# ASTRONOMICAL SYMBOLS ON COINS OF THE ROMAN REPUBLIC

# ELENI ROVITHIS-LIVANIOU<sup>1</sup>, FLORA ROVITHIS<sup>2</sup>

<sup>1</sup>Dept of Astrophysics, Astronomy & Mechanics, Faculty of Physics, Athens University, Panepistimiopolis, Zographos 15784, Athens, Greece Email: elivan@phys.uoa.gr

<sup>2</sup>Email: florov11@yahoo.gr

Abstract. We present and describe some ancient Roman coins with astronomical symbols covering the interval 3rd century BC till the end of the Roman Republic, *i.e.*27 BC. Any further available information for these coins is given, and a general discussion is made

Key words: ancient Roman coins, astronomical symbols and events, myths.

#### 1. PROLOGUE

Although it is said that the Roman governor Servios Toullios issued bronze coins in 6th century BC, the Roman coins came from the archaeological excavations are not thus old, as they are dated to the 3rd century BC. Besides, it is said that Entrusts, who had been settled in central Italy used in their exchanges raw pieces of bronze, the so called *aes rude*. These, were displaced by the *aes signatum*, *i.e.* signed pieces of copper of about 1600 gr, and then by the *aes grave*.

The Romans introduced a new coin system based on *aes* in **212** BC. So, we can say that the *aes* or *as* was in general the first coin of the Roman democracy. The *as* was a copper coin contain 2 half *ases*; while, the 1/4 of *as* was called *tetras*, or *tetartimorion*, and the 1/3 of it *trias*.

On the other hand, the first silver Roman coin was the *denarius* or *denary*, issued in 269 BC. The name comes from the Roman words *dena=ten* and *aeris=ases* declaring its value, which was equal to **10 ases**. Denary was a very strong coin, recognized in whole Europe. It was divided in **2** *hemi-denary*, or in **4** *sistertia*. The first of them were very similar to the *drachmas*, and *didrachma* of the Greek colonies of Sicily and south Italy, but since **250** BC the ancient Roman coins issued with clear Roman themes.

Gold Roman coins issued around **217** BC, while since Julius Caesar era the basis of the Roman numismatic system was the gold coin with values equal to **25** *denary*.

In two previous papers (Rovithis-Livaniou & Rovithis, 2011 & 2012, hereafter

Romanian Astron. J., Vol. 24, No. 2, p. 169-184, Bucharest, 2014

refer as Paper I & Paper II, respectively) a systematic presentation of *ancient Greek* coins with stellar symbols was made. In this paper, we continue presenting *ancient Roman* coins with the same subject limited to the Roman Republic, *i.e.*till 27 BC. Similar coins concerning the Roman Empire will be the subject of forthcoming papers.

#### 2. COINS OF THE ROMAN REPUBLIC

The Roman Republic covers the interval (509-27) BC, and the themes and design of its early coins were very similar to the Greek ones. To be more specific, they were similar to those of the Greek colonies in Sicily and south Italy, *i.e.*the so-called Magna Grecia. Moreover, *drachmae*, *di-drachmae* and *unciae* were used at that time, which were typically Greek currency or currency used in the Greek colonies of Sicily.

On the other hand, towards the end of third-beginning of second century BC, many coins, mainly denary, issued having on their observe sides  $Roma^{[1]}$ , and many other themes on reverses. We shall examine all these starting from the first coins of the Roman Republic found so far.

## 2.1. THE EARLY COINS OF THE ROMAN REPUBLIC

Four coins of the Roman Republic of the 3rd century BC are shown in Figs. 1 & 2, where the heads of some gods are shown on their observe sides while various astronomical symbols are presented on their reverse ones. For example the heads of gods  $A\pi\delta\lambda\omega\nu$  Apollo &  $H\lambda\iota\sigma$  Helios are presented on Fig.1 (Left & Right, respectively), and these of  $Z\epsilon\upsilon\varsigma$  Zeus (Jupiter) or  $K\rho\delta\nu\sigma$  Saturn are shown on Fig.2 (Left & Right, respectively). From the four Greek gods presented on the observe



Fig. 1 – Left: Di-drachma of (275-270) BC, Laureate head of Apollo, legend ROMANO/Horse, sun/star above; Right: Uncia of (217-215) BC, Radiated head of god-Helios, one pellet<sup>[2]</sup> at left/Crescent Moon with 2 stars and 1 pellet inside, legend ROMA.

sides of the early coins of the Roman Republic, only Apollo and god-Helios were also used on observe sides of coins with astronomical symbols issued later.



