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## ON THE ORIENTATION OF TWO ROMAN TOWNS IN THE RHINE AREA

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### ABSTRACT

The aim of the present paper is to extend the archeoastronomical study sample on the orientation of Roman cities to the analysis of a number of cases in the Rhine area. The starting point is a study of the orientation of *Augusta Treverorum* (present day Trier; Goethert, 2003). Goethert assumed that the orientation of the *decumanus maximus* was towards sunrise at the autumn equinox, on September 23<sup>rd</sup> as the *dies natalis* of the city. This event would deliberately coincide with the anniversary of the birth of Augustus, and would have determined the establishment and orientation of the new urban layout. However, our *in situ* measurements of the orientation of the urban network at several sites of the Roman town rule out this hypothesis. We find an orientation that is more in line with those documented for other Roman cities and camps elsewhere in the Roman provinces (González-García *et al.*, 2014; Rodríguez-Antón *et al.*, 2016). Moreover, measurements made in the *Lenus Mars* temple indicate a recurrent phenomenon of cultural hybridization. Here the temple, located outside the city walls on the west bank of the river Moselle, combines a possibly Celtic orientation with Roman symbolic beliefs. In reality, the alleged orientation towards the *dies natalis* of Augustus is verified for Cologne. There are a number of circumstances that make this choice logical for a city that was initially planned as the capital of the Augustan province of *Germania* and the seat of an *ara* of imperial worship.

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**KEYWORDS:** Roman Towns. Orientation. Limes Germanicus. Augusta Treverorum. Celtic rites. Cologne.

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## 1. INTRODUCTION

Roman political supremacy in the provinces was established at different levels, ranging from practical engineering through to the religious and symbolic realm. Recent publications on the orientation of Roman cities and military camps highlight this latter aspect by indicating the application of certain design criteria that coincide with sunrise at particular moments of the Roman religious calendar (Magli, 2008; González-García and Magli, 2014; González-García et al., 2014; Bertarione and Magli, 2015). Despite this, the study of particular cities such as Lyon (García Quintela and González García, 2014; González García and García Quintela, 2014) or St. Bertrand de Comminges (González García et al., this issue) demonstrates the existence of syncretistic processes in the methods of city planning and development. Here we present the results for two Roman cities in present-day Germany, one in the province of *Gallia Belgica* and the other in the Augustan province of *Germania: Augusta Treverorum* (Trier) and *Ara Ubiorum*, (Cologne). These results extend the sample of our measurements towards the Germanic *limes*, but also have sufficient entity to be considered the subject of specific studies.

## 2. AUGUSTA TREVERORUM

During Roman times, the city of Trier received the name of *Augusta Treverorum* (Mela, 3, 2, 20) (Fig. 1), a designation that specifically links the town with the political action of Augustus, who would have founded it to provide the *Treveri* with a new *caput civitatis* replacing the chief *oppidum* at Titelberg (Pétange, Luxembourg; Trunk, 2010). As we know from Pliny, the *civitas Treverorum* (defined as the legally constituted political community of the *Treveri*) enjoyed a peregrine administrative status of *civitas libera* until an unspecified time in the reign of Augustus, at which time it would have received the status of a Latin colony in the context of the creation of *Augusta* (Scheid, 2006).

Today there is no definitive agreement on the date of foundation of the city. Authors like Goethert (2003) maintain a late chronology based on the construction of a Roman bridge over the river Moselle, dated by dendro-chronology to the year 17/16 BC. Others like Morscheiser-Niebergall (2009) defend an early chronology based on the archaeological evidence supplied by the city, which seems to point to a period between the year 8/7 BC and the change of era. Regardless of this undoubtedly important fact, the city had to have been built and its governing bodies operating during the first decade of the first century AD, when a dedication to Gaius and Lucius Caesar was erected in AD 4 (Trunk, 2010).

