, there are some who stated that *Scorpio* was that who frighten god's Helios horses, when his son Phaeton, *Φαέθων*, was driven his father carriage. Because as Phaeton has not any experience, the horses went out of their usual course, approached Earth very much causing a fire, and Phaeton was killed.

Scorpio's brighter star is called Antares, from the Greek words *ἀντί* and *Ἄρης*, which means that this star is a rival of planet Mars. Both celestial bodies, *Antares* and *Mars*, have a reddish colour; Mars being of a darker shade than Antares.

SAGITTARIUS

The centre of our galaxy is towards Sagittarius direction.

The Romanian folks call it the *Archer* and consider that it stands for a Roman warrior.

Old Egyptian and Greek traditions speak of beings that are half human beings and half horses, namely the body being that of a horse with four legs and a tail, stuck to the bust of a man with two arms and a head. These monsters were called *Κένταυρος*, i.e. centaur and were considered very good and steady archers. The best known of them was *Chiron*, *Χείρων*, who was taught by Apollo, *Ἀπόλλων*, and Artemis, *Ἄρτεμις*, in botanology, music, astronomy and medicine. So, he became

teacher of almost all of the famous heroes like Hercules, Pileups, Asklepios, Jason, Dioskouroi, Achilles etc. The ancient astronomers said that Chiron had invented the celestial sphere. In antiquity it was believed that these monsters had really existed. The naturalist Pliny, for instance, asserted that in Rome, at his epoch, there was such a centaur preserved in honey (Otescu, 2002).



Fig. 15. Coin of Antoninus Pius, (138–161) AD, Zodiac series, Head of Antoninus Pius & legend, Head of Zeus & centaur leaping right drawing bow, star above his head.

There are ancient drawings that show the archer of this constellation as a centaur with a stretched arch, the arrow pointed towards the constellation Scorpio. This bowman is supposedly Chiron that is why this constellation is also called the Sagittarius.

Otescu (2002) stated that: «De altfel, legendele asupra centaurilor îi dau ca și războinici. În desemnurile din cele mai vechi timpuri până azi, săgetătorul din această constelațiune e figurat printr-un centaur cu arcul întins, și săgeata din arc țintind spre Scorpio. Acest centaur e supozat a fi Chiron, Argo chiar numește această constelațiune Săgetătorul sau Chrion. Cu toate acestea, unii zic că acest săgetător nu ar fi un centaur, ci ar fi Crocus, vestit vânător care locuia pe muntele Helicon, lângă muze».

CAPRICORN

Capricorn is represented by the mythological monster that was half a he-goat and half a fish, namely a being with the head and forefeet of a he-goat and the rest of the body ending in a fish tail.

In Romanian folklore it is called the *He-goat*. The Romanian peasants also believed that when it was lightening towards the direction of the Goat's Horn, it was certain that there would be rain.

According to the ancient Greeks Capricorn stands for the being into which either the god Pan or his son Aegipan, *Αἰγίπαν*, was transformed in order to be

saved when the giant Typhon, *Τύφων*, was persecuted him. Actually Aegipan was son of *Αἴη* (Aige) and *Πᾶν* (Pan) from whom he got his name; because Aegipan comes from *Aige & Pan*. Aegipan was half like god Pan in appearance, i.e. he had horns at his head and his legs were like those of a goat.



Fig. 16. Coin from Augusta, Cilikia; Livia's bust / Capricorn carrying globe & ΑΥΓΟΥ, star.

Besides, some others think that Capricorn was the goat Amaltheia, which had fed Zeus when he was born and was hidden at Crete to avoid (not to be found by his father) Kronos, *Κρόνος*.

Mousaios refers that when Zeus, *Ζεύς*, or Dias, *Δίας*, was born, his mother Rea, *Ρέα*, gave him to Themis, *Θέμις*; Themis gave him to Amaltheia, *Αμάλθεια*, and Amaltheia gave him to her goat Aiga, *Αἴγα*, to fit him. Aiga, who was Sun's daughter, was too ugly that the gods (of the Cronos epoch) asked from the Earth, *Γῆ*, to hide her in a cave. *Γῆ* hid Aiga at Crete and asked Amaltheia to take care of her. So, finally Amaltheia fed Zeus with the milk of her goat Aiga, (Presocratics, 2000).



Fig. 17. The she-goat Amaltheia in a coin from Phrygia of (182-184) AD, Commodus times (Obverse: Laureate head of Commodus, legend AV KAI MAVR KOMOΔOC; Reverse: The she-goat Amaltheia suckling the infant Zeus, legend AIZA-NEIT-Ω-N for the city's name in Greek.

