The *Ara Pacis Augustae*: a Symbol of the Augustan Age in the *Campus Martius* in Rome

Dan-Tudor Ionescu

The main aim of my short study is to try to decipher and understand the relationships between the spatial orientation of the Augustan monuments located on the Campus Martius in Rome and the symbols and myths represented on the friezes of the famous Altar of the Augustan Peace (the Ara Pacis Augustae) situated in the Campus Martius (the Field of Mars, nowadays the Campo Marzio) in Rome. This article did not pretend to describe once again the panels of the façades of the Ara Pacis Augustae, but to discuss or at least describe the conclusions reached by many a researcher that had given different views and analyses of this most famous monument of the Augustan Age. This is not, however, an enumeration of various hypotheses and theories about the purpose, functionality, or even iconography of this monument. It is a study about the destination of the Ara Pacis according to clues given both by the general lay out of Augustan monuments on the Northern Campus Martius and by the original geographical orientation of the Ara Pacis, that was considerably different from the present day orientation of the reconstructed monument exposed in the "Museo dell'Ara Pacis" located in the Piazza del Augusto Imperatore between the Via di Ripetta and the Lungo Tevere Avenue in Rome.

The Ara Pacis Augustae was erected (according to the Roman ritual of *constitutio*/religious beginning of the construction process) on the fourth of July 13 BC and it was consecrated (according to the Roman rite of *dedicatio*/definitive consecration of a religious building or space to the gods) on the thirtieth of January 9 BC. Augustus himself had written in his *Res Gestae* 12 (his "Deeds" or political autobiography and testament) that on the occasion of his safe return from Gaul and Spain the Senate of Rome had decided to build in his honour an *Ara* (Altar) of the Augustan Peace, during the consulates of Tiberius Nero and Publius Quinctilius. The thirtieth of January was the birthday of Livia, Augustus' wife; however, one cannot affirm in all certainty that the dedication of the *Ara Pacis Augustae* ("The Altar

Chaos e Kosmos – www.chaosekosmos.it Rivista online ISSN 1827-0468 Autorizzazione del Tribunale di Roma nr. 320/2006 del 3 Agosto 2006 Direttore responsabile e proprietario Riccardo Chiaradonna of the Augustan Peace") was done on purpose on Livia Augusta's birthday. According to the *Res Gestae* 11-13 (mainly 12, 2), a yearly sacrifice should have commemorated this event (the erection of the *Ara Pacis* ("the Altar of Peace") in honour of Augustus' return from the provinces of Gaul and Spain). The authorities in charge with the cult sacrifices within the *Ara Pacis Augustae* were the Roman pagan priests, the Senate of Rome, and the Vestal Virgins. The annual sacrifice was probably meant to commemorate both this event and the peace brought by Augustus' new regime¹.

This *Ara Pacis Augustae* was not the only one monument of this kind built during the reign of Augustus: to the south of Rome, before the *Porta Capena* (the Capena Gate) and the temple of *Honos et Virtus* (the deities of Honour and Courage), there had been constructed another altar, the *Ara Fortunae Reducis* (the Altar of the goddess *Fortuna Redux*, the Good Fate that presided over Augustus' happy return from Syria to Rome in the year 19 BC). This *Ara Fortunae Reducis* was *constituta* (erected) on the twelfth of October 19 BC and it was *dedicata* (consecrated) on the fifteenth of December the same year. In the same area of the *Porta Capena*, at least according to Livy (*Ab Vrbe Cond*.1.26.2-5), the victor Horatius over the three Curiatii had stabbed his sister to death, because she dared to

¹ La Rocca 1983, pp.10-11; in fact, the emphasis Augustus had put in his *Res Gestae* 34.1-3 on his role as the Pacator Urbis and on the honors bestowed upon him by the grateful Roman Senate (the *clupeus i.e.* the shield put into the *Curia Iulia* for his qualities of virtus, pietas, iustitia, and clementia) is proof enough (at least in my humble opinion) for the image he intended to leave to posterity. According to Suetonius' Vita Divi Augusti (28.2), Augustus himself in one of his edicts proclaimed that he 'Quam voluntatem, cum prae se identidem ferret, quodam etiam edicto his verbis testatus est: Ita mihi salvam ac sospitem rem sistere in sua sede liceat atque eius rei fructum percipere, quem peto, ut optimi status auctor dicar et moriens ut feram mecum spem, mansura in vestigio suo fundamenta rei quae iecero/His good intentions he not only expressed from time to time, but put them on record as well in an edict in the following words: 'May it be my privilege to establish the State in a firm and secure position, and reap from that act the fruit that I desire: but only if I may be called the author of the best possible government, and bear with me the hope when I die that the foundations which I have laid for the State will remain unshaken'; and Suetonius concluded this passage: 'Fecitque ipse se compotem voti nisus omni modo, ne quem novi status paeniteret/And he realized his hope by making every effort to prevent any dissatisfaction with the new regime': for the Latin original text and the English translation cfr. Suetonius, Lives of the Caesars vol. I (T.E.Page, W.H.D. Rouse [edd.], with an English translation by J.C.Rolfe, London New York 1914, pp. 164-165).

weep for her dead betrothed, one of the vanquished Curiatii brothers. One should also remember that two of the Horatii had fallen in this combat between champions (Livy *Ab Vrbe Cond*.1.25.14). This mythical fight has united the Latin cities of Alba Longa and Rome, under the leadership of Rome. Both Augustus and the Roman Senate were well aware of the connection between different historical regions of Rome (such as the Palatine hill, the Capitolium hill, the Porta Capena area, and the *Campus Martius*) and the founding myths of Rome.

According to the myth and legend narrated by Livy (Ab Vrbe Cond.1.16.1-2) on the Campus Martius (the field dedicated to the war god Mars) Romulus himself was mustering his army, near the swamp of Capra (Palus Caprae or the swamp of the Goat), and there he was taken to Heaven by the gods, according to the vision narrated by Julius Proculus to the bewildered first Romans (Livy Ab Vrbe Cond.1.16.3-8). There in the time of Romulus was built an altar to Mars (Ara Martis) and this field was destined to abide the military exercises of the first Roman armies, the *dilectus* (recruitment) of the future young soldiers, the military and athletic contests of the Roman youth, and finally the assemblies of the Comitia Centuriata (it was initially the military assembly of the Roman people in arms, grouped *classes*/social-economic groups and divided into into centuriae/hundreds that elected future magistrates endowed with the power of military commanders). In this field dedicated to Mars and to the Roman Iuventus (therefore to Youth as the future of the Eternal City) by the will of the Senate of Rome it was consecrated an altar to the Augustan Peace².

² Ponti 1938, p. 11; La Rocca 1983, p. 11; Settis 1983; Settis 1988, p. 401; in fact these two phases in the building and consecration of the *Ara Pacis Augustae* are mentioned by Ovid. *Fasti* I 709. The date of Fourth of July as the *Constitutio* (Building, Construction) of the *Ara Pacis* is given also by the *Fasti Amiternini* (the *Fasti* from *Amiternum*) and by the *Fasti Antiates* (the *Fasti* of *Antium*). According to both the *Fasti Amiternini* and with the *Res Gestae* 12, 2, the *Constitutio Arae* (the Construction of the Altar) had taken place in the year 13 BC, under the consulship of Tiberius Nero and Publius Quinctilius Varus (the future Roman army commander responsible later in the AD 9 for the disaster of three Roman legions and nine auxiliary units in the Teutoburg Forest) cfr. Murdoch 2006, pp. 55-56; both Tiberius and Varus appearing as consuls on the southern frieze of the *Ara* (Altar), between Augustus and the *Flamines* (the special *collegium* of Roman priests) and the *Consecratio/Dedicatio Arae Pacis Augustae* (the Consecration of the Altar of the Augustan Peace) had taken place on the Thirtieth of Januray (Livia's birthday),