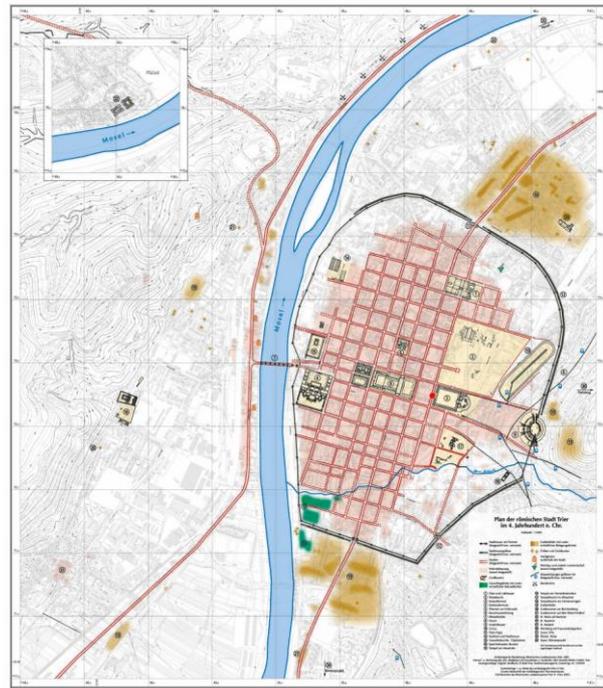


Figure 1. Plan of Augusta Treverorum from Rettet das archäologische Erbe in Trier (2005). The red dot indicates the point from where the picture in Fig. 3 was taken.

In the year 30/29 BC and prior to the foundation of *Augusta*, Rome built a military settlement on the nearby hill of Petrisberg (Trunk, 2010). It stands on a plateau on a hill on the east bank of the valley with a clear visual control over the alluvial plain and the ford of the Moselle. Archaeologists and historians have linked its construction to the uprising of the *Treveri* in 29 BC. (Cassius Dio, 51, 20, 5). Geophysical prospecting work and emergency excavations documented a fortified area of 50 ha with buildings made of mud and wood. Among them were the *Principia*, the *Praetorium* and some barracks aligned with the alleged *via Praetoria*. Its life would have been brief, and was possibly abandoned around the year 27 BC (Trunk, 2010).

### 2.1. The Lenus Mars Temple Complex at Irminenwingert

On the west bank of the Moselle, at the feet of Markusberg, are the remains of a religious complex outside of the city walls. This is a sanctuary dating from the time of Augustus and the second half of the first century AD. At a functional and architectural level, the shrine would have been organised around four places of worship: a properly delimited outdoor venue with individual chapels on its western flank that seem to have housed a cult of *Mars Iovantucus* related to rites of passage from childhood to adolescence; a Gallo-Roman temple of classical tradition with a *temenos* consecrated to *Lenus Mars*; a processional entry to the temple complex with three exe-

dras and altars offered to *Mars, Lenus Mars, (Mars) Intarabus* and *Ancamna*; and a monumental theatre (Scheid, 2006; Derks, 2008).



Fig. 2. Ara Ubiorum towards the end of the 1<sup>st</sup> Century A.D. Map from Eck, 2004.

### 3. ARA UBIORUM

In Roman times, the city of Cologne had two names as a result of its complex formation history: *Ara Ubiorum* (since its foundation in the time of Augustus to AD 50) and *Colonia Claudia Ara Agrippinensium* (from AD 50 onwards) (Bechert, 2013) (Fig. 2).

Both names refer to the same reality: the presence of an altar in Cologne. Its political and religious significance would have led to the incorporation of the term to the official name of the city as a sign of identity and distinction. Literary sources inform us about the existence of these *ara* from the time of Augustus (Eck, 2004). This is where the representatives met from the Germanic *populi* of the Augustan province of *Germania* (probably before the disaster of Varus in AD 9). As for the cult professed in it, there is agreement on the idea that this *ara*, by analogy with the one in *Lugdunum*, was consecrated to Rome and Augustus, especially considering a passage from Tacitus (*Annales* 1, 59, 1) where he refers to the “human” nature of the Roman gods worshiped there (*sacerdotium hominum*). This would have been led by a *sacer-*

*dos*, probably chosen among the assembled Germanic *populi*, similar to Lyon (Fishwick, 2002; Eck, 2004).