Fig. 2 – Coins of 207 BC with the head of Zeus on observe side of both, or Saturn on the right coin and large **S** behind; Reverse left: Coin of 207 BC,  $N\ell\kappa\eta$  Nike<sup>[3]</sup> crowing shield & spears, crescent Moon below, legend ROMA; Reverse right: Prow of galley, large **S** & crescent Moon above, legend ROMA.

#### 2.2. OTHER COINS WITH GOD APOLLO (ON OBSERVE)

The head of Apollo on observe side is also found on coins issued during the first century BC, as are these presented in Figs. 3 to 6. In some of them the *moneyer*<sup>[4]</sup> name is also referred, and it will be so from here on, *i.e.* if known it will be referred. On the other hand, if more than 2 icons are shown in the same figure, in the legends they will be dedicated as: Left, Middle & Right if there are 3, and as: a,b,c,d if they are 4.



Fig. 3 – Denary of early first century BC with Apollo's head on observe and star below or in front of his neck; legends denote moneyer's name, *i.e.* Left: L. Caecilius L.f. Q.n. Metellus, 96 BC, Middle: L. Calpurius Piso Frugi, 90 BC, Right: C. Vibius C.f. Pansa, 90 BC; Reverse left: Roma seated & crowned by Victory, two shields down, legends; Reverse middle: Horseman carrying torch, enemy's head above; Reverse right: Goddess Demeter (Ceres) walking holding torches, pig in front.

## 2.3. OTHER COINS WITH GOD HELIOS (ON OBSERVE)

The head of god-Helios on observe is also found on coins issued much later than that of Fig. 1 (Right), as are the coins of Fig. 7 (a,b,c,d) made by various *moneyers*, the names of whom are written on the coins and referred in the legends.

172



Fig. 4 – Denary with Apollo's head on observe; Left: Mn. Fonteius, 85 BC, Right: Q. Fabius Maximus, 82-80 BC; Reverse left: Winged god on goat between Dioscuroi's<sup>[5]</sup> caps with star above each, Reverse right: Cornucopia<sup>[6]</sup> full of fruits & thunderbolt in wreath.



Fig. 5 – Denary with Apollo's head on observe and moneyer's name on observe or reverse, respectively: Left: Q. Pomponius Musa, 56 BC, Right: Q. Sicinius & C. Coponius, 49 BC; Reverse left:  $Ov \rho \alpha \nu i \alpha^{[7]}$  Ourania standing and pointing with wand to globe, legend Q.POMPONI MVSA, Reverse right: Club of Hercules, arrow & bow, legend C. COPONIVS.



Fig. 6 – Denary, of L. Valerius Acisculus with Apollo's head, 45 BC; Left: Head of Apollo, star above, part of laurel wreath, legend ACISCV/ Head of Valeria Laperca, or of Sibyl<sup>[8]</sup>, legend [VA]LERIVS; Middle: Apollo & star/Valeria Luperca riding & veil above; Right: Head of Apollo, legend ACISCVLVS/Owl with helmeted head of Athena & 2 spears, legend VALERIV[S].



Fig. 7 – Denary with radiated head of god-Helios on observe made by various moneyers, second & first century BC. (a) Manius Aquillius, 109/108 BC; (b) L. Lucretius Trio, 76 BC; (c) P. Clodius M.f. Turrinus, 42 BC; (d) L. Valerius Acisculus, 45 BC. Reverse a:  $\Sigma \epsilon \lambda \dot{\eta} \nu \eta^{[9]}$  Selene in biga, crescent Moon above her head & a faint star beside, 2 stars above, one star under horses, legend MAN. AQUIL; Reverse b: Crescent Moon, 3 stars above, 2 in right & 2 in left field, TRIO inside crescent & L. LVCRETI below; Reverse c: Crescent Moon & 5 stars, legend P. CLODIVI M.F.; Reverse d:  $A \rho \tau \epsilon \mu \iota \varsigma^{[10]}$  Artemis galloping.