Chaos e Kosmos XV, 2014 - www.chaosekosmos.it

The Ara Pacis was integrated in a system of monuments in the northern part of the Campus Martius: the Mausoleum Augusti (the Mausoleum of Augustus), the Meridianum/Horologium Solarium Augusti (the Solar Meridian/Clock of Augustus), the Ustrinum Augusti (the funeral pyre of Augustus), and the Pantheon (the temple dedicated to all gods). In the Res Gestae Divi Augusti ("The Deeds of the Divine Augustus" 11-13), one can hear over a span of time of two millennia Augustus' very words: he basically wrote that the Roman Senate had ordered to be built in his honour the Ara Fortunae Reducis (the Altar of the Fortuna Redux, the goddess Fortune that presided over happy returns home from voyages and expeditions) and the Ara Pacis Augustae, and that sacrifices were to be performed there in his honor by the magistrates, the priests, and the Vestal virgins. There is an obvious correlation between the architectural and sculptural monuments that were mentioned in the Res Gestae and the very text of the Res Gestae; one can find here the ingenious device of the political ideology promoted by Augustus. That was in fact the official initiative of the Senate and thus the continuity between the new regime of personal power and the old republican forms of government were apparently ensured. Although it could appear a bit far-fetched and anachronistic, this is in fact true political propaganda. Nevertheless, it was a shrewder move than the mere proclaiming of the virtues of the Princeps (the Princeps Senatus, the first of the Senators that was no other than the Emperor Augustus himself) by himself: it was in fact the old representative institution of the Res Publica (the "Public Thing" *i.e.* the Roman state), the Roman Senate that empowered the magistrates, the pagan priests, and the Vestals to sacrifice on this altar in honour of the "Augustan Peace" or Pax Augusta³.

One should underline that we have started with the assumption that the altar or *Ara* that has been found in the area of San Lorenzo in Lucina, underneath the foundations of the Ottoboni-Peretti-Fiano-Almagià palace, was the true above mentioned *Ara Pacis Augustae*. In

according to the *Acta Fratrum Arvalium* (the Acts of the Arvalian Brothers), to the *Fasti Caeretani* (the *Fasti* from *Caeres*), to the *Fasti Verulani* (the *Fasti* from *Verulum*), and also according to the *Fasti Praenestini* (the *Fasti* from the city of *Praeneste; Fasti* was a type of Roman-Italic religious-astronomical calendar). Moreover, the *Fasti Praenestini* contain the valuable information that the *Dedicatio Arae Pacis* has taken place during the consulship of Drusus and Crispinus that was in the year 9 BC, cfr. Settis 1988, pp. 400-401.

³ Zanker 1987, pp. 126-127.

fact, although the majority of the scholars admit that identification, there are also other scholars who doubt or even deny that allegation⁴. Nevertheless, for the start of this study we shall begin with the assumption that the *Ara* found underneath the foundations of the Palazzo Ottoboni-Peretti-Fiano-Almagià is the true *Ara Pacis Augustae*.

Returning to the period previous to the foundation of the *Ara Pacis Augustae*, one should return to the *Ara Fortunae Reducis*. The erection of the *Ara Fortunae Reducis* was preceded by the ceremony named *ire obviam*, going to encounter the main character of this ritual, in that case Augustus himself. The consul L.Lucretius, part of the praetors, of the plebeian tribunes (*tribuni plebis*), and of the senators went in Campania in order to meet Augustus returning from Syria. This event happened, as we have mentioned above, in the year 19 BC. It was so to say a kind of precedent to the building of the more important *Ara Pacis Augustae* during the years 13-9 BC (Six to ten years later), honouring Augustus' return from Gaul and Spain⁵.

⁴ Weinstock1960, p. 58 apud Schütz 2011, p. 86.

⁵ La Rocca 1983, pp. 9-11: as a matter of fact, the Augustan ideology of power has vacillated between the image of the young and new Caesar Octavian (at the very beginning of Caius Octavian's spectacular political career at the young age of nineteen years old struggling to be seen as the rightful and legitimate heir of the Divus Iulius "Divine Julius"), the image of the young all conquering hero of the oikoumene that was the known and civilized world to the ancient Greeks and Romans) immediately after the victorious battle of Actium (the second day of September 31 BC) and the conquest of Egypt (30 BC). Caesar Octavian as the victor terra marique ('conqueror over land and sea'), the pacator orbis ('peacemaker over the world'), and eventually the *dominus mundi* ('the world master': in fact this image is going back to the icon of the ideal Hellenistic King, the new Alexander the Great as a kind of world master or κοσμοκράτωρ); and finally the Augustan iconography has arrived to the image of the mature Imperator Caesar Augustus ('Emperor Caesar Augustus': Imperator was the victorious Roman military commander of an army that proclaimed him as such), the benevolent patron and protector of the 'Restored State' or Res publica restituta. It is enough to mention here the statue of Augustus discovered at (Livia's?) villa (manor country house) at Prima Porta as the eternally youthful and invincible *imperator*, making the gesture of *adlocutio/allocutio* (allocution was his speech addressed to the Roman soldiers) and the statue of the mature Augustus on the Via Labicana as vir togatus, the man wearing the toga and perhaps in the gesture of offering sacrifice. This last and final image that Augustus has chosen to leave of himself to posterity is paradoxically more tributary to the ideals of the optimates leaders (the 'Best men' of the Roman aristocracy that were also a political faction of a kind of Roman "Tories"), such as Cato the Younger, as the great Pompey in his mature age, and as M. Tullius Cicero,

The aim of my short paper is, as it was stated from the beginning, not to describe from an iconographic or architectonic point of view the *Ara Pacis Augustae*. It is rather to try to analyze and understand the relationships between the *Ara Pacis Augustae* and the other monuments of the northern part of the *Campus Martius*, and especially *gnomon*-obelisk and the solar meridian or solar clock (*Meridianum Solarium Augusti/Horologium Solarium Augusti*)⁶.

When anyone speaks about the systems of measuring time in Antiquity, it is nevertheless compulsory to discuss the different calendars used in Antiquity. We have dealt with this issue before in the course of this study; however we must also draw some applied conclusions to the issue at hand (namely the correlation between the *Ara Pacis Augustae* and the Montecitorio obelisk/gnomon-meridian system). The ancient Romans had used three calendars; the first one allegedly established by Romulus, a lunar calendar with only ten months (the names of the months September, October, November, and

men hostile to the political or social innovations or revolutions, the *res novae*, than to the ideas of the *populares* leaders (the Roman 'Whigs' so to say, the reformers and populist leaders of the Roman nobility/*nobilitas*), such as Julius Caesar (C.Iulius Caesar). To be fair and square, the young Octavian at the very beginning of his political career bore more resemblances with a Catilina type of leader than to the image of the 'first man of the Senate' (*Princeps Senatus*) the stern guardian of the 'way of the ancestors'' (*mos maiorum*) who, according to his very words in the *Res Gestae* 34, 3: "*Post id tem[pus] auctoritate [omnibus praestiti.potes]tatis au[tem] nihilo amplius [habu]i quam cet[eri qui] mihi quoque in ma[gis]tra[t]u conlegae [fuerunt]*" (After that time I had outdone all in prestige, nevertheless I had no more legal power than the others who were my colleague officials – mine transl.), cfr. Lana – Biasi – Ferrero 2003, pp.216-219.

