

Ritual time: the seasonal calendar and religious festivals in Archaic and Republican central Italy

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Abstract: Time, place, and the rhythm of the seasons, essential constituents of ancient ritual, collaboratively shaped and channeled the experience of religious performance. Focusing on agricultural and civic time reckoning, this article investigates the orientations of the monuments at the extramural Sanctuary of the Thirteen Altars at Lavinium and their coordination with viticultural activities amid the shifting social and religious circumstances of the 6th and 5th c. BCE. The article will argue that the 6th- and 5th-c. altars were aligned in such a way as to face sunrise at a particular location on the horizon on two very particular days in the seasonal year. The altars at Lavinium, playing an important role in the emerging urban community's economic life, will be shown to be themselves a form of agentic seasonal timekeeping that closely determined the integration of local agricultural, religious, and economic practices.

Keywords: religion, ritual, wine, Latium, Lavinium, time, calendar, urbanization

Introduction: time – reckonings, recordings, experiences

Natural time mattered. The rhythms of earth and sky were essential constituents of ancient ritual, offering a conceptual framework for shaping and channeling the experience of religious performance and – most practically – for anchoring agriculture and its festivals to the cycles of the seasonal year. The privileging of particular seasonal recurrences provided religiously authorized coordination for economically crucial communal events and practices. If, then, time was so important for religion, for its gods, and for peoples and places, how do we begin to make sense of the material structuring of this temporal aspect of ritual practice?

In this article, I will show how the sacrificial altars at the Sanctuary of the Thirteen Altars in Lavinium were deliberately oriented to specific solar events recurring on specific days in the annual course of the seasons in order to signal the start and celebration of particular viticultural activities, in response to the changing social and religious circumstances of the 6th and 5th c. BCE. The article will begin with an introduction to some basic conceptions of time and seasonal calendars, followed by an explanation of methods (and software) adopted from the field of archaeoastronomy; it will then move to a detailed exploration of the architecture of the 6th-c. BCE altars and the categorizations of the types and functions of the archaeological finds excavated at these altars, highlighting their particular connection to wine. The final sections of this article will turn to a briefer, complementary discussion of the second construction phase at the site and its connection to a communal wine ritual in the 5th c. This article will ultimately show how the altars and their specific orientations, along with the marked viticultural character of the associated archaeological finds, were themselves a form of ritual, seasonal timekeeping that closely determined the way local agricultural, religious, and economic practices were integrated for one particular emerging community.

Time and timekeeping: calendars and seasons

In early Italy, an annual “calendar” was experienced as a series of somewhat movable festivals tied to the cycle of the seasons.¹ Religious authorities in different places would determine the timing of the communal festivals specific to their local seasonal circumstances, basing their judgments, at least partly, on some degree of astronomical knowledge and observation. For early Italy, then, calendars were decidedly local and place specific, though with, of course, certain commonalities.² Even with some underlying cognate aspects, the particular character of the lived experience and reckonings of time would necessarily depend on who was experiencing what and arguably, most of all, on the *where* of the occurrence.

If place is so important to ritual time, and if calendars in this period in Italy were not conceptually or materially “fixed,” then the “repeated cycles of various celestial bodies” would have provided the necessary “temporal markers of excellent reliability.”³ This attention to stellar and solar phases creates, in effect, “seasonal calendars,”⁴ methods of agronomically effective timekeeping that conveyed the rhythm of the year not by numerical dates in a fixed, material calendar but rather by linking recurring festivals and agricultural seasons with places on the horizon and celestial events. At Lavinium, as this article will argue, we see just this kind of entanglement of regularly repeating human and natural phenomena: monumental emplacement, religious festival, and agricultural harvest and processing, all contingent on the close correlation between the course of the seasonal year and the annual cyclical passage of the rising Sun along the horizon.

Ritual and the sky: archaeoastronomy models

Some early attempts at the archaeoastronomy of the ancient world have been criticized as “naïve” and “uncontextualized alignment studies,” insufficiently attentive to the human and material circumstances of time and place.⁵ In the last 10–15 years, however, integrated investigations of religious spaces, ritual practice, and archaeoastronomy of ancient Greece, Etruria, and Rome and the later Empire have come to play an important part in the larger study of ritual places and actions of the ancient world.⁶

¹ The subject of the Roman calendar has been written about expertly and extensively, and justice to the numerous magisterial studies on the subject cannot be attempted in the space of this article. See, for example: Rüpke 2011; Rüpke 2020b; Michels 1967; Hannah 2005; Degraasi 1963; Feeney 2007; Forsythe 2012; Humm 2005. For the calendars of early Italy, see Bernard 2023, chapter 5.