## 3. COINS WITH ROMA

As already referred towards the end of third-beginning of second century BC, many coins issued having on their observe sides *Roma*. On the reverse side of these coins various other themes were used. We shall see them starting from the coins of *Roma* and *Dioscuroi*, since they are the oldest ones.

#### 3.1. COINS WITH ROMA AND DIOSCUROI

Dioscuroi appeared on the reverse sides of many coins with *Roma* on their observe ones, made either by anonymous or known *moneyers*, as are for example the coins shown in Fig. 8 (Left, Middle & Right):



Fig. 8 – Coins with Roma and Dioscuroi of late third century BC: Left: Coin of 211/210 BC, Middle: Decius, (206-200) BC, Right: Coin of (206-195) BC; Observe: Head of Roma with wings helmet, large X behind in the middle & right coins; Reverse: Dioscuroi galloping right, stars above their hats, legend ROMA

This tradition was followed with many other similar coins. From all of them and since it is impossible to show all here we've chosen some presented in Figs. 9 and 10. In all coins of Fig. 9, one can notice the large V or X behind *Roma's* head. Besides: a *star* is shown under the horses of coin b, and there is a *crescent Moon* between the caps of *Dioscuroi* on coin c.



Fig. 9 – Coins with Roma and Dioscuroi of early to middle second century BC; a-c: Anonymous; a: After 211 BC; b: (206-195) BC; c: (194-190) BC; d: L. Iteius, 149 BC.

On the other hand, in some of the coins presented in Fig. 10, the large X – behind *Roma's* head in Fig. 9 – has moved in front, while various other symbols are shown behind it. Notice for example the *cornucopia* on coin (a), or the *wreath* on coin (c), in Fig. 10.



Fig. 10 – Denary with Roma and Dioscuroi from middle to end of second century BC; a: L. Cupiennius, 147 BC; b: M. Iunius D.f. Silanus, 145 BC; c: C. Serveilius, 136 BC; d: C. Plautius, 121 BC.

## 3.2. COINS WITH ROMA AND THE GODDESSES OF THE MOON

Another attractive theme in the early Roman coinage seems to be the combination Roma/Selene (Luna), or Roma/Artemis (Diana) according to others, as Artemis was also considered goddess of the Moon. In all of these cases, the goddess is driving her two horses chariot, and is recognized by the *crescent Moon* above her head, as is shown in all coins of Fig. 11.



Fig. 11 – Coins, with Roma and Luna of early to middle second century BC; Left: 189-180 BC; Middle: Denary of 179/170 BC; Right: Denary by Decimius Flavus 150 BC; Observe: Helmet head of Roma, large X behind; Reverse: Luna or Diana, galloping in two horses chariot, crescent Moon in her head, legend ROMA below.

Moreover, in Fig. 12 the chariot of goddess Diana is carried by two *stags*, *i.e.*the goddess' lovely animal. Besides, there is no *crescent Moon* above goddess' head, but it appears below the stags' legs.



Fig. 12 – Denary of 143 BC Observe: Helmet head of Roma, large X behind; Reverse: Artemis galloping in two stags chariot, crescent Moon below their legs, ROMA below.

## 3.3. COINS WITH ROMA AND THE GOD HELIOS

God-Helios, *Sol* in Roman, is presented on the reverse side of some coins with *Roma* on observe, as are the coins shown in Fig. 13 (Left & Right). We have included them here, mainly because of god-Helios, but also because on the right coin a *star* and a *crescent Moon* is presented, too. As regards the left coin, the symbol in front of the neck of *Roma* **might not be** a *star*, as is explained in the next Session.



Fig. 13 – Denary with Roma/god Helios, late second century BC; Left: M. Aburius M.F. Geminus,
132 BC; Right: A. Manlius, (118-107) BC; Left: Head of Roma; star? in front / God Helios, legend
M.ABVR & ROMA; Right: Helmet head of Roma, SER behind, in circle of dots / God-Helios driving his chariot, large X & crescent Moon above, star in left field, legend A. MANLIO.