⁶ The list of contributions on this topic is very long; however, I shall quote here the following authors: Buchner 1976; Buchner 1980; Buchner 1980-1982; Buchner 1982a; Buchner 1982b; Buchner 1982c; Buchner 1983; Buchner 1985; Buchner 1988; Buchner 1993-1994; Buchner 1996; cfr. (K.)Buchner 1974 (*contra* Almeida Rodriguez 1978-1980; Schütz1990; as for the Capricorne as the sign of the Zodiac that presided over the birth of Augustus cfr. Schütz 1991; Rehak 2006; Heslin 2007; Schütz 2011. for the mathematics of the age cfr. von Bummelen 2009). There are interesting debates for and against E. Buchner's thesis, in Heslin 2007 and Heslin 2011 which is generally against Buchner's thesis, while Haselberger 2011 and Hannah 2011 are for Buchner's thesis. A more balanced opinion is represented by Alföldy 2011. As for my humble opinion and ideas in this debate, cfr. Ionescu 2011, esp. pp. 60-64, and Ionescu 2013. The most recent discussions are included in the Alföldy – Auber – Cipolla – Hannah – Haselberger – Heslin – Rocca – Leonhardt – Pollini – Schütz 2014; cfr. Maes 2014.

respectively December in our own language, although they refer to the ninth, tenth, eleventh, and respectively twelfth month of the solar year, mean actually the seventh, eighth, ninth, and tenth month of the old moon calendar), then one of twelve months supposedly invented by the second mythical King of Rome, the wise Numa Pompilius. Julius Caesar bade a mathematician and astronomer from Alexandria in Egypt, Sosigenes (a Greek by name), and asked him to come up with a more precise calendar and the result was the so called Julian calendar. This calendar was finally adopted under the Principate of the still young then Octavian Caesar (the future Augustus) in the year 30 BC, with the slight modification of adding an intercalary day every four years, as it had been stated in Ptolemaic Egypt more than two centuries before in the "Canopus Decree", in order to correct the slightly imperfect calculation of the solar year. To honor him and his illustrious uncle, the deified Julius Caesar (Divus Iulius), the Romans changed the old Latin names of the months July and August (namely Ouinctilis and Sextilis, respectively the fifth and the sixth month of their oldest calendar made according with the phases of the moon) into the names we still use today, starting from the Latin words Iulius (the month of July: mensis Iulius or mensis Iulii) and Augustus (month of August: mensis Augustus or mensis Augusti). Opposed to the ancient Greeks and to the modern Europeans (and Europe shaped modern cultures on every continent), the ancient Romans placed the pivots or *cardines* of the sun year, the equinoxes and the solstices, not at the beginning of each season of the astronomical year, but at the middle of the conventional season (Plin. NH XVIII 222). A reminiscence of this practice can be seen in the modern distinction established between the beginning of the calendar spring, summer, autumn, and winter (respectively the first of March, June, September, and December) and the astronomical respective seasons of the year (twenty first of March/the Spring Equinox and the beginning of the astronomical spring, twenty first of June or the Summer Solstice and the start of the astronomical summer, twenty first of September as the Fall Equinox and the beginning of the astronomical autumn, and eventually twenty first of December as the winter solstice and the start of astronomical winter). On the Flavian meridian associated with our obelisk-gnomon, the central point between the Spring Equinox (the beginning of the Ram) and the Summer Solstice (the first degree in the sign of the Crab) falls in the fifteenth degree of the Bull, right where it is written: Θ EPOY Σ APXH, the Beginning of Summer, on the same meridian. Therefore, although on this Roman age meridian the mathematical and astronomical-astrological concepts are written in Greek, the whole conception of the calendar that revolves around the *cardines* placed in the middle of the yearly seasons is nevertheless Roman⁷.

The sole or basis (pedestal) of the obelisk, according to the report written by J. Stuart in 1750, as it was found in 1748 during the excavation, ran not with the sides parallel to the meridian and the front perpendicular to it, but turned by fifteen degrees towards the west. Thus the meridian line ran on a South-North direction, while the pedestal of the obelisk had its north-eastern side facing the Ara Pacis, precisely because of this 15° rotation with respect to the meridian axis. In the fifteenth century, this pedestal of the obelisk had been already discovered by the humanist Pomponius Laetus, who wrote that it was surrounded by a seven steps rectangular stone structure (septem gradus circum) having inscribed on its four angles or corners the Greek names of the winds, such as (in the North-East) the Greek name of the Northern Wind, BOPEA Σ . This was done according to Vitruvius' principles exposed in the De arch. I 6, 6-7 and I 6, 8; already Timosthenes had ideated the 12 (twelve) divisions of the "rose of the winds". Pliny the Elder's remark that "Augustus addidit mirabilem suum" (NH XXXVI 72: "Augustus has added his own miracle/miraculous instrument") suggests that the system of measuring time (whether horologium solarium or meridianum), seen as a technological and scientific wonder of the age, was in fact added after the erection of the obelisk in that location and possible that it was not part of the original plan⁸.

The problem of the equinoctial line: was it truly extended until it reached the *Ara Pacis*? If this was so, then we would probably have a true solar clock (*horologium solarium*), defined by two intersecting and perpendicular on each other axis of symmetry (the North-South *Meridianum*/Meridian and the East-West equinoctial or equatorial line). This is nevertheless only a possibility, not confirmed by any hard fact or archaeological discovery. We are not even sure that the ensemble *Ara Pacis-Gnomon* (the obelisk as a shadow maker)-Meridian/*Horologium* was even conceived from the start as an

⁷ Schütz 2011, pp. 81-82, esp. p. 82, n. 17 (*contra* Haselberger 2011, p. 55, n. 9, based on Buchner 1982b, pp. 63-66 and p. 79).

⁸ Schütz 2011, p. 83: the Latin verb *addere* indeed suggests that something not yet existent is created and added to something that is already in existence.

integrated whole with a precise aim. The meridian could well have been part of an ulterior adding to the obelisk and not thought of ab *initio* as the dial for the *gnomon* (that means here the obelisk). It would have been a necessity only for a Horologium Solarium, the very existence of it being not at all sure⁹. Moreover, due to the imprecision of celebrating Augustus' precise birthday according to the two Roman calendars already in use under his reign (the old Roman one and the newly reformed Julian calendar, even further improved under Augustus by the application of the Egyptian reform mentioned by the "Canopus Decree"), the symbolic significance of the Ara Pacis as a commemorative monument of Augustus' birthday becomes a little blurred¹⁰. However, it remains the undeniable fact that the obelisk was erected sometime between the years 10 and 9 BC, just before the Dedicatio or Consecratio Arae Pacis Augustae on the thirtieth of January 9 BC, Livia's birthday¹¹. However, it appears much more plausible that the equinoctial lines of the Augustan and Flavian meridians to have fallen both slantwise, in an oblique direction in respect with the axis of symmetry of the western entrance to the Ara Pacis; these equinoctial lines (the Augustan and the Flavian one) would have formed an angle with the line of steps leading to the western entrance, just under the north-western half of the western façade of the Ara^{12} . Accordingly, it appears to me more plausible that

⁹ For this theory of the necessity of a *Horologium Solarium* cfr. Haselberger 2011, pp. 68-69 (contra Schütz 2011, p. 83). Nevertheless, even Haselberger points out that, except the obelisk itself, the physical appearance of Augustus' Horologium Solarium was unclear; however it considers the precise alignment of the equinoctial line on the Ara Pacis's axis of symmetry that leads to the western entrance to the monument. This argument is thoroughly and I think soundly combated and refuted by Schütz 2011, pp. 84-85. The obelisk could have been erected initially without any meridian; a Meridianum or a Horologium Solarium would have been inconceivable without a gnomon-obelisk.

¹⁰ Schütz 2011, p. 84; moreover, in the Augustan astronomical treatise of Manilius (Astronomica) the term aequinoctium does not appear directly, but it is indirectly marked as the moment when either the day conquers the night or vice versa and the Fall Equinox is for him an intersection between the ecliptic and the celestial equator (Spring or Fall Equinox cfr. Manil. Astronom. II 242, III 254 etc. apud Schütz 2011, p. 84 n. 27); likewise for Ovid in the Fasti III 878 the equinox is only the moment when the day and the night have both equal length; therefore there are no deeper symbolic and mythological meanings associated with the equinox, cfr. Schütz 2011, p. 84). ¹¹ Haselberger 2011, p. 69, n. 46.

¹² Schütz 2011, p. 85, fig. 2.

Michael Schütz's theory of associating the sculptural, iconographical, and architectural program of the *Ara* with the feast of the *Parilia* (Twenty First of April that was also the Founding Day of Rome in the year 754/753 BC) to be correct, although his support of Weinstock's denying of the identity of the *Ara* was, in my opinion, soundly refuted by Toynbee with logical and iconographical arguments; it is most interesting his (Schütz's) idea that on the *Parilia* the sunrise could have been seen by looking from the eastern portal of the *Ara*¹³.