Regarding the date of its construction, there are two main opinions. On the one hand, Fishwick (2002) argues that the altar of Cologne was erected at the same time as the altar of *Lugdunum*, probably between 12 and 9 BC. He bases his argument on the evidence of an important religious policy on implementing the imperial cult in *Tres Galliae* and *Germania* promoted by Drusus. Among the results of this policy would be both altars, a temple to Augustus consecrated on 9 BC in the *civitas* of the Lingons (Cassiodorus, *Chronica*. 2, p. 135, 586-7; Fishwick 2002) and the widespread dissemination of the priesthood associated with the imperial cult. On the other hand, Eck (2004) and Bechert (2013) consider a slightly later date in line with the building work in the city from 7 BC.<sup>1</sup> This hypothesis clashes with Fishwick’s proposal, who dissociates the erection of the *ara* from the urban construction work, a possibility (in the current state of research) that cannot be excluded. Thus, the existence of the altar would have determined the choice of the site for the foundation of the city, the official place name and the layout of the urban area.

Concerning the foundation date of the city, *communis opinio* considers that it was before the year AD 4/5, a *terminus ante quem* that has managed to be established by the dendrochronological dating of the “*Ubiarmonument*”, a square structure made of stones and wooden piles that may have been a defensive enclosure or a port infrastructure (Trier, 2014). The *terminus post quem*, however, has been fixed by two stratigraphic levels from the area of Cologne Cathedral and Great St. Martin Church, dated between 7 BC and AD 6/5-14 (Bechert, 2013). Eck (2004) thus proposes the building of the city at the end of Tiberius campaigns (9/8-7 BC), as part of an ambitious program of urban and municipal development launched by Augustus in *Tres Galliae* and *Germania* (Morscheiser-Niebergall, 2009).

As for the possible location of the altar, there are two opposing theories. The first situates the *ara* on the western flank of the *forum* in the heart of the city, perhaps as part of a semi-circular structure that enclosed the public square on that side (Bechert, 2013). The second, however, locates it at the eastern edge of the town, in a prominent location overlooking the Rhine, straddling the *Praetorium* and the *Capitolium*, and the straight *decumanus maximus*. In this area, according to Eck (2004), there are several peripheral structures bordering a vast terrace of 220 x 120 m<sup>2</sup>. These structures encircled a building (in the opinion

<sup>1</sup> There are no clear material remains attributable to the altar, and so it is not possible to confirm those dates.

of Eck) reminiscent of the Augustan monument erected in *Nicopolis* to commemorate the victory at *Actium*.

#### 4. ARCHAEOASTRONOMICAL MEASUREMENTS

The measurements were obtained with a Suunto Tandem including a precision compass and a clinometer, with an accuracy of  $\frac{1}{4}^\circ$  in the determination of azimuth and  $\frac{1}{2}^\circ$  for the horizon height. The measurements were corrected from magnetic declination using the WMM magnetic declination model included in the NOAA webpage<sup>2</sup>. When the horizon was blocked due to the presence of buildings we used the digital terrain model available to reconstruct the horizon<sup>3</sup>. This, together with the errors due to the state of preservation of the remains, translates in a mean error of about  $\frac{3}{4}^\circ$  in declination.

**Table I. Buildings measured in Augusta Treverorum (Trier), Petrisberg (latitude 49° 45' N) and Ara Ubiorum (Cologne) (Latitude 50° 56' N). We provide measurements towards E and W. The columns show the site or structure measured, the azimuth (A) and horizon altitude (h) and the calculated astronomical declination ( $\delta$ ). A \* means that the horizon was calculated using a digital terrain model. The last column gives the possible astronomical event or date. For details see text.**