² Commonalities could include, for example, the March start date of the civic year; the coordination with the phases of the moon for organizing the days of the month; or even perhaps an early overall 10-month structure for the seasonal year.

³ Ruggles 2015a, 17.

⁴ Hannah 2005, 46. References in Greek and Latin agronomic literature highlight the importance of seasonal calendars. In Greece: Hes. *Op.* 479–80, 564–67, 663–65; Thuc. 5.20.1–2. In Italy: Varro, *Rust.* 1.28; Columella, *Rust.* 9.14.12; Ov. *Fast.* 4.913ff.; Vitruvius, *Vitr.* 9.6.3; Pliny, *HN* 18.226. For examples of calendars from the later Empire depicting agricultural tasks for each month, see Salzman 1981; Magi 1972; Mols and Moormann 2010; Foucher 1954; Van Limbergen and De Clercq 2021, table 15.2.

⁵ Boutsikas and Ruggles 2011, 56.

⁶ For Greece: Ruggles 2015a; Ruggles 2000; Boutsikas 2007–2008; Boutsikas 2007; Boutsikas 2015; Boutsikas 2017; Boutsikas and Ruggles 2011; Evans 2015; Evans and Berggren 2006; Hannah 2002; Hannah 2005; Hannah 2015. For Etruria: Pernigotti 2019 and bibliography therein;

Many of these studies situate analyses of, for example, temple alignments within a larger discussion about how and why specific social entities in particular social, cultural, and temporal contexts might have made their architectural dispositions as they did, taking “orientation data into consideration but only as one aspect of the range of available evidence.”⁷ Alignments of religious structures need to be considered not in isolation but in the context of cultural, historical, and geographical specificities, integrating material evidence, if possible, with textual or epigraphic testimony. It is just this more holistic, contextual approach that the present study takes as its model, offering a connected account of the orientations of the 6th- and 5th-c. BCE altars at Lavinium, the associated finds excavated at the altars, local and regional topography, relevant socioeconomic circumstances, and mythological traditions. Before we turn to this emplaced study of the altars’ orientations, we first need to look briefly at the architecture of the site itself and thoroughly understand how the numerical data for the orientations were obtained.

Sanctuary of the Thirteen Altars: construction history and methodology

The Sanctuary of the Thirteen Altars at Lavinium was first excavated in 1957, with continuous excavation during the 1960s by Ferdinando Castagnoli and Lucos Cozza, culminating in a two-volume report (*Lavinium I*, 1972 and *Lavinium II*, 1975). There have been sporadic excavation campaigns in the last 50 years, most recently with Stefania Panella’s work in 2004–5 and again in 2009.⁸

The 13 altars at Lavinium were built in four different construction phases from the 6th to the 4th c. BCE (Fig. 1). The first building phase, in the early 6th c. BCE, saw the construction of altars XIII, VIII, and IX, all at the same orientation. A 6th-c. structure adjacent to these first three altars, which may have served as a production or storage facility, had the same alignment as the 6th-c. altars.⁹ In the next phase of construction, in the mid-5th c. BCE, altars I, II, III, IV, and V were built at a distance of 8.22 m from altar VIII; these new altars shared a new orientation, a conspicuous divergence in alignment from that of the original altars. The next building phase, altars VI and VII, constructed in the late 5th to mid-4th c., returned to the orientation of the original first three 6th-c. altars. And finally, the construction of altars X, XI, and XII in the late 4th c., also at the original orientation, filled the gap between altars IX and XIII. There have been numerous scholarly attempts over the years to explain the significance of the sanctuary as, for example, a cult site dedicated to Venus or the Penates, or one in which each altar represents a city of the Latin League or stands in for a month of the calendar.¹⁰ This article will take a

Aveni and Romano 1994; Guarino 2011; Gottarelli 2003; Gottarelli 2013; Malgieri 2007; Potts 2015, 88–89; Malnati 2008; Sassatelli and Govi 2010. For Rome and the Roman Empire: Magli 2016; Magli et al. 2019; Magli 2015; Hannah 2019; Hannah and Magli 2015; González-García et al. 2019; Frischer et al. 2016; Frischer et al. 2017.

⁷ Boutsikas and Ruggles 2011, 56.

⁸ Panella 2012.

⁹ Panella 2012, 576–79; *Enea nel Lazio* 1981, 171; Moser 2022. The utilitarian structure seems to have been used for some kind of production activity, whether connected to the adjacent double kilns or to weaving, with the 200 loom weights found within (Moser 2022). For the loom weights, see Jaia 2022.