There was also a counterattack against the theory of Michael Schütz: Robert Hannah defended the thesis of Buchner, basing his argumentation also on Pliny the Elder's Naturalis Historia (XXXVI 72) and the use by the ancients of a "daylight triangle" noted as ABC; A represents the noon on the winter solstice while G on the diagram is the gnomon of the sundial¹⁴. Pliny the Elder (NH VI 212) mentions the "aequinoctio die medio" ("the moment of midday or noon in the day of the equinox") that is extremely important in the discussion of the existence of a possible Horologium Solarium and its relationship with the Ara^{15} . Moreover, R.Hannah considers that the affirmations of Pliny the Elder (NH XXXVI 72) are not appropriate in describing a solar meridian, but they are more adequate to describe a solar clock (Horologium Solarium)¹⁶. However, we do not know for sure that it had ever been a "daylight triangle" and also a longer equinoctial line that are the markers of a true Horologium Solarium. The only things we do know is that the different instruments used in Antiquity for measuring time were in form spherical, hemispherical, and flat/planar; the Horologium Solarium (Solar Clock) and the Meridianum (Solar Meridian) both enter in the category of flat instruments (included in a flat surface such as a *platea* made out of travertine with a marked South-North bronze line in the case of the meridianum and a net of lines in the case of the horologium). According to E. Buchner's

¹³ Schütz 2011, pp. 85-86, nn. 29-30; cfr. Ovid. *Fast.* IV 721-862 for the description of the *Parilia*; for the opposing theories on the true identity of the *Ara* cfr. Weinstock 1960 (*contra* Toynbee 1961). Simon 1967, p. 9 thinks that the existence of the two portals was not satisfactorily explained. Schütz 2011, p. 86 admits that in this issue of the *gnomon*-obelisk, the meridian/sundial, and respectively the *Ara* "the current state of affairs is admittedly dissatisfying".

¹⁴ Hannah 2011, p. 88, n. 4, ill. 52.

¹⁵ Hannah 2011, p. 87, n. 2.

¹⁶ Hannah 2011, pp. 87-88; moreover, Hannah mentions that exist at least two mentioned cases of solar meridian and a third case of a vertical instead of a horizontal meridian (Hannah 2011, p. 87, n. 4).

reconstructions the types of *horologium solarium* are basically of two main forms: like the spread wings of a bat and respectively circular¹⁷. The main argument brought by R.Hannah against the thesis of M.Schütz is that he takes into account only the elliptical shadow left by the globe on the top of the obelisk and not the whole length of the shadow left by the entire obelisk¹⁸. Bringing in modern day examples such as the Cenotaph's obelisk from Dunedin (New Zealand), R. Hannah tries to show empirically that the length of the shadow of Augustus' obelisk (and not only the length of the shadow from its bronze globe located on the top of the gnomon-obelisk) plus the actual penumbra of the obelisk would have pointed towards the centre of the Ara at Augustus' birthday (he means here the total length of the shadow including the penumbra and the shadow left by the tip of the obelisk *i.e.* the bronze globe)¹⁹. The sole problem is that, although the height of the cenotaph's obelisk of Dunedin would be "reasonably close" to the total height of Augustus' gnomon-obelisk, part of the computations made by R. Hannah are totally approximate and not precise (as those of M. Schütz's) and his observations are only empirical and based on a single example²⁰. Moreover, because M.Schütz calculates starting from the elliptical shadow left by the bronze globe located on the top of the obelisk that would mean he took in fact into account the whole length of the shadow left by the entire obelisk and therefore R. Hannah's counterargument becomes untenable²¹. However, as it was previously stated, the exact height of the Augustan gnomon-obelisk is not precisely known, because of the problems involving the number of levels of its pedestal, as it was already shown by the Bandini - Stuart -De Marchis archaeological report of 1750²². In conclusion, all our reconstructions (including the most scientifically grounded that is the theory of M. Schütz) stand on weak ground.

¹⁷ Hannah 2011, p. 89.

¹⁸ Hannah 2011, pp. 90-91.

¹⁹ Hannah 2011, pp. 92-93 (figs.) and pp. 93-95.

²⁰ Hannah 2011, p. 91 and p. 94.

²¹ Mainly that M.Schütz had not taken into account the whole length of the *gnomon*obelisk's shadow; even R.Hannah admits that the elliptical shadow of the bronze globe obelisk represents the tip of the whole shadow left by the entire obelisk (cfr Hannah 2011, p. 91, n. 13-16 for his own precise calculations).

²² Haselberger 2011, pp. 61-63 (p. 61, fig.10; p. 63, fig.11).

Chaos e Kosmos XV, 2014 - www.chaosekosmos.it

The conclusions of R. Hannah's article deserve attention: they are moderate and, without suggesting that on a particular important hour the shadow of the obelisk pointed towards the Ara (probably meaning the centre of the Ara and therefore its axis of symmetry), he insists that the shadow pointed towards the Ara during Augustus' birthday²³. Nevertheless, his support for the existence of a Horologium Solarium and not of a simple solar meridian (as it is proven both by the archaeological evidence so far available to us as well as by the more plausible theory of M. Schütz) is disputable, to say the least. According to R. Hannah's calculations the shadow of the gnomon-obelisk would have not touched the Ara between roughly the seventh of November and the fifth of February, leaving therefore out of question the moment of Augustus' conception under the sign of the Capricorn, around the winter solstice. Varro (RR 1.28.1-2) wrote that, according to the old Roman calendar of King Numa Pompilius, the first day of spring occurred on the day of twenty third of the zodiacal sign Aquarius, the first day of summer on the twenty third day of *Taurus* (the sign of the Bull in the zodiac), the first day of autumn on the twenty third of Leo (the sign of the Lion), and the first day of winter on the twenty third day of Scorpio (the sign of the Scorpion). In the new Julian calendar these dates would have been approximately our days named seventh of February, ninth of May, eleventh of August (Sextilis mens according to the oldest Roman calendar of Romulus, with the year beginning on the first of March), and the winter would have begun around the tenth day of November²⁴. In conclusion, R. Hannah suggests, very interestingly that the virtual or imaginary line left by the gnomon-obelisk's shadow towards the Ara could have marked a temporary boundary between the seasons of the year, by its very presence or absence (in the interval between the seventh of November and the fifth of February) 25 .

The conclusive remark on this issue is that of the great scholar Géza Alföldy: although he is more inclined to the traditional thesis of E.Buchner about the *Horologium Solarium*, like L.Haselberg he acknowledges that the actual form and dimensions ("spatial expanse") of this kind of putative Augustan sundial remains unknown. Moreover, he tries to see it in connection with a possible model of a

²³ Hannah 2011, p. 94.

²⁴ Hannah 2011, p. 94, n. 19; cfr. Plin. *NH* XVIII 221-222.