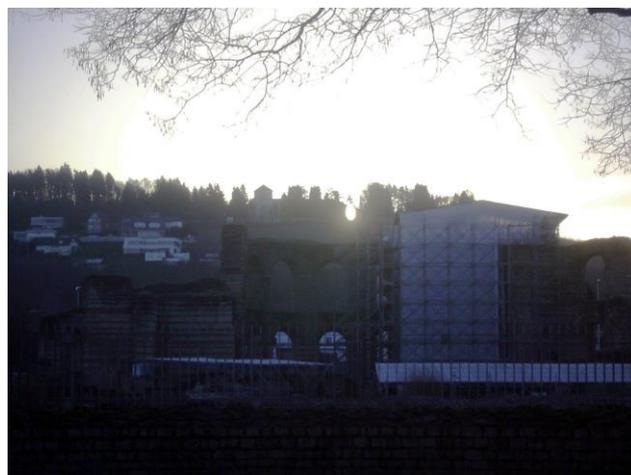
Petrisberg	A	h	$\delta$	Event
Urban layout (E)	131	1 $\frac{3}{4}$	-23 $\frac{3}{4}$	Winter Solstice
(W)	311	1 $\frac{3}{4}$	26	---
A. Treverorum	A	h	$\delta$	Event
Urban Layout (E)	106	4 $\frac{1}{2}$	-7	3 <sup>rd</sup> Mar/11 <sup>th</sup> Oct
(W)	286	5 $\frac{1}{2}$	14 $\frac{1}{4}$	29 <sup>th</sup> Apr/14 <sup>th</sup> Aug
Lenus Mars (E)	113 $\frac{3}{4}$	1 $\frac{1}{4}$	-14	11 <sup>th</sup> Feb/1 <sup>st</sup> Nov
(W)	283 $\frac{3}{4}$	11 $\frac{1}{2}$	23 $\frac{3}{4}$	Summer Solstice
Ara Ubiorum	A	h	$\delta$	Event
Urban Layout (E)	90 $\frac{1}{2}$	0 $\frac{1}{2}$ *	0.07	21 <sup>st</sup> Mar/23 <sup>rd</sup> Sep
(W)	270 $\frac{1}{2}$	0 $\frac{1}{2}$ *	0 $\frac{1}{4}$	21 <sup>st</sup> Mar/22 <sup>nd</sup> Sep

The orientations for *Augusta Treverorum* and *Ara Ubiorum* were obtained by measuring several different structures in Trier and Cologne and verifying that the orientations were consistent (within the measurement errors). Moreover, in the case of the Roman camp at Petrisberg (Trier), we obtained measurements from detailed prospection maps kindly made available to us by the persons in charge for surveying.

The measurements are condensed and presented in Table I, assuming for each site a general east-west orientation. The general hypothesis considered here is that the orientation of the Roman city, generally speaking, could be connected with sunrise or sunset on specific dates. As a result, measurements towards the north and south were considered and obtained,

but are not included in the Table for the sake of space.

It is interesting that the first of the three settlements studied here, the Roman camp of Petrisberg, is oriented towards sunrise at the winter solstice (the orientation towards sunset would not work due to the horizon height in that direction). In contrast, the urban layout of *Augusta Treverorum* seems oriented towards the sunrise at the beginning of March or the middle of October. This orientation was verified *in situ* on March 3<sup>rd</sup> 2015 (see Fig. 2). The orientation towards the west could also be relevant, as this may be linked with the start of May, one of the Celtic beginning of season dates discussed elsewhere (González-García *et al.* this volume). This orientation towards the beginning of season festivities appears more clearly in the main orientation of the *Lenus Mars* temple complex (Fig. 4). In the case of *Ara Ubiorum*, the eastern orientation of the city seems connected with the astronomical equinox.



**Figure 3. Sunrise on March 3<sup>rd</sup> 2015 as seen from the Kaiserthermen in Trier. Sunrise on these dates happens on the hill where the Roman camp of Petrisberg was located. The sunlight is perfectly in line with the remains of the *decumanus maximus*. Photo: David Espinosa.**

## 5. DISCUSSION

### 5.1. The Orientation of the Roman camp at Petrisberg and Augusta Treverorum

The Roman camp at Petrisberg has an orientation consistent with the sunrise at the winter solstice. This seems at odds with the patterns observed for Roman Camps in other areas of the Empire (like *Britannia*, Rodríguez-Antón *et al.*, 2016; or the *limes Arabicus*, Rodríguez-Antón this volume). However, it would be in agreement with other military camps and Roman towns studied in *Hispania* (González-García *et al.*, 2014) or Italy (Magli, 2008).