Later, when Zeus was grown up and wanted to fight Titans, but he had not guns, he got an oracle to use goat's Aiga skin that was invulnerable and terrible having at the middle of its back gorgon Medusa's face. Zeus managed to look as being double acting this way. Then, Dias covered Aiga's skeleton with another skin, gave her life and made her immortal and it is said that this became constellation.

It is said that Capricorn had discovered a specific sea-shell, which makes an enervating sound, the so-called *panic*; and using it during the Titanic war, made Titans to run away. Thus, when Zeus won, got the throne and became king of the gods, he made both Capricorn and his mother Aiga constellations. It is also said that since the shell was in the sea, Capricorn has a fish tail as discretion sign.

AQUARIUS

In Romanian folklore it is called *Aquarius* or the *Water Carrier* (Fig. 18).



Fig. 18. The Aquarius constellation.



Fig. 19. Coin of Antoninus Pius Obverse: Head of Antoninus Pius & legend.
Reverse: Aquarius swimming and bust of Helios above.



Fig. 20. Coin of (180–192) AD from Ilios, Troas Obverse: Head of Commodus & legend AY KAI M AVPH KOMOΔOΣ, Reverse: Ganymede nude with Phrygian cap, Zeus's eagle with spread wings, legend IAIE-ΩN in Greek.

In Greek mythology Aquarius stands for Ganymede, son of Troa and Kalliroe who was the most beautiful young person, and whom either Zeus himself, or his eagle, brought to the gods place: mount Olympus. Actually the constellation of the Eagle is very close to and almost above that of the Aquarius.



Left, Fig. 21. The rape of Ganymede (by Rubens).
 Middle, Fig. 22. Ganymede rolling a hook and holding Zeus's gift a cockerel
 (From an Attic red-figure crater of 500-490 BC, Louvre Museum).
 Right, Fig. 23. Zeus holding Ganymede who holds Zeus's gift, a cockerel
 (Terracotta, 5th century BC, Olympia).

In the Homeric tradition the gods raised Ganymede to the sky and carried him to Olympus to delight their eyes and hearts through his beauty. There, he became the one who poured nectar for the gods, especially for Zeus.

PISCES

The ancient Greeks used to call this constellation in plural: the Pisces. It is supposed that they were connected by «τὸν Σύνδεσμο τῶν Ἰχθύων», i.e. «*the Pisces Connection*». In this, both Ptolemy and Hipparchus followed Aratos, who called the brighter star of Pisces «*Δεσμό*» = «*Connection*».

The Romanian peasants call this constellation the *Fishes* or *Carps*. According to their popular belief, these are the two fishes with which Jesus Christ fed the five thousand people.

According to the Greek Mythology they represent goddess Venus, *Ἀφροδίτη*, and her son Eros, *Ἔρως*, who were persecuted by the giant Typhon, *Τυφών*. For this reason they fall into the river Euphrates after they were transformed to fishes, and were tied together with a cord not to lose each other.

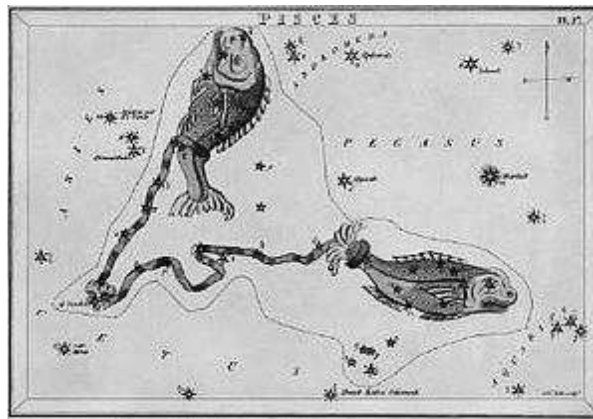


Fig. 24. The Pisces constellation.

This happened during Gigantomachia, when the Olympian gods abandoned mount Olympus and went to Egypt. And as usually, to this there are other acceptations, too. So, they may represent the fishes which help these two gods to escape from *Typhon*, while according to some others they represent the two dolphins which accompanied god Poseidon during his journeys on the sea.

DISCUSSION

In this paper we have drawn a comparison between the Romanian folk representations of the twelve signs of the zodiac and the ancient Greek mythological ones. Besides, some astronomical information was given, restricted only to well-known, famous, or easily recognizable objects in each of these **12** constellations.