²⁵ Hannah 2011, pp. 94-95.

gnomon-obelisk and Horologium Solarium in Alexandria in Egypt, probably constructed by the initiative of Marc Anthony, Octavian's sworn enemy in the final struggle for the domination of the Roman Empire. He correlates the obelisk of Montecitorio, dedicated originally by the ancient Egyptians to the sun god (Sol for the ancient Romans) and brought there by the order of Augustus with the obelisk in the present day Vatican St. Peter's Square, brought, erected, and consecrated there by Caligula in his "Circus of the area consecrated to the god Vaticanus" or Circus Vaticani (both obelisks share similarities in shape, including the bronze globe with a spine on top, a Hellenistic-Roman innovation by no means similar to the ancient Egyptian tradition). He quotes, as examples of this Egyptian fashion of the obelisks, the two smaller obelisks that were originally placed in the front of the Mausoleum of Augustus (Mausoleum Augusti); the triangular composition of the three Augustan obelisks, two smaller in the front of his Mausoleum and one in the vicinity of the Ara would have found parallels in Alexandria of Egypt, ruled first by Cleopatra VII and Marc Anthony, and then by Augustus' trusted men, Caius Cornelius Gallus his praefectus fabrum (his commander of the military craftsmen) and the first praefectus Aegypti (governor of Egypt that was personally selected by Augustus from the equestrian order) and then by the second prefect of Egypt, Publius Rubrius Barbarus. This last character had actually erected two obelisks at Alexandria in the front of Augustus' temple there, while Augustus was still alive, in the years 13-12 BC. Moreover, the Vatican obelisk brought by Caligula from Egypt to Rome was already inscribed and inaugurated by C.Cornelius Gallus in late 31 BC, while he was still only Octavian's praefectus fabrum; this obelisk could have been originally a monument ordered by Marc Anthony as gnomon of a gigantic sundial at Alexandria of Egypt, in the same area of the city with the obelisks later associated with P.Rubrius Barbarus. Interestingly enough, it is the same period of time (13-9 BC, 13-12 BC, and respectively 10-9 BC) correlated with the construction of both the Ara Pacis and the erection of the gnomon-obelisk in the northern Campus Martius. The inscription in Greek ETEZIAI ITAYONTAI ("the Etesians winds are stopping") that we find on the Flavian meridian was probably a truthful reproduction of the Augustan original inspired by a Greek-Egyptian model from Alexandria²⁶. G.Alföldy concludes on a similar tune with L.Haselberger: there existed a *Horologium Solarium Augusti* in the northern *Campus Martius* and it was important for establishing the calendar as well as showing to the ordinary Romans who was really in charge in Rome and beyond, not only in solving problems pertaining to the sphere of mortal humans, but also with regulating time that was the province of the gods²⁷.

The problem of the true identity of the *Ara* now housed by the Museo del Ara Pacis in Lungotevere was seriously taken into account starting from 1960; while in the Renaissance (the sixteenth century) the fragments discovered from the *Ara* were considered parts of Roman triumphal monuments, only in 1879 the archaeological genius of Friedrich von Duhn had the intuition that all the fragments discovered under the Ottoboni-Peretti-Fiano Palazzo in the region of Via and Piazza San Lorenzo in Lucina in the Campo Marzio (Rome) were in fact parts of the famous *Ara Pacis Augustae*, mentioned in the "Deeds of the Divine Augutus" or *Res Gestae Divi Augusti* 12.2²⁸.

²⁶ Alföldy 2011, pp. 96-97; Haselberger 2011, pp. 68-69; Lange 2009, pp. 6-7 is nevertheless more inclined to accept M.Schütz's theory: "Sadly, this theory (*i.e.* E. Buchner's) did not stand the test of time and a physicist from Tübingen" (*i.e.* M.Schütz).

²⁷ Alföldy 2011, p. 98 for the importance of the existence of a *Horologium Solarium* in the self-representation of Augustus before the Senate and the People of Rome; Haselberger 2011, pp. 69-70 about the symbolic importance of the ensemble *Horologium Solarium Augusti-Ara Pacis Augustae* in the Augustan urban transformation of Rome and in regulating chronology and civic life in Rome and in the Roman Empire according to the cosmic cycles of heavens. The so called *Meridianum/Horologium Augusti* has been the object of many researches. I quote here only the following: Coarelli 1984; Rakob 1987; Lloyd 1991; Simpson 1992; Coarelli 1997; Heslin 2007, p. 7; Ciampini 2004; Sorek 2010. It was Facundus Novius the astronomer, astrologist, and mathematician that had thought, calculated, and planned mathematically the *Meridianum/Horologium Solarium Augusti*, cfr. Rossini 2006, pp. 12-13.

²⁸ La Rocca 1983, pp. 11-13 for the *Res Gestae* (11-13) and the monuments directly connected by symbolical and ideological links with the *Ara Pacis*, namely the *Ara Fortunae Reducis* and the *Aedes Iani Quirini in Argileto*. An interesting fact is that, according to Cass. Dio (*Hist.Rom.LIV* 25, 3), the Roman Senate had initially decided to erect the *Ara Pacis* inside the *Curia Senatus*; Augustus had in fact refuted this idea and preferred the Northern *Campus Martius* cfr. Rossini 2006, p. 5. The first recuperated fragments of the *Ara Pacis* appear in fact from an incised drawing or engraving made by Agostino Veneziano before 1536; it was about the lower outer frieze, with a swan with spread wings and the floral and vegetal decoration. In 1566 the cardinal Giovanni Ricci da Montepulciano acquired nine marble blocks for a

However, in the year 1960 Dr. S.Weinstock in an article published in the famous «Journal of Roman Studies» guestioned and even denied this identification, mainly on the ground of iconographical evidence. His objections were met and countered with equally serious iconographical, architectonical, and logical arguments by another important researcher in this field, J.M.C.Toynbee, in another article published in the same Journal of Roman Studies the following year²⁹. Without entering in the details of their discussions and arguments (revolving mainly on the identity of the deity worshipped in the Ara), one should mention here that for Stefan Weinstock this Ara could not be securely identified (but for him it was surely not the Ara Pacis Augustae, perhaps being the Ara Gentis Iuliae (the Altar of the Gens *Iulia*, the Julian clan) that nevertheless, at least under Vespasian, was located on the Capitol and not in the Field of Mars (*Campus Martius*), where there were other monuments: Monumentum Iuliorum (the Monument of the Iulii), Ustrinum Domus Augustae (the funeral pyre of the family of Augustus), and the Mausoleum Augusti or the Mausoleum of Augustus³⁰. The counter arguments brought in by J.M.C.Toynbee against the thesis of S.Weinstock were summed up in his memorable conclusion: "Dr. Weinstock has most forcibly reminded us that we have no ineluctable, explicit proof that the Campus Martius Augustan altar is the Ara Pacis Augustae. But he has

price of 125 scudi, including the so called Tellus-Pax panel (the panel with the representation of the nourishing goddess, either Pax/Peace or Tellus/Earth). The cardinal's secretary had in fact even written a letter to the secretary of the Grand Duke of Tuscany Cosimo I of Medici in 1569, telling him by means of this letter that these sculptural friezes are Roman reliefs with triumphal figures ('con figure di trionfi'). After a troubled history that brought recovered fragments of the Ara to Florence, to the future Villa Medici at Trinità dei Monti, to the Villa Aldobrandini on the Quirinale in Rome, and even to Paris (Louvre), only in the year 1879 Fr. von Duhn recognized the ensemble of the recovered fragments from that area as component elements of the Ara Pacis. There followed in the period of 1894-1903 the archaeological diggings under the Palace Ottoboni-Peretti-Fiano-Almagià, directed by Eugen Petersen and Angelo Pasqui, stopped by technical reasons. In 1913 A. Pasqui had tried again in a letter to convince the Italian government to financially and legally support the excavations. Only in 1937-38 the archaeological team led by Giuseppe Moretti and (for the restoration) by Guglielmo Gatti, using innovative techniques, had achieved the excavations and restoration of the whole monument cfr. Rossini 2006, pp. 14-17.

²⁹ Weinstock 1960, pp. 44-58 (*contra* Toynbee 1961, pp. 153-156).

³⁰ Weinstock 1960, p. 58.

not, to my mind, succeeded in proving us æ that it is certainly not the *Ara Pacis Augustae*æ^{"31}.

The most important fact is that we do not possess until now any dedicatory inscription of this most important monument of Roman Augustan Art and therefore we cannot attribute it for sure to the goddess Pax (Peace) or Tellus (Earth) etc. One cannot epigraphically relate directly the altar to the Res Gestae Divi Augusti 12.2 in absence of a monument's own inscription that defines its function and meaning. However, its location, much of its iconography and symbols hint at the cult of Pax and of the goddesses related with agricultural plenty and richness, with wealth, happiness, and fruitful love (fertility of the plants, sexual reproduction of cattle, and by implication, fecundity of women and men; the reform of the marital and sexual *mores* of the Roman citizens, the stability of marriage, family, and the conception, birth, and upbringing of legitimate free Roman children was one of the concerns involving the inner policy of Augustus, a fact that is known by all scholars specialized in the field of Ancient Roman History). It is also related with Roman religion (rituals, ceremonial processions or gatherings for sacrifices), with the mythology of the Primordia Romae (the beginnings of Rome) and with the Origines (the mythical and myth-historical or legendary origins) of the people from Latium (nowadays Lazio in Central Italy). One cannot help of not thinking at the Ara Pacis Augustae mentioned by the Res Gestae Divi Augusti 12.