<sup>2</sup> <http://www.ngdc.noaa.gov/geomag-web/>

<sup>3</sup> <http://www.heywhatsthat.com/>

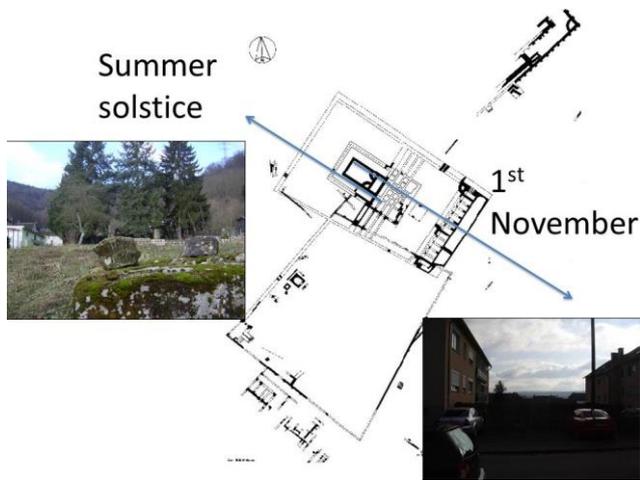


Figure 4. Orientation of the main temple in the Lenus Mars complex. The temple is facing the banks of the river Moselle. The back of the temple is towards the steep slopes of Markusberg.

A question of interest is related to the toponymical evolution of Petrisberg. As we know from the entry on Trier in the *Topographia Archiepiscopatum Moguntiensis, Trevirensis et Coloniensis* from the *Topographia Germaniae* of Matthäus Merian (published between 1642 and ca. 1660), Petrisberg hill was known as *Mons Martis*, while the hill located on the left bank is mentioned as *Apollinis Mons*. This circumstance seems to abound in the importance and permanence of the cult of Mars among the *Treveri*. Moreover, the ancient tradition places the Monastery of San Martin (commissioned by Magneric, Bishop of Trier, in the sixth century in honour of St. Martin of Tours) on *Mons Martis*. This would have meant the Christianization of an ancient place name, Marsberg, transformed by metonymy in Martinsberg. This is one of the many possible methods of Christianization of the Landscape known throughout Europe, including some that have been studied from an archaeoastronomical perspective.

As regards the urban layout of *Augusta Treverorum*, the *decumanus maximus* and the *forum* are oriented towards sunrise on the first days of March and mid-October (see Fig. 3). Interestingly, this sunrise occurs on top of *Mons Martis*. Here we propose that these dates are related to the “war season”, ritually defined in Roman traditions and perhaps also in Celtic culture (*vid. infra*). This orientation is at odds with that found in the small sample we still have for *Gallia* (see González-García *et al.*, this volume), but could be compatible with other Roman towns in *Hispania* (González-García *et al.*, 2014) and the military camps in *Britannia* (Rodríguez-Antón *et al.*, 2016). In fact, the orientation of cult structures towards the “war season” has also been indicated for *Hispania* in the pre-Roman or Romanized settlements of the NW (García Quintela *et al.*, 2014), and could

also be found at the so-called Janus temple outside the city walls of Autun (García Quintela and González García, 2016), as well as in the orientation of the temple of Mercury at the summit of the Puy-de-Dôme (Latitude 45°46'; Azimuth 101¼°; altitude of the horizon 0¼°; declination -8°; dates: 1<sup>st</sup> March/14<sup>th</sup> October; measured by us *in situ*).

Therefore, the choice of these dates in the case of *Augusta Treverorum* does not seem arbitrary, and could have been motivated by the desire of the Roman authorities to signal the start and end of the “war season” and, according to this, the “government of Mars” in the civic life of the *Treveri*.