¹⁰ For a discussion of some of these theories, see Zevi 1993; Panella 2012; Torelli 1984b; Turcan 1983.

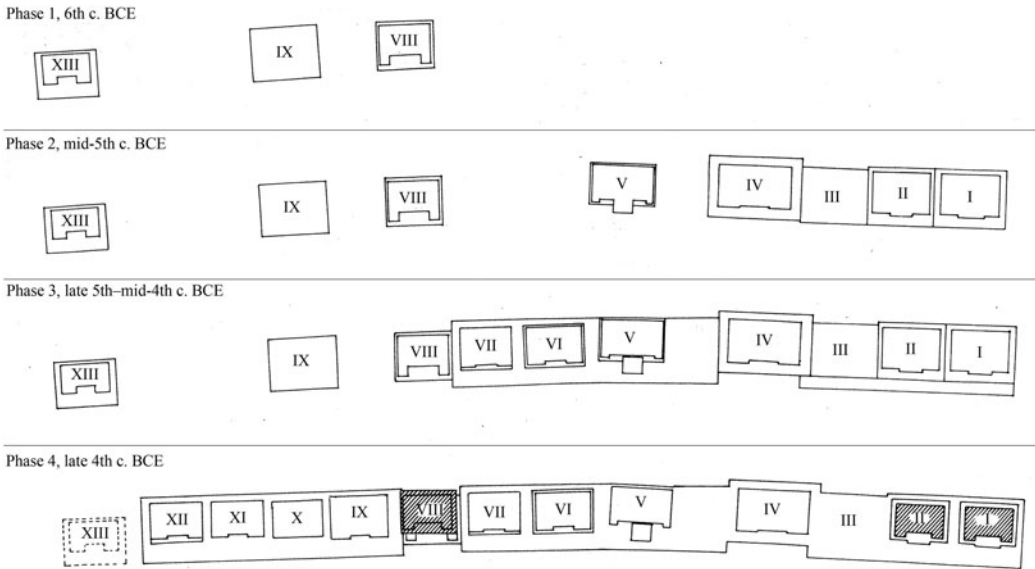


Fig. 1. Plan of the phases of the 13 altars. (After Enea nel Lazio 1981, modified by author.)

different approach and instead suggest a close correlation between the 13 altars and the celebration of a particular complex of agricultural and viticultural events.

Methodology

An accurate, geo-rectified plan of the sanctuary was created by a team from the British School at Rome in collaboration with the author in 2012 (Fig. 2).¹¹ The 13 altars are currently housed in a modern shed, thus precluding a survey using highly accurate differential global positioning system equipment (DGPS), which would require a direct signal from satellites. However, a detailed total station survey was completed, tracing the outlines of the foundations, bases, bodies, and moldings on each of the altars. These points were then tied into a DGPS survey of the landscape outside the modern shed, allowing real-world coordinates of the monuments to be accurately mapped and geo-referenced.

In the field, the foundations, bases, bodies, and moldings of each altar were surveyed by taking multiple points along the monument. When these data from the field survey were later imported into an ArcGIS database, azimuths of lines drawn between data points were calculated (“azimuth,” here and throughout this article, refers to the orientation expressed as a horizontal angle, in degrees, measured eastward from north; so, for example, the azimuth of North is 0°, East is 90°, Northeast is 45°, and so on).¹² Due to conditions in the field and the present robbed-out state of some of the extant altars, lines produced from the survey data were not always exactly straight and the points taken did not necessarily accurately reflect the form of the original monuments as they would have been constructed in the 6th–4th c. BCE. Therefore, a representative average was obtained by taking azimuths of three lines for each of the 13 altars: the northern, eastern, and southern lines formed where the platform of the altars meets the plinth, or torus, or echinus moldings of the altars

¹¹ Moser and Hay 2013.

¹² With huge gratitude to Aaron Gidding for the ArcGIS data calculations.