Accepting the theory that the monument exposed now in the "Museo dell'*Ara Pacis*" is the true *Ara Pacis Augustae*, we can think the final conclusions of the true meaning rendered by the friezes of the monument. We can see the meaning (especially that of the outer upper friezes) as an embodiment in stone of the Augustan idea of the *Parta Victoriis Pax*, the Roman Augustan Peace (*Pax Romana Augusta*) born out of military victories, the victory being a real one or an imagined one (like Augustus' diplomatic triumph in the negotiations with the Parthians, in the year 20 BC, over the legionary eagles and standards lost by the Roman legionaries commanded by Crassus in the battle of Carrhae in 53 BC and captured by the Parthians). In essence, one can see the *Ara Pacis Augustae* as the embodiment in carved Luna/Carrara marble of an idea: it is an epic poem that renders in sculptural form the mythology of the origins of Rome, *Latium*, and

³¹ Toynbee1953; Toynbee 1961, p. 156 (*contra* Weinstock 1960, p. 58).

Italy and that binds inextricably the divine origin of the Gens Iulia (and therefore of both Caesar the Divus Iulius and Augustus the Divus to be), descending from the goddess Venus (via Aeneas and his son Iullus Ascanius), with the origins of the Roman people, descending from Mars; the Romans, being under the protection of Jupiter the King of the gods, like once Romulus the son of Mars and founder of Rome, they are destined to rule over the peoples of the earth and to impose peace (Verg. Aen. VI 851-853: "Tu regere imperio populos, Romane memento: Hae tibi erunt artes, pacisque imponere mores, parcere subjectis et debellare superbos" [You will rule the peoples with power, o Roman, remember: these will be your crafts, to enforce the ways of peace, to spare the vanquished, and to destroy the proud through war]). The panels with the nourishing goddess and with the triumphant Dea Roma (the eastern upper friezes of the external precinct of the Ara) hint at another idea, dear to both Augustus and Virgil, Aen. XII 827: "Sit Romana potens Itala virtute propago" (May the Roman Offspring be strong by means of Italic Valour)³²

To sum up, one should not forget the original orientation of the facades of the Ara Pacis Augustae: if the hypothesis of Schütz (2011) 86 is correct and the viewer that stood in the front of the eastern facade of the Ara Pacis Augustae at the Parilia (Twenty First of April, the Birthday of Rome) could have seen, in Augustus' lifetime, the rays of the sun entering the eastern entrance of the altar, then the message transmitted by Augustus and by the anonymous sculpture master entrusted with the iconographical and architectural design of the whole monument to posterity is subtler than E.Buchner, in all his undeniable wisdom and experience, had ever imagined: instead of the shadow of the obelisk entering the western entrance on Augustus' birthday (Twenty Third of September), as if the Heaven itself testified that Augustus was "natus ad pacem/born to bring peace", we stumble upon the assertion of Rome as bringer of peace and prosperity: the armed Dea Roma (the warlike goddess Rome) and the weaponless but beautiful Pax (Peace) are the two faces of the same coin. Because of the archaeological evidence discussed so far, as well as because of the mathematical experience and professionalism of M. Schütz, I am personally inclined to adopt his theory of the solar meridian, although I do not agree with him in embracing S. Weinstock's denial of the identity of this altar as being the true Ara Pacis Augustae. We also

³² Pollini 2002; Pollini 2012. Cfr. Polacco 1992.

must be aware of the fact that the controversy on the total height of the gnomon-obelisk (because of its two, three, or five steps basis, according to the controversial Stuart - Bandini - De Marchis archaeological report of 1748-1750) means that different computations are still possible. The overall height of the original obelisk and its precise original location can change all the trigonometric calculations. Moreover, I personally think that M. Schütz's theory could confirm what I have personally written in a previous study about Alexander the Great and Augustus. I hereby reproduce my own hypothesis. I see the symbolic of the Ara Pacis reliefs as follows: the west is the realm of origins, of the Roman and Latin founding myth, the land of the heroes of old and the space of the gods founders of Rome: Jupiter, Mars, and (indirectly) Venus (through her son Aeneas). Aeneas and the legendary twins Romulus and Remus are also hewn in stone here. It is a cardinal point used with the same symbolic in other mythic traditions: in Greek myth Heracles went west to find the golden apples of the Hesperidae (the goddesses of the West), symbols of eternal youth and immortality. In the Roman foundation myth, Aeneas and his son Iullus Ascanius and the surviving Trojans (preceded by the Arcadians of king Evander that had settled on the Tiber, in the future territory of Rome), after the fall of Ilium went also west via Africa, Sicily, arriving eventually on the western coast of central Italy, in order to merge with the Aborigines (the native inhabitants of Central Italy) of king Latinus. After mythical and epic heroic events narrated by Vergil and Livy, Aeneas married princess Lavinia, the daughter of king Latinus of Lanuvium. It was thus founded the Latin people and so appeared the birth of the Latium land and of the cities of Lavinium and Alba Longa. Latin settlements or towns predecessors of Rome. In the Greek Romance of Alexander (Pseudo-Callisthenes), Alexander the Great, like a new Ghilgamesh seeking the Immortality grass/herbs, search for the Immortality fount in the west. In Irish (Celtic Gaelic) mythical epics, stories, and poems, the heroes travel west in search of the blessed islands of the Immortals, in the mythical Tir na'nOg (the land of the eternal vouth)³³. In the old Egyptian tales, the sun god Amun-Ra travels the lands of the west every night with his boat, in order to be reborn the next day in the east. Finally, in the Mahayāna and Vajrayāna

³³ cfr. Markale 1971; Markale 1977; AA.VV. 1999; Bachmann 2005; Ionescu 2013; Ionescu 2014; Ionescu 2015; *supra*, n. 11.

orientations of Buddhism we find the Buddha Amitabha ruling over the Western Buddhist Paradise³⁴. The east is the realm of Eternal Peace seen as Eternal Present, the realm of the gods protectors of Augustus: the swans and the acanthus flower decorations carved in stone are all symbols of Apollo, Augustus' personal protector god. Dea Roma and Tellus/Venus/Pax are also present. The north is home to the children of the Imperial family, to the offspring of Rome, and there are also sculpted a part of the state officials and priesthood of Rome (the *augures*, who told the future divining the flight of the birds and the septemviri epulonum, the organizers of the public feasts are represented here). It is the space of the future of the Eternal City. The south, oriented forever towards the Urbs, it is the processional space of Augustus himself, of Agrippa his best and truest friend and collaborator, and of the most sacred priests of Rome, the priestly associations of the *flamines* priesthood (*collegia flaminum*). It is the space of the civic and sacral (or political and religious) eternal present of Rome³⁵.

It is an inherent probability that the new theory (or rather hypothesis) regarding this Ara to be the right one³⁶. In favor of this idea that sees the original eastern facade and entrance to the monument as the one marked by the rays of the sun on the Twenty First of April (the Roman Feast of the Parilia) speaks the superior mathematical and astronomical expertise of the German physicist Michael Schütz; however even he makes that claim to be still a hypothesis and not a proven fact; what remains (almost) for sure is that during the autumn equinox (Twenty First-Twenty Third of September), therefore during Augustus' birthday feast (the Twenty Third of September/*Dies Natalis Augusti* or the Birthday of Augustus) the shadow of the gnomon-obelisk did not fall on the precise axis of symmetry of the western entrance to the Ara, but it fell rather slantwise, in an oblique direction to the axis of symmetry (this axis of symmetry is the perpendicular line to the entrance and therefore to the geometrical middle/centre of the western façade). Even so, although the shadow did not fall perpendicular into the Ara through the western

³⁴ cfr. Blofeld 1976, pp.118-123 (so much about the West as a symbolic cardinal point in many religions, mythologies, and esoteric philosophies).