In general, the cult of Mars was highly important among the *Treveri* (in fact, there are five shrines consecrated to this god in association with native and Roman gods) with deeply martial values that permeated their activities. For instance, Caesar considered the *civitas Treverorum* to be the most powerful in Gaul for its cavalry (Caesar, *De Bello Gallico*, 5, 3, 1 and 4), stressing the good reputation enjoyed by their riders among the Gauls themselves (Caesar, *De Bello Gallico*, 2, 24, 4), a potential that would be used by Rome from the time of Caesar himself.

According to him, it was customary among the *Treveri* (*more Gallorum*) to organize a military assembly (*armatum concilium*) before setting off to war (Caesar, *De Bello Gallico* 5, 56, 1-2). In addition to the speech of the military commander, the last soldier who had joined the assembly was slaughtered after undergoing all kinds of torture. Once the war came to an end, the *Treveri* sacrificed the captured animals that had survived in honour of Mars, depositing the rest of the booty in a consecrated *tumulus* (Caesar, *De Bello Gallico*, 6, 17, 1-2). In the opinion of Roymans (2004), these testimonies would demonstrate the existence of a deeply martial ideology among the Gauls, a circumstance that Rome would use and promote by large-scale recruitment of auxiliary troops (preferably from the *Treveri* and Batavian). This ideology, according to Roymans, was conveyed through the establishment of certain myths and cults like that of Mars among the *Treveri*, and Hercules among the Batavians.

In the Roman sphere, the importance of March and October in military and liturgical calendars is well known. Both months were the beginning and end of the “war season” (as defined by Dumézil, 1987), a period subject to a series of legal and religious rules that would have taken shape in a series of rites and ceremonies of consecration and desecration of the army. March, as we know from Ovid (*Fasti* 2, 857-861; 3, 85-88), was the month consecrated to *Mars Gradivus*, “the god marching to war”. On the 1<sup>st</sup> of this month the *ceremonias natalicias* of *Mars Pater* were held, i.e. the *dies natalis* of Mars in his role as

father of Romulus, founder of Rome. A series of celebrations and rituals began on this day with the army as one of its protagonists: the second *Equirria* (March 14), the *Sacrum Mamurio* or *Mamuralia* (14/15 March), the *Agonium Martiale* (17 March), the *Quinquatria* (March 19) and the first *Tubilustrium* (March 23) (Scullard, 1981). As for October, this month marked when military operations came to an end, when series of rituals took place dedicated to Mars and aimed at the *lustratio* of army and weapons: the October *Equus* (October 15) and *Armilustrium* (October 19) (Scullard 1981). Furthermore, from 19 B.C. onwards, the *Augustalia* were held in honour of Augustus every October 12 (*Res Gestae Divi Augusti* 11).

In view of the above, the orientation of the urban grid of *Augusta Treverorum* to the sun rising on Petrisberg (a hill probably consecrated to Mars) during the first days of March and mid-October would not have been accidental. Instead, it seems to be the result of a deliberate decision by the Roman and *Treveri* authorities to match the orthogonal layout of the city with the beginning and end of the “war season” according to religious, military and astronomical criteria. A very different matter is to propose that one of these two moments was the *dies natalis* of *Augusta Treverorum*, a difficult issue to resolve in the current state of the sources.

In this sense, Goethert (2003) raised the possibility that the *dies natalis* of the city was the *dies natalis* of Augustus, that is, September 23<sup>rd</sup>. This would have determined the orientation of the urban grid to the dawn of that day. This approach, developed theoretically without measurements of any kind, was rejected by Morscheiser-Niebergall, who argued that the orientation of *Augusta Treverorum* followed only geomorphological criteria (Morscheiser-Niebergall, 2009). While the application of these criteria should not be ruled out, measurements taken *in situ* on certain Roman public buildings revealed that cosmological principles had decisively influenced the orientation of the city that would not have been determined (as proposed by Goethert) by the birthday of Augustus, but by the opening and closing ceremonies of the “war season” consecrated to Mars.