### 3.4. COINS WITH ROMA AND VARIOUS OTHER GODS

Except the foregoing mentioned combinations, *Roma* is found with others, as are the gods Jupiter, Apollo, etc. We think that in some of these coins the astronomical symbol, and in particular the star behind or in front of the head of *Roma*, might not be real. Because it is possible that some *moneyers* added a bar in the middle of large **X**, which made it to *look like a star*. So, one can not be sure that the symbol behind or in front of *Roma's* head is really a **star**, or not. This situation is shown on the observe sides of the left and middle coins of Fig. 14, while on the right one of the same figure the symbol looks much more like a *star*.

## 3.5. COINS WITH ROMA AND OTHER COMBINATIONS

Although many are the combinations with *Roma* on coins of the Roman Republic, as Roma/Nike, Roma/Hercules, Roma/horseman, Roma/warrior etc., the situation described earlier with the bar added to large **X** that made it *to look like a star* is similar. For this reason in the following we shall present only the coins in which the symbol behind or in front of *Roma's* head it is a real star or at least it looks very much like a *star*. This is for example the case on the coins of Fig. 15 (Left, Middle & Right).



Fig. 14 – Denary with head of Roma and a god by various moneyers: Left: C. Aburius Geminus, 134 BC; Middle: Lucius Opeimius, 131 BC; Right: M. Vargunteius, 130 BC; Observe: Head of Roma with wing helmet; star? in front or behind her neck; Reverse left & right: Jupiter driving his 4 horse chariot, moneyer's name & ROMA below; Reverse middle: Apollo with spear and bow, moneyer's name M. OPEIMI & ROMA below.



Fig. 15 – Denary with Roma and various combinations by different moneyers; Left: 117/116 BC, Marcus Calidius, Q. Metellus & Cn Fulvius 117/116 BC; Middle: M. Sergius Silus, 116 BC; Right: P. Licinius Nerva, 113/112 BC; Reverse left: Victory in her chariot, legend with moneyers' names; Reverse middle: Warrior on horse, legend M SERGII / SILVS below; Reverse right: 3 citizens voting, legend C. NERVA.

## 4. VARIOUS OTHER COINS OF THE ROMAN REPUBLIC

In this session, we shall present all other coins of the Roman Republic with various themes trying to keep a chronological order. So, we start with 3 coins where a *galley*, or part of it, is shown on reverse:



Fig. 16 – Left: (169-158) BC; Middle: 114/113 BC; Right: 108/107 BC; Observe left: Head of Hercules, 3 pellets behind; Observe middle: Heads of Dioscuroi looking at opposite directions, G in left, star in the right field; Observe right: Head of Dioscuroi with stars above, possible star in front; Reverse left: Prow of galley, star in front, 3 dots; Reverse middle & right: Galley with rowers, legend with moneyer's name.

Some gods/goddesses had been also the theme of some coins of the Roman Republic, as are these shown in Fig. 17, where god *Mars* is presented on observe of both the left & right coin.



Fig. 17 – Left: C. Publicius Malleolus, 96 BC; Right: L. Rustius, 74 BC; Observe: Head of god Mars in circle of dots, star in front; Reverse left: Warrior standing in front of trophy holding spear & shield, legend C. MAL; Reverse right: Ram, legend L. RVST[I] denotes moneyer's name.

On the other hand, in the following two coins two events are shown. The first from tradition, *i.e.* the rape of Sabines women, dated to 750 BC, and the other from history, *i.e.* the victory of *Sulla* against the king *Jugurtha*<sup>[11]</sup>.



Fig. 18 – Left: Denary, L. Titurius & Sabinus, 89 BC, Observe: Head of Tatius<sup>[12]</sup> & palm, legend SABIN left & APV right, Reverse: Tarpeia<sup>[13]</sup> buried to her waist in shields, fending off 2 soldiers about to throw their shields on her, L TITVRI in exergue, crescent Moon with star inside above; Right: Denary, Faustus Cornelius Sulla, 56 BC, Observe: Bust of Diana with crescent Moon above her head, legend FAVSTIVS, Reverse: Sulla seated left, Bocchus king of Mauritania kneels in front offering olive branch; Jugurtha king of Numidia kneels behind, legend FELIX.