³⁵ This is of course a personal interpretation and it should be taken as such. cfr. Ionescu 2011, pp. 62-64.

³⁶ Schütz 2011, p. 86.

gate, it nevertheless fell obliquely towards the western facade of the Ara. In the eventuality that M. Schütz's hypothesis is correct the design created by the anonymous master or masters that brought the Ara into existence reflects in a wonderful way the Augustan ideas about the majesty of Rome: the sun lit the eastern entrance of the Ara on Rome's Founding Day, during the Feast of the Parilia (that was a Roman religious festival of the herdsmen in its origins; the companions of Romulus and Remus were all young warriors, hunters, and herdsmen from all of Latium, but many of them were fugitives and exiles from their native cities, criminals and runaway slaves that sought salvation in the consecrated place of refuge or asylum founded by Romulus, as Livy writes in the first book of his Roman history that starts with the founding of the Latin people and of Rome, Ab Vrbe Condita). The Eternal City founded by the warlike son of Mars, Romulus, was now, during Augustus' benevolent Principate (Principatus, the rule of the First Senator or Princeps Senatus that happened to be also the first Roman Emperor, Imperator Caesar Augustus) under the sway of the Pax Augusta (the Augustan Peace, see the symbolism of the eastern façade of this monument). During Augustus' birthday, the shadow of the gnomon-obelisk falls obliquely towards the Ara, pointing in an indirect way to the Primordia Romae (the myth-historical beginnings of Rome) and to the Origo Gentis *Iuliae* (the origin of the gens Iulia, the Roman clan that eventually had eventually produced Julius Caesar, the adoptive father of Augustus). The light comes from the East, wherefrom Aeneas' Trojans and before them Heracles/Hercules and King Evander's Greeks once came and settled in Latium (first in Lanuvium/nowadays Lanuvio and then founding in the process the new towns of *Lavinium* and *Alba Longa*) and on the Seven Hills of Rome; the West is on the Twenty Third of September under the shadow of the gnomon-obelisk, conserving the memory of Aeneas (or that of Numa Pompilius) and of the heroic Twins founders of Rome, the sons of Mars and Rhea Silvia, Romulus and Remus. In the person of Augustus, the original fratricide that stood at the very foundation of Rome is thus at least symbolically mitigated. It becomes not a simple brother killing brother in the struggle for power, but a not represented human sacrifice, as necessary to the founding of the Urbs (the Eternal City of Rome) and to the future of the ancient known world as it was the coming of Aeneas and his Trojans to Italy's sea shore or the divine lovemaking between the Italic war god Mars and the Vestal Virgin Rhea Silvia. In the seduced Vestal's veins flew the blood of Aeneas son of Anchises and thus of Venus-Aphrodite, Aeneas' mother and the goddess of love and beauty. Thus, indirectly, in the Roman myth like in the original Greek one, the act of lovemaking between the war god Ares and the love goddess Aphrodite produced the daughter *Harmonia*, the prerequisite to the reign of Peace.

Bibliography:

- AA.VV. 1984: AA.VV., Roma Sepolta, Roma 1984
- AAVV. 1999: AA.VV., Dictionary of the Celts. New Lanark 1999
- Alföldy 2011: G. Alföldy, *The Horologium of Augustus and its Model at Alexandria*, «Journal of Roman Archaeology» 241 (2011), pp. 96-98
- Alföldy Auber Cipolla Hannah Haselberger Heslin Rocca – Leonhardt – Pollini – Schütz 2014: G. Alföldy, P. A. Auber, N. Cipolla, R. Hannah, L. Haselberger, P. J. Heslin, E. La Rocca, G. Leonhardt, J. Pollini, M. Schütz, *The* Horologium *of Augustus. Debate and Context*, «Journal of Roman Archaeology» Supplementary Series 99 (2014)
- Almeida Rodriguez 1978-1980: E. Almeida Rodriguez, *Il Campo Marzio Settentrionale*. Solarium *e* Pomoerium, «Atti della Pontificia Accademia Romana di Archeologia. Rendiconti» 51-52 (1978-1980), pp. 195-212
- Bachmann 2005: P. Bachmann, "Der mit den zwei Hörnern": Alexander der Grosse in Werken der arabischen Literatur, Mainz am Rhein 2005
- Blofeld 1976: J. Blofeld, Le Bouddhisme tantrique du Tibet, Paris 1976 (ed. or. London 1970)
- Buchner 1974: K. Buchner, Imperium nullum nisi unum, in AA.VV., L'Idéologie de l'Impérialisme Romain. Colloque de Dijon le 18 et 29 Octobre 1972, "Publications de l'Université de Dijon" 46, Paris 1974, pp. 134-145.
- Buchner 1976: E. Buchner, Solarium Augusti *und* Ara Pacis, «Mitteilungen des Deutschen Archäologischen Instituts. Römische Abteilung» 83 (1976), pp. 319-365

- Buchner 1980: E. Buchner, Horologium Solarium Augusti: Vorbericht über die Ausgrabungen 1979/1980, «Mitteilungen des Deutschen Archäologischen Instituts. Römische Abteilung» 87 (1980), pp. 355-73
- Buchner 1980-1982: E. Buchner, *L'orologio solare di Augusto*, «Atti della Pontificia Accademia di Archeologia. Rendiconti» 53 (1980-1982), pp. 331-345
- Buchner 1982a: E. Buchner, Die Sonnenuhr des Augustus: Nachdruck aus RM 1976 und 1980 und Nachtrag über die Ausgrabung 1980/1981, Mainz am Rhein 1982
- Buchner 1982b: E. Buchner, *Die Sonnenuhr des Augustus*, Mainz am Rhein 1982
- Buchner 1982c: E. Buchner, *Die Sonnenuhr des Augustus*, in L.
 Habachi (ed.), *Die Unsterblichen Obelisken Ägyptens*,
 "Kunstgeschichte der Antiken Welt" 11, Mainz am Rhein 1982, pp. 240-242
- Buchner 1983: E. Buchner, Horologium Augusti: Neue Ausgrabungen in Rom, «Gymnasium» 90 (1983), pp. 494-508
- Buchner 1985: E. Buchner, Sonnenuhr des Augustus und römischer Fuss, in AA. VV., Bauplanung und Bautheorie der Antike. Kolloquium des Architekturreferates des Deutschen Archäologischen Instituts (Berlin 1983), Berlin 1985, pp. 215-218
- Buchner 1988: E. Buchner, Horologium Solarium Augusti, in Martin 1988, pp. 240-244
- Buchner 1993-94: E. Buchner, *Neues zur Sonnenuhr des Augustus*, «Nürnberger Blätter zur Achäologie» 10 (1993-94), pp. 77-84
- Buchner 1996: E. Buchner, Ein Kanal für Obelisken. Neues vom Mausoleum des Augustus im Rom, «Antike Welt» 273 (1996), pp. 161-168
- Ciampini 2004: E.A. Ciampini, Gli Obelischi Iscritti Di Roma, Roma 2004
- Coarelli 1984: F. Coarelli, Horologium Augusti, in AA.VV. 1984, pp.72-91
- Coarelli 1997: F. Coarelli, *Il Campo Marzio. Dalle Origini Alla Fine Della Repubblica*, vol. I, Roma 1997