Between the nominations and legends associated by the Romanian peasants to the stars that form the zodiacal signs and ancient Greek mythology there is a

link. This came firstly from the fact that the ancestors of the Romanian people had large influence by the ancient Greeks, who had established colonies in the Black sea coasts since the 7th century BC. The most known of them are Histria, *Ἰστρία*, Kallatis, *Καλλάτης*, (Magalia today), and Tomis, *Τόμις*, (Constanza today). This was continued later through Romans, who had also been influenced a lot by the Greek civilization. The coins presented here, most of which are Romans, show this clearly, as the themes on their reverse sides are taken from the Greek mythology. These two were the first and most important means by which the Romanian people came into contact with the wonderful mythology of the ancient Greeks.

Certainly myths contain a lot of hyperboles, but this was in the past the way through which people were taught and learned. Myths are also symbols of people's imagination, and of their effort to explain and understand things. So, myths can be regarded as the primitive form of the human knowledge. And it is amazing the way ancient Greeks used mythology to explain a lot of things, some of which we met and refer here. For example, as it was impossible to know the way lights are created and appeared during a storm, they attributed them as *stars* sent by the greatest of their gods: Dias. Furthermore, Capricorn was presented as amphibious to be able to walk on earth and swim in waters; otherwise it would have been impossible to discover the special sea-shell with which the Titans were frighten. Similarly, they used Phaeton's myth to inform people about the catastrophes that could be caused either by fires, or by floods, or by any other cause, as is explained (Plato, «*Timaios*», §22, C & D).

On the other hand, Dias was grown up drinking the milk of a she-goat. This was a simple and easy way to teach people that the she-goats milk was important and useful in the children's growth. Similarly, Orion's death after a scorpion's bite, teach people to be careful while making their various agricultural works.

The foregoing may sound *common* today. Because, nowadays scientists teach us and explain the way things happen; as a result a lot of things are considered certain. For example the weather services all over the world inform us about the weather conditions from one to the other side of our planet. It is not necessary to point out that this was not so during ancient times. At that time, people watch the sky, trying to see some easily recognizable stars or constellation and then to arrange their agricultural works, or their travels in the sea, on which the trade was based.

Hesiod for example refers: «*Ask, your servants to winnow the holly Demeter's wheat, when the giant Orion is firstly appeared*», (Hesiod, «*Works and Days*», lines: 597–599).

He continues: «*When the Orion and Sirius come to Zenith and Arcturus rises in the early morning, (actually he refers: the rosy-fingered Eos sees Arcturus), then is time to gather your grapes. Leave them for ten days in the Sun, and keep them in shadow for another five days and the sixth day collect in vases Dionysus gifts. And when Pleiades and Yades, as well as the giant Orion set, then is time for sowing. And it is time for the seed to be inside the ground*», (Hesiod, «*Works and Days*»,

lines: 609–617). And he goes on similarly referring when the sea becomes dangerous for travels etc. Many of his suggestions are connected to bright and well known stars as well as to others easily recognizable celestial bodies as Pleiades. For example he refers: «*You have to start reaping when the Atlas daughters' Pleiades rise, and the sowing when they set...*», (Hesiod, «*Works and Days*», lines: 383–385). For this reason we paid here special attention to this open particular cluster. Similar to the foregoing suggestions and advances were given by Virgil in his «*Georgics*», as well as by Plinius. Because at that time, one epoch, *season*, follow the other in a rather *normal* way, and not as happens today due to the big environment changes.

Moreover, amazing the names Greeks have chosen for people or to describe things. Although we've already explained some of them it is worthwhile to point out that Astraios and Astraea come from the Greek word *ἄστρον* = *star*, meaning either this who comes from the stars, or the full of stars, and thus brilliant, as the goddess of Justice Astraea had to be.

The cultural contact between Romanians, Greeks and Romans took place orally, as the majority of the people that made up of the population of present day Romania were agricultures and pastors. These categories of population formed the basic structure of the Romanian people, the one that carried on the first traditions and basic knowledge in various fields, the starry vault of heaven included. Thus, we may say that the Zodiac reflects, except the knowledge of Romanian people to the Greek Mythology, their deep Orthodox religious character, with some references also to their history.

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ERRATA. In the article “*Zalmoxis and Pythagoras in Ancient Greek Sources*”, authors Doina Ionescu and Eleni Rovithis, published in volume XXXVI, 2011 of *Noesis*, was included by mistake Figure 3 – The death of a messenger (god Hermes is also in the scene), on page 113. We mention that this figure is irrelevant for the text of the article.