We go on with two coins in which Sibyl and god Mercury are shown:



Fig. 19 – Left: Denary of 65 BC, L. Torquatus, Observe: Head of Sibyl, Reverse: Tripod with 2 stars & amphora, legend; Right: Denary of 61 BC, L. Calpurius Piso Frugi, Observe: Head of Mercury or Terminus<sup>[14]</sup>, star behind, 2 handled cup in front, Reverse: Knife & patera<sup>[15]</sup>, legend M PISO M F FRYGI within wreath.

We continue with two other coins, (Fig. 20), of the second half of the first century BC with *Dioscuroi* either on observe or on reverse.



Fig. 20 – Left: Mn. Cordius Rufus, 46 BC, Observe: Head of Dioscuroi with stars above, Reverse: Venus holding scales & sceptre, Eros (Cupid) on her shoulder, legend with moneyer's name; Right: Servius Rufus, 41 BC, Observe: Head of a man, (Servius Rufus?), legend with moneyer's name, Reverse: Dioscuroi with stars above heads holding sceptres and spears.

During the last years of the Roman Republic the various military and political leaders issued coins as these of figures 21 to 23. One can notice the similarity of the right coin of Fig. 21 to the middle one of Fig. 16; we think that this is also shown how from *Dioscuroi* the Roman god *Ianus* came out.



Fig. 21 – Coins of Pompeii (Gnaeus, *Magnus*, & Sextus); Left: Denary of Pompeii Magnus, Observe: Head of Pompeii or Neptune, dolphin below, legend NEPTUNI, trident in right field, Reverse: Galley & star, by Q. Nasidius as its legend denotes; Right: *As* of Sextus Pompeii, Observe: Head of god Ianus with the facial features of Pompeii Magnus, Reverse: Prow of galley, star, IMP.



Fig. 22 – Various coins of Julius Caesar; Left: Bust of Julius Caesar, crescent Moon behind his neck / Goddess Venus holding Nike; Middle: Coin Thessalonica, Macedonia, Greece, Head of Augustus, legend in Greek [KAI]ΣΑΡ ΣΕΒ-ΑΣΤΟ[Σ]<sup>[16]</sup>/Greek inscription ΘΕΣΣΑ-ΛΟΝΙ-ΚΕΩΝ<sup>[17]</sup> in laurel wreath with star above; Right: Head of Victory in circle of dots & star behind his neck, CAESARDICTER/Athena (Minerva for Romans), holding her shield with Medusa's [18] head, the snake Erichonios [19], legend PRAEF C CLOVI.



Fig. 23 – Coins of Marc Antony; Left: Denary of 42 BC, Greek mint, Middle: Denary, Right: Gold coin 40 BC; Observe: Head of Marc Antony, legend M.ANTONI IMP, Reverse left: Head of god-Helios in two columns temple, III VIR R P C; Reverse middle: Marc Antony dressed as priest, legend; Reverse right: Prow of galley, star, legend.

#### 5. DISCUSSION

Continuing our presentation of ancient coins with astronomical symbols, in this paper we show some *Roman* coins with this same subject, as we've done with the ancient *Greek* ones. Actually, in this first Paper of the ancient Roman coins, we present those covering the interval from the third century BC till the end of the Roman Republic *i.e.*in 27 BC. Besides, although on the ancient Greek coins astronomical symbols were used since the 5th century BC, it seems that this is not so for the ancient Roman coins, where these symbols appear two centuries later.

To be able to understand the Roman coinage, one has to know Roman history, and many things about the country developed from the improvement of the city of Rome. From all these, we are restricted to few, but important. For example, around the end of the second century BC the Roman Republic, and even Rome itself, was threatened by the various German races. Then, the brave and capable general *Gaius Marius* managed to save it, (with 2 victories in 102 & 101 BC). From here on, the victor generals were the managers of the internal politics.

Later, there was a civil war between *Gaius Marius*, who was consul for many years and supported by the popular party, and *Lucius Cornelius Sulla*, who as Senator (86-46) BC had the assistance of the Senate. The prevalence, triumph, of the latter made him to react as *dictator*.