- Hannah 2011: R. Hannah, *The* Horologium *of Augustus as a Sundial*, «Journal of Roman Archaeology» 24.1 (2011), pp. 87-95
- Haselberger 2011: L. Haselberger, A Debate on the Horologium of Augustus: Controversy and Clarifications, «Journal of Roman Archaeology» 24 (2011), pp. 47-73
- Haselberger et alii 2014: G. Alföldy, P. A. Auber, N. Cipolla, R. Hannah, L. Haselberger, P. J. Heslin, E. La Rocca, G. Leonhardt, J. Pollini, M. Schütz, *The* Horologium of Augustus. *Debate and Context*, «Journal of Roman Archaeology» Supplementary Series 99 (2014)
- Heslin 2007: P.J. Heslin, Augustus, Domitian, and the So-Called Horologium Augusti, «Journal of Roman Studies» 97 (2007), pp. 1-20
- Heslin 2011: P.J. Heslin, *The Augustus Code: A Response to L.Haselberger*, «Journal of Roman Archaeology» 24.1 (2011), pp. 74-77
- Ionescu 2011: D.-T. Ionescu, Alexander's Monarchy and the Principate of Augustus Meditating on Relevant Aspects of an Ideological Interface, «Ephemeris Dacoromana» 13 (2011), pp. 7-75
- Ionescu 2013: D.-T. Ionescu, *The* Ara Pacis Augustae. *Symbolic Iconography and Mythology of the Friezes*, «Ephemeris Dacoromana» 15 (2013), pp. 99-174
- Ionescu 2013: D.-T. Ionescu, Alexander the Great in the Persian Legends: From Alexander of Macedon to Sikandar. The Circulation of Mythical Topoi between the Greek Alexander Romance and Firdousi's Shah-Nameh, «Chaos e Kosmos» 14 (2013) = www.chaosekosmos.it/pdf/2013_14.pdf
- Ionescu 2014: D.-T. Ionescu, Alexander the Great in the Persian legends: from the Pseudo-Callisthenes's Greek Romance about Alexander of Macedon to the Sikandar of Firdousi's Shah-Nameh, «Miscellanea Anthropologica et Sociologica» 15 (2014), pp. 110-117
- Ionescu 2015: D.-T. Ionescu, Alexander the Great in the Persian Legends: From Alexander of Macedon to Sikandar (The circulation of mythical topoi between the Greek Alexander Romance and Firdousi's Shah-Nameh), in R. Cârjan, A. Panaite (edd.), Moesica et Christiana: Studies in Honour of Professor

Alexandru Barnea on his 70th Anniversary, Bucharest 2015, pp. 507-517

- Ionescu 2015: D.-T. Ionescu, Ara Pacis Augustae: Un Simbolo dell'età augustea. Considerazioni storico-religiose tra Pax Augusta e Pax Augusti, «Civiltà Romana. Rivista pluridisciplinare di studi su Roma antica e le sue interpretazioni» 1 (2015), pp. 75-107
- Lana De Biasi Ferrero 2003: I. Lana, L. De Biasi, A.M. Ferrero (edd.), *Gli Atti Compiuti e i frammenti delle opere di Cesare Augusto Imperatore*, 2 voll., Torino 2003
- Lange 2009: C.H. Lange, Res Publica Constituta: Actium, Apollo and the Accomplishment of the Triumviral Assignment, "Impact of Empire" 10, Leiden – Boston 2009
- La Rocca 1983: E. La Rocca, Ara Pacis Augustae in occasione del restauro della Fronte orientale, Roma 1983
- Lloyd 1991: G.E.R. Lloyd, *Methods and Problems in Greek Science*, Cambridge – New York – Stanford Roat – Oakleigh – Melbourne 1991
- Maes, F. 2014 : F. Maes, Zonnewijzer van Keizer Augustus:opkomst en neergang van een hypothese, «Roma Aeterna» 2 (2014), pp. 15-26
- Markale 1971: J. Markale, L'Épopée celtique d'Irlande, Paris 1971
- Markale 1977: J. Markale, Le Roi Arthur et la société celtique, Paris 1977
- Martin 1988: AA. VV., H.G. Martin v., Kaiser Augustus und die Verlorene Republik: eine Ausstellung in Martin-Gropius-Bau Berlin 7. Juni-14 August 1988, Mainz am Rhein 1988
- Murdoch 2006: A. Murdoch, *Rome's Greatest Defeat Massacre in the Teutoburg Forest*, Thrupp Stroud 2006
- Polacco 1991-1992: E. Polacco, Ara Pacis Augustae Una Forma, Un' Idea, «Atti dell'Istituto Veneto di scienze, Lettere e Arti. Classe di Scienze Morali, Lettere ed Arti» 150 (1991-1992), pp. 9-31
- Pollini 2002: J. Pollini, Frieden-durch-Sieg"-Ideologie und die Ara Pacis Augustae: Bildrhetorik und die Schöpfung einer dynastischen Erzählweise, in M. Bietak, M.Schwarz (edd.), *Krieg und Sieg Narrative Wanddarstellungen von Altägypten bis ins Mittelalter. Internationales Kolloquium 29.-30. Juli 1997 im*

Schloβ Haindorf, Langenlois, "Untersuchungen der Zweigstelle Kairo des Österreichischen Archäologischen Instituts" 20 = "Denkschriften Der Gesamtakademie" 24, Wien 2002, pp. 137-157

- Pollini 2012: J. Pollini, 'The Ideology of "Peace through Victory" and the Ara Pacis Augustae: Visual Rhetoric and the Creation of a Dynastic Narrative, in J. Pollini, From Republic to Empire: Rhetoric, Religion, and Power in the Visual Culture of Ancient Rome, "Oklahoma Series in Classical Culture" 48, Norman 2012
- Ponti 1938: E. Ponti, Ara Pacis Augustae Origine Storia Significato, Roma 1938
- Rakob 1987: F. Rakob, Die Urbanisierung des nördlichen Marsfeldes. Neue Forschungen im Areal des Horologium Augusti, in L'Vrbs. Espace urbain et histoire. Ier siècle av. J.-C. Actes du colloque international. Rome 8-12 Mai 1985, Rome 1987, pp. 687-712
- Rehak 2006: P. Rehak, Imperium and Cosmos Augustus and the Northern Campus Martius, Madison 2006
- Rossini 2006: O. Rossini, Ara Pacis, Roma Milano Verona 2006
- Schütz 1990: M. Schütz, Zur Sonnenuhr des Augustus auf dem Marsfeld. Eine Auseinandersetzung mit E. Buchners Rekonstruktion und seiner Deutung der Ausgrabungsergebnisse, aus der Sicht eines Physikers, «Gymnasium» 97 (1990), pp. 432-457
- Schütz 1991: M. Schütz, Der Capricorn als Sternzeichen des Augustus, «Antike und Abendland» 37 (1991), pp. 55-67
- Schütz 2011: M. Schütz, *The* Horologium *on the* Campus Martius *reconsidered*, «Journal of Roman Archaeology» 24 (2011), pp. 78-86
- Settis 1983: S. Settis, *L'Altare della Pace*, «Mensile di Franco Maria Ricci» 10 (1983), pp. 85-110
- Settis 1988: S. Settis, Die Ara Pacis, in Martin 1988, pp. 400-426
- Simon 1967: E. Simon, Ara Pacis Augustae, Greenwich (CT) Tübingen 1967
- Simpson 1992: C.J. Simpson, Unexpected references in the Horologium Augusti at Ovid, Ars Amatoria 1.68 and 3.388,

Chaos e Kosmos XV, 2014 - www.chaosekosmos.it

«Athenaeum. Studi di letteratura e Storia dell'antichità» 80 (1992), pp. 478-484

- Sorek 2010: S. Sorek, *The Emperor's Needles Egyptian Obelisks and Rome*, Exeter 2010
- Toynbee 1953: J.M.C. Toynbee, *The* Ara Pacis *Reconsidered and Historical Art in Roman Italy*, "Italian Lecture British Academy From the *Proceedings of the British Academy*" 39, London 1953, pp. 67-95
- Toynbee 1961: J.M.C. Toynbee, *The* Ara Pacis Augustae, «Journal of Roman Studies» 51(1961), pp. 153-156
- von Bummelen 2009: G.v.Bummelen, The Mathematics of Heaven and Earth. The Early History of Trigonometry, Princeton – Oxford 2009
- Weinstock 1960: S. Weinstock, Pax *and the* Ara Pacis, «Journal of Roman Studies» 50 (1960), pp. 44-58
- Zanker 1987: P. Zanker, Augustus und die Macht der Bilder, München 1987