The choice of Mars (and, thereby, the choice of dates to which the urban fabric was oriented), in addition to responding to religious reasons related to military activities, may have been prompted by three main reasons. First, the existence since Pre-Roman times of a profoundly martial ideology with which the *Treveri* identified, and which recognized by the rest of the Gauls and even Rome itself. Secondly, the desire of the *Treveri* authorities to legitimize their position through the public acceptance of political and military values supported by Augustus and personified by Mars as *Pater* and *Ulltor*, that is, as found-

er of the *nomen Romanum* as father of Romulus (Velleius Paterculus 2, 131), and as tutelary deity (with *Venus Genetrix* and *divus Iulius*) of the gens *Iulia* (Ovid, *Ars Amatoria*, 1, 203-204; *Tristia*, 2, 295-296; *Fasti*, 5, 549-598; Suetonius, *Caesar*, 6, 1). And thirdly, the interest in making Mars the main god of the colony due to his apotropaic and protective qualities as *custos civitatis* or *custos urbis* against any external threat (Scheid, 1992).

It is not surprising that three centuries later, when Constantine stayed in Trier, Mars (with helmet, spear, *chlamys* and/or shield) was chosen as the main allegorical figure for the bronze coinage issued in *Augusta Treverorum* with the inscription MARTI PATRI CONSERVATORI or MARTI PATRI PROPUGNATORI (e.g., *Roman Imperial Coinage*, VI, 725, 862-864, 896-897).

### 5.1.1. The *Lenus Mars* Temple Complex

The Roman orientation of the urban grid of *Augusta Treverorum* contrasts sharply with the syncretic character of the orientation of the temple consecrated to *Lenus Mars* on the western outskirts of the city. The main cult building was oriented towards dawn on November 1<sup>st</sup> and towards the sunset at the summer solstice. The choice of these dates, which belong to different religious and symbolic spheres, could be an indication, as the name of *Lenus Mars* suggests, of a process that was agreed and sanctioned by the Roman authorities for cultural survival, tolerance and syncretism, which would have allowed the *Treveri* authorities to establish a bond of kinship with Rome while safeguarding their local identities.

This Celtic orientation towards the sunrise on November 1<sup>st</sup> (the beginning of the season and of the whole year) would be in line with several other dates already studied by our research group in different parts of Gaul (Lyon: García Quintela and González-García 2014; Bibracte-Autun: García Quintela and González-García 2016; see also González-García *et al.* this volume) and Spain.

Moreover, the extramural location of the sanctuary would be analogous to that of the so-called Janus temple in *Augustodunum* (Autun, France). However, this temple is facing the mountains where Bibracte is located, and is orientated towards sunset on the days of the above mentioned “war season”. Also, the orientation of *Augustodunum* changes from beginning of season to solstitial, but the orientation of some of the most remarkable elements in Bibracte is towards the beginning of season dates. We can see a possible parallelism emerging, where an analogous process of syncretism is present between the Roman and Aeduan population in *Augustodunum* to the situation in *Augusta Treverorum*.

## 5.2. The orientation of *Ara Ubiorum*

In the case of *Ara Ubiorum*, its equinoctial orientation seems to be in line with a number of other Roman settlements in Gallia, such as *Vesunna* (Perigueux), *Ruscino* (Château-Roussillon, Perpignan) and *Augustonemeton* (Clermont-Ferrand) (González-García *et al.*, this volume). In the case of *Ara Ubiorum*, the choice of an orientation towards the sunrise on September 23<sup>rd</sup> (*ante diem VIII Kalendas Octobres*) may have been motivated by the desire of the Roman and Ubian authorities to coincide the *dies natalis* of this city (conceived as capital of the Augustan province of *Germania*) with the birthday of Augustus, a circumstance that has been suggested (for example) in the Augustan *municipium* of *Segobriga* in Spain (Abascal and Almagro-Gorbea, 2012).