Much later the wars of the Romans with various kingdoms of the world elevated other persons. Thus, in the East against the kingdom of Pontus and the king Mithridates VI (Mithridates the Great, 88-64 BC), elevated *Gnaius Pompeius*, (Pompeii the Great). The war against Germans and others elevated *Julius Caesar*, while the war against Egypt *Marcus Antonius*, Mark Antony. The defeat of the latter at the Cape Action meant the end of the *Roman Republic* and the beginning of the *Roman Empire*.

Coming back to our main subject, we can say that in many of the coins shown in this work the influence from various other parts of the world, which had become Roman conquests, is obvious. Besides, as they were Roman Provinces the Romans made use of the various mints being in some of them. And as later some of the

conquests became hemi-autonomous, the Romans allowed them to *keep* their own *old coins*, or to use their *old themes*, at least on the reverse sides of them.

The influence from the various parts of Greece is more than obvious in the coins where Roma is represented. Here, the similarity of the helmeted head of Roma with goddess  $A\theta\eta\nu\dot{\alpha}$  Athena, or heroes  $\Pi\epsilon\rho\sigma\epsilon\dot{\nu}\varsigma$  Perseus Phrygian helmet with wings, is astonishing. Similarly, the combinations of Roma on observe with various Greek gods on reverse, or with  $Ni\kappa\eta$  Nike (Victoria for the Romans) crowing the victors, also confirm the influence from Greece or Greek colonies. Moreover, the influence from the kingdom of Pontus as well as from other places that now were Roman Provinces is obvious. As are for example the Crescent Moon With a star inside, or the Crescent Moon With a star inside, or the Crescent Moon With a star above or in front. Here, it was also presented one with a <math>Crescent Moon above (Fig. 2, right).

It is worthwhile to be mentioned that the *star inside crescent Moon* is also found in other places, too, as for example at Mauritania. All these were depended and related to the *moneyers*, too. Because, they decided about the designs, while in some cases the themes were chosen from their families' history, or from a historical event. For example, for the right coin in Fig. 5 -by Q. Sicinius & C. Coponius with Hercules club- is said that it was stuck somewhere in the campaign of *Gnaeus Pompeii* (Magnus), when he came against *Julius Caesar* in **49** BC, after the latter had crossed the *river Rubicon*.

Generally speaking, we think that a simple *star* was used to denote the superior, the high or even the *deity*. For example a moneyer -if he or his father was high priest of a deity- liked to represent the face of this particular deity, usually decorated with a *star*. The *star* was above, in front, behind or even below the head of a god/goddess, to show the superiority. Similarly, a *star* was used in combination with a high position person: a politician, a ruler, a general etc. simply to show his *superiority*. And as in ancient Greek great heroes, like Hercules, Dioscuroi etc., were deified after their death, something similar happened with some famous Roman generals or Caesors.

According to Burnet *et al.*(1992) it is not known what exactly symbolised a *star* on the ancient Roman coins. Even so, it is generally accepted that the *astronomical symbols* presented on them are very possibly related to an *astronomical event*, (Zimmermann, 1995). Besides, the use of a *star* on Roman coins has been examined, (e.g. Mclvor 2006). It seems that at least some of the *astronomical symbols* on the coins presented here are related to *an astronomical event* or they present *a constellation*. For example, the coin **a** of Fig. 7 is said to represent *a conjunction of the Moon* with Jupiter, Mars and Venus happened in June 17th of **109** BC, *i.e.* one year before it was issued. Similarly, another astronomical event is said to show coin **b** of the same figure. Because, is said that the **7** stars represent an occultation of the Moon with the *Pleiades star cluster* that had happened twice in **75** BC (11 October and 4 December). This is in good coincide with the year of its issued; although, according

to some others, it may simply represents the **7** brighter stars of *Ursa Major* (the Great Bear).

On the other hand, we do not really know what could be the astronomical explanation for coin **c** of the same figure (Fig. 7). Does it similarly show an occultation of the Moon with the *Pleiades star cluster* as coin **b**? or a possible *synod of planets* with the Moon? Something else? Furthermore, what could be the explanation for the right coin of Fig. 1, with one *pellet* and two *stars* inside a crescent Moon? One could suppose that the *new Moon* was very close, or even underneath a *planet*, and *two stars*. But, *which planet*?, and *which stars*? Thus, we have to be very careful before coming to definite conclusions. It is necessary to examine any further information for the coin, especially as regards the place and the date of its issue. And then to find out if an astronomical event had taken place just before this date, (although, as we shall see in another Paper, this interval may be quite big).