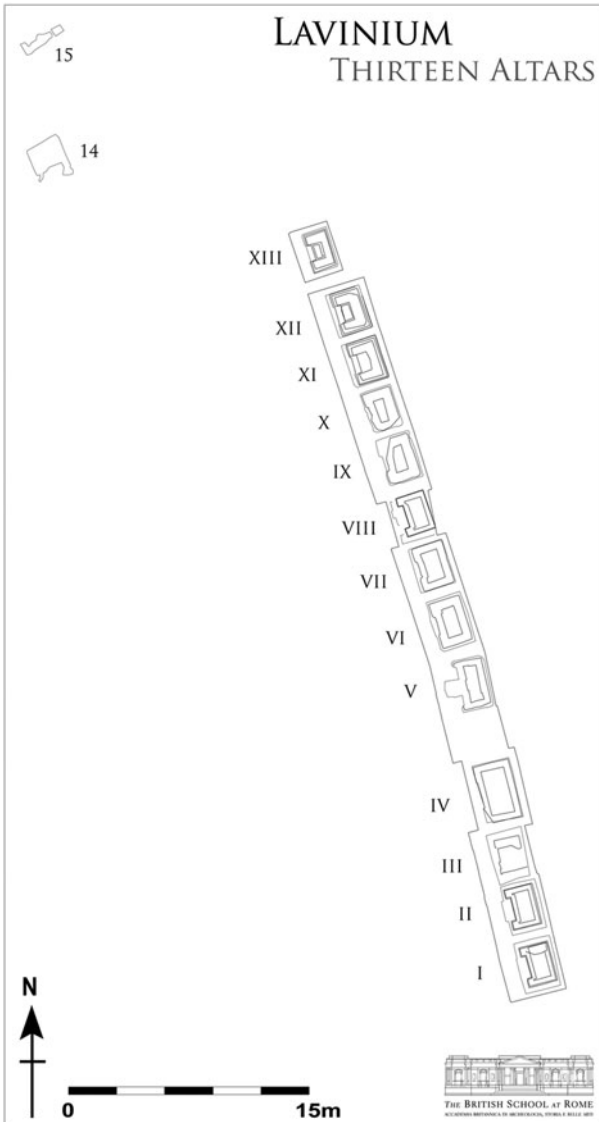


Fig. 2. Plan of Sanctuary of the Thirteen Altars. (After Moser and Hay 2013.)

(see Figure 3a–b for the positions of the data points).¹³ Ideally, for each monument, each of these three lines should share – directly or at a right angle – the same azimuth. Where multiple points were taken in the survey along one of these lines, resulting in multiple azimuth readings, the average of these readings along the line was computed. The numerical averaged azimuth for each altar was then computed from the average of the three lines.

¹³ The exception to this procedure was altar III, since its superstructure is no longer extant and all that remains is the setting line for its foundation. Three azimuth lines were nonetheless obtained (just as for the other 12 altars), but instead of using the lines formed by the meeting of the moldings with the platforms, measurements were made of the lines from the remaining northern and eastern parts of the robbed-out platform and from the remaining southwest segment of the foundation (as can be observed from the setting lines). Other data from this altar were errant due to the state of its remains, and these were the three most accurate lines attainable.

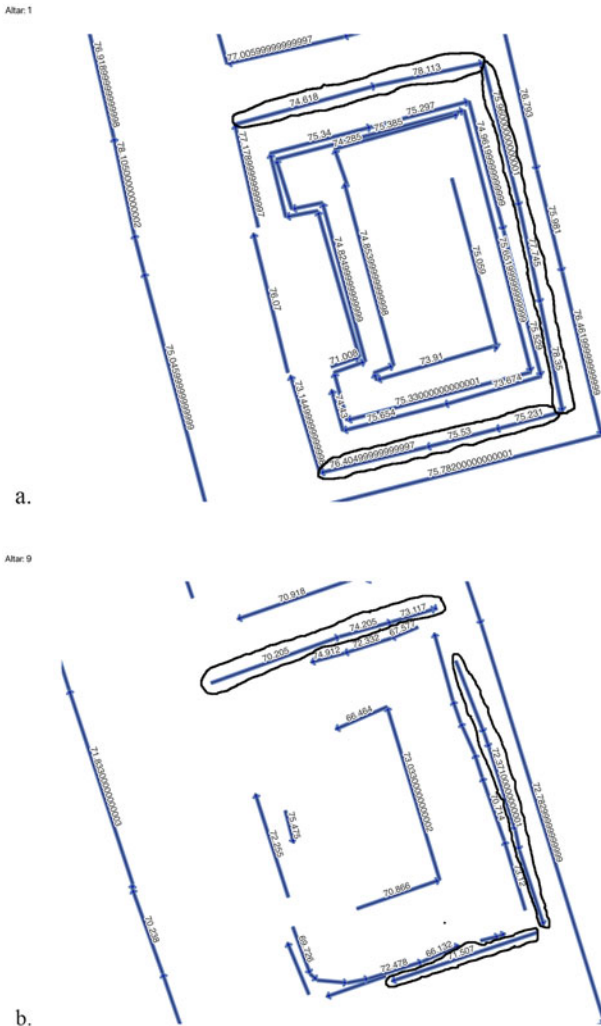


Fig. 3. Data point locations for (a) Altar I; (b) Altar IX. (Data from plan of Sophie Hay, generated by Aaron Gidding, 2022.)