Indeed, September 23<sup>rd</sup> was an important feast day of the Roman liturgical calendar, possibly established as *dies ferialis* by Augustus himself. This appears in the *fasti publici* (as in the case of the *Fasti Pinciani*, *Fasti Palatii Urbinate*, *Acta Fratrum Arvalium*, *Fasti Maffeiani*, *Fasti Vallensis*, *Fasti Pighiani* and *Fasti Philocali*) and the *ferialia* (such as the *Feriale Cumanum* and *Feriale Duranum*).

In addition, a series of texts and epigraphs document the celebration of ceremonies and games in honour of Augustus, as well as offerings, during this date both in the eastern and western provinces. In this respect, a decree passed between 27 and 11 BC in the Greek city of Mytilene reports on the granting of “divine honours” (*isotheoi timai*) to the emperor, the construction of a temple, the creation of a cult identifying Augustus with *Zeus Olympios* and the monthly and yearly celebrations held in his honour during the *dies natalis* (*Inscriptiones Graecae ad Res Romanas pertinentes*, IV, 39). On the other hand, around 19 BC Athens approved a decree on the celebration of the birth of Augustus, establishing similar sacrifices for the emperor to those made during the festival of Apollo (*Supplementum Epigraphicum Graecum*, XVII, 34). In connection with these celebrations, but from Philadelphia (Lidia), an epigraph dated AD 40 shows that a local family paid the expenses as a result of Augustus’ *dies natalis* celebration (*Inscriptiones Graecae ad Res Romanas pertinentes*, IV, 1615). However, this religious behaviour was not confined to the eastern territories of the Empire (which were familiar with the cult of the Hellenistic rulers), but was widespread in Italy and in other provinces of the West. According to Dio Cassius (54, 26, 2), in 13 BC the *praetor Iullus* organized *ludi circenses* in Rome

for the birthday of Augustus. Two decades later, according to this author, Tiberius and Germanicus planned a horse race in AD 11 at the end of their campaign in *Germania* to commemorate the *dies natalis Augusti* (Cassius Dio, 56, 25, 2-3). The feast, after the death of Augustus in AD 14, had to be celebrated in Rome with games similar to those established in honour of *Mars Ultor* (*ludi Martiales*) (Cassius Dio, 56, 46, 4).

Another, possibly complementary type of celebration to this was to hold *immolationes* and *supplicationes* to Augustus in his different aspects (*genius Augusti*, *numen Augusti* and *divus Augustus*) on 23 and 24 September. This practice is attested in *Narbo Martius*, where an epigraph commemorates the consecration of the *ara numinis Augusti* in AD 11 and prescribes the individual sacrifice of a victim by three *equites Romani* and three freedmen on September 23. Furthermore, they had to pay for incense and wine on September 24<sup>th</sup> for the *supplicationes* that the *coloni et incolae* had to carry out to the *numen Augusti* (*Corpus Inscriptionum Latinarum*, XII, 4333). A similar procedure is attested in *Forum Clodii* in AD 18, where two victims should be sacrificed on the *ara numinis Augusti* for 23 and 24 September (*Corpus Inscriptionum Latinarum*, XI, 3303).

Based on the amount of testimonies, the political and religious significance of September 23 as *dies natalis Augusti* is quite clear. This importance is further emphasised if we consider that in 9 BC, the Greek cities of the Roman province of *Asia* set this day as the beginning of the year and the “beginning of all good things.”

Therefore, we believe that obtaining September 23 on the basis of the measurements and calculations is not the result of chance, but is the consequence of a planned intention to coincide the orthogonal urban layout of *Ara Ubiorum* with dawn on Augustus’ birthday, a fact that provides a lasting testimony of *pietas* and *fides*, with the altar used as a central place of worship and meeting point for all of the Germanic *populi* on this day until the Varian disaster. It would therefore be consistent with this interpretation that the *ara* were part of the eastern façade of the city in an open area facing towards *Germania* and in line with the *forum*. The fact that the first rays of the sun every September 23<sup>rd</sup> aligned with the religious and political areas of *Ara Ubiorum* would have given the whole complex a theatrical effect full of symbolism, creating a prodigious vision attributable to the manifestation of the *numen* of Augustus.

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