#### 6. APPENDIX

- [1] A female tutelary deity personified the city of Rome and had it under her care. Roma's head appears on the coins with a Phrygian wing helmet like that of heroes  $\Pi\epsilon\rho\sigma\epsilon\dot{\nu}\varsigma$  Perseus. The Phygian cap originally was the symbol of *sailors*; in Rome, it became the *cap of Liberty*.
  - [2] It is supposed that *pellet* in the early Roman coins denoted a *planet*.
- [3] A Greek goddess who personified victory. According to the Greek mythology  $N'i\kappa\eta$  Nike was daughter of the Titan  $\Pi\alpha\lambda\lambda\dot{\alpha}\varsigma$  Pallas and the goddess  $\Sigma\tau\upsilon\xi$  Styx. Nike was originally appeared without wings, as people wanted to "keep" her in their own place; but, later she appears with wings to be able to fly around and mainly to the battle fields rewarding the victors with fame and glory. Nike is known as *Victoria* by the Romans.
- [4] Someone who creates money. In the Roman Republic, and around **150** BC, there were *3 men* for striking and casting bronze, silver and gold coins. In Roman they named *tresviri monetales*, *i.e.the three men of money*. These 3 (trio) officials, magistrates, controlled the process and were responsible for the production of the Roman coinage. They also controlled the coins' design and their themes. In the beginning they put some signs on the coins, then their names, while later they use themes related to the history of their family. Julius Caesar added a fourth magistrate in **44** BC, since at that time and because of the war against Parthia the mint out put was extremely large. Moneyer's position considered high and in some cases it was the forerunner for even higher positions. It is mentioned that *Sulla*, *Julius Caesar* and *Mark Antony* had been moneyers.
  - [5] They were sons of Zeus, (Dias), and the queen's of Sparta, Leda. Actually

Zeus achieved his plane, to have a sexual intercourse with Leda, transformed to a swan. Dioskouroi had taken part to many exploits and travelled to various parts of the main Greece as well as to Greek colonies. They had also taken part to the Argonaut expedition, where they managed to save *Argo*; then, lights appeared above their caps, (hats, pillei), and the Argonauts thought they were *stars* sent by their father Zeus. Thus, Dioskouroi are presented wearing always their caps with *stars above*. Moreover, in Rome it was believed that Dioscuroi helped the Romans during their war against the Latins during the battle of Lake Regillus in **496** BC. (For more info about Dioscuroi see Rovithis-Livaniou & Rovithis 2014).

- [6] The symbol of abundance; for this reason it is presented as a corn full of fruits. It is related to the Greek myth of the baby Zeus and the she-goat Amaltheia, who feed him supposing to be its horn. On the other hand, according to Ovid, it denotes the wrenched off horn of the river-god  $A\chi\epsilon\lambda\omega$ o $\varsigma$  Achelous, during his fight with Hercules and where Achelous was finally killed.
  - [7] One of the Greek Muses; Muse of Astronomy.
- [8] The name comes from the Greek word  $\sigma i\beta \upsilon \lambda \lambda \alpha$ =prophetess. It was considered as one of the chthonic deities.  $H\rho\dot{\alpha}\kappa\lambda\epsilon\iota\tau$ o $\varsigma$  Heraclites, 5th century BC, was the first to mention Sibyl. Later,  $\Pi\lambda\dot{\alpha}\tau\omega\nu$  Plato talks about one Sibyl, while  $\Pi\alpha\upsilon\sigma\alpha\nu i\alpha\varsigma$  Pausanias refers to two. It seems that in the course of time others were added increasing their number up to 10.
- [9] Ancient Greek goddess of the *Moon*. It is supposed to be daughter of the Titan of light  $\Upsilon\pi\epsilon\rho\acute{\iota}\omega\nu$  Hyperion, and the Titaness of sight  $\Theta\epsilon\acute{\iota}\alpha$  Theia. Her brother was the god-H $\lambda\iota$ o $\varsigma$  Helios (*Sol* in Latin) and her sister H $\acute{\omega}\varsigma$  Eos, *i.e.*the down. Selene was referred as *Luna* by the Romans.
- [10] Ancient Greek goddess of the hunting, who was also considered goddess of the Moon as some other goddesses, too. As goddess of Moon she appears here with *crescent Moon* on her head. Artemis was referred as *Diana* by the Romans.
- [11] King of Numidia, (160-104) BC. During the war of Rome against Numidia, *Gaius Marius* sent *Lucius Cornelius Sulla* to Mauretania, asking for support. Thus, with the help of king *Bocchus*, *Sulla* managed to capture *Jugurtha*. Then, he brought him in chains to Rome, where *Jugurtha* was paraded through the streets during *Gaius Marius Triumph*.
  - [12] The king of Sabines during their war against the Romans.
- [13] Daughter of the governor Spurius Tarpeius of the citadel of the Capitoline Hill. She opened the city gates to Sabines in order to get what they bore on their arms, believing that she will get their golden bracelets. Instead, the Sabines crushed her to death with their shields.
  - [14] Roman god responsible for the bounds, the limits.
- [15] A special plate with which the Roman made their offers to the gods. It is very close to the Greek  $\phi\iota\dot{\alpha}\lambda\eta$  fiale.

- [16] The Greek legend means Caesar respectable.
- [17] The Greek legend denots the people of Thessalonica.
- [18] One of the three gorgons, who according to the Greek mythology were daughters of the sea deities  $\Phi \acute{o} \rho \kappa \upsilon \varsigma$  Forkys and  $K \eta \tau \acute{\omega}$  Keto. Two of the gorgons were immortal, while Medusa was not. So, when heroes  $\Pi \epsilon \rho \sigma \epsilon \acute{\upsilon} \varsigma$  Perseus managed to cut her head, (by the aid of the goddess Athena), he offered it to Athena, who put it in the middle of her shield.

[19]  $E\rho\iota\chi\theta\delta\nu\iota\circ\varsigma$  was called the serpent lived in goddess Athena's Temple at the Acropolis of Athens. The name comes from the Greek words  $\epsilon\rho\iota\circ\nu$ =wool and  $\chi\theta\omega\nu=\gamma\eta=$ earth. According to the Athenians Erichonios was born by god  $H\phi\alpha\iota\circ\tau\circ\varsigma$  Hephaestus (Vulcan) and the goddess  $\Gamma\alpha\iota$  Gaea (Earth), while according to the Ionians by Hephaestus and Athena. Actually according to tradition Hephaestus fall in love with Athena, and when once she went to his Lab to get her arms, the god wanted to make love with her. Athena managed to get rid of him, but he followed her and his seed fall onto her leg. The goddess cleaned her leg with a piece of wool, which though to the earth. So, Earth gave born to Erichonios, who got his name from the piece of wool and the earth.

#### REFERENCES

Burnett A., Amandy M. & Ripolles P.: 1992, *Roman Provincial Coinage*, Vol. 1 (44 BC AD 69), British Museum Press, London.

Crawford M.H.: 1974, Roman Republican Coinage, Cambridge Univ. Press, London.

Mclvor R.S.: 2006, JRASC, Vol. 98, p. 87.

Marshall Faintich: 2007, Astronomical Symbols on Ancient and Medieval Coins, McFarland & Co. Inc. Publ., U.S.A.

Plutarch: 1975, *Alexander-Julius Caesar*, ALL WORKS OF THE ANCIENT GREEK WRITERS, Scientific Company of Greek History of Literature, Publ. PAPYROS, Athens (in Greek).

Rovithis-Livaniou H. & Rovithis F.: 2011, Stellar Symbols in Ancient Greek Coins I, Romanian Astron. J. 21, 165.

Rovithis-Livaniou H. & Rovithis F.: 2012, Stellar Symbols in Ancient Greek Coins II, Romanian Astron. J. 22, 83.

Zimmermann L.: 1995, Heads and Tales of Celestial Coins 91, p. 28.

http://en.wikipedia.org

http://www.asiaminorcoin.com/gallery/index.php

http://www.museum.com.ua

http://www.pontos.dk

http://www.wildwinds.com/coins/greece/i.html

Received on 5 July 2014