The resulting final azimuth numbers for each altar were very close, ranging from 71.42° to 72.13° for altars VI–XIII, and from 76.03° to 77.36° for altars I–V. Finally, an average of the azimuths for each of the two phases of the altars was calculated, producing an average azimuth of 71.73° for altars VI–XIII and 76.86° for altars I–V. The investigation below (of both the orientations and the archaeological finds) primarily focuses on the first phase of the altars (those constructed in the early 6th c. BCE). The votive materials and orientation of the second phase of the altars are then brought into the argument as complementary support and explanation.

The averaged azimuth (71.73°) for the first phase of the altars, together with related geographical data for the location of the sanctuary and for the angle of elevation of the point in the azimuthal direction of the sanctuary’s horizon, was entered into *Stellarium* v. 23.2, a planetarium software, for the phase 1 representative year 575 BCE. *Stellarium* output data are arrived at by fine-tuning the input settings of an animated “skyscape” as viewed over the surface of a terrain by a user placed at eye height.¹⁴

¹⁴ Zotti et al. 2019, 189.

Dates and times were obtained from *Stellarium* for the twice annual (spring and late summer) sunrise at the orientation of the altars. The locational data – longitude, latitude, and elevation of the sanctuary, and the respective distance and altitude of the azimuthal horizon point – were obtained from Google Earth Pro (v7.3.6.9345) data and a DEM.¹⁵ The angle of elevation (the upward angle at which a viewer at the altars looking in the azimuthal direction would see the rising Sun cresting the distant horizon on the Alban Hills) was computed to be 1.86°. Taking into account the outputted apparent diameter of the Sun (radius about 0.26°) and employing *Stellarium's* default empirical corrections both for atmospheric effects and for irregularities over time in the Earth's rotation, the user can manually adjust the date and time inputs, thus obtaining the software's corresponding computed output for the estimated times and astronomical circumstances of the two days of the year when a viewer at the sanctuary's latitude, longitude, and elevation would see the upper limb of the Sun appear at a point on the horizon where the azimuth and the altitude of the Sun's center would coincide as closely as practicable with target azimuth, 71.73°, and altitude, 1.6°.

Plugins such as “ArchaeoLines,” which allows for an archaeological simulation to show azimuth indicator lines, have made *Stellarium* a popular platform for archaeological simulations.¹⁶ The software accepts user input of custom “background landscapes” – wide-angle, artificial renderings of the horizon topography – to create a simulation of how the horizon would have looked and been experienced from a particular viewpoint.¹⁷ I created such a horizon image for the latitude, longitude, and elevation of the site at Lavinium.

The sunrise results at Lavinium

With *Stellarium*, I was searching for the date of a sunrise as viewed in a particular direction from a particular location in a particular year.¹⁸ At the azimuth of the earliest, 6th-c. BCE group of altars (71.7°, rounded), these monuments are oriented to the Sun rising over a very particular point – 938 m in elevation on the Alban Hills, 27 km away (Fig. 4) – on a

¹⁵ N 41.656700° E 12.477734°, 61 m; azimuthal horizon distance 27 km, elevation 938 m.

¹⁶ See Zotti et al. 2019.

¹⁷ Andrew Smith's Horizon GIS tool (<http://agksmith.net/horizon/index.html>). See also Zotti and Wolf 2021, 65–78.

¹⁸ Sunrise, rather than sunset (*contra* Torelli 2018, 494–96) was an important time for religious rituals, allowing the full day necessary for religious performances (Ruggles 2015b; Belmonte 2015). Various later Latin texts portray sunrise sacrifices or ceremonies: to the Dea Dia (Scheid 2003, 88); or at the *Tubilustrium* festival (Rüpke 2011, 26–27 n. 25); or a marriage celebration (Juv. *Sat.* 2.133–35). Other authors suggest that there was an afternoon break following the morning sacrifice (Varro, *Ling.* 6.31; Macrob. *Sat.* 1.16.3). In Italy, sunrise exigencies may explain the orientation of sacred and secular structures (for the Ara della Regina, see Bagnasco et al. 2013; for the Roman Forum, see González-García et al. 2022; for Roman towns, see González-García et al. 2019; for Marzabotto, see Gottarelli 2013; Sassatelli and Govi 2010). And the importance of augury and the *auguraculum*, evident both in texts (Cic. *Div.* 1.107–8; Macrob. *Sat.* 1.3.7; Dion. Hal. *Ant Rom.* 2.6) and in architecture (Sassatelli and Govi 2010, 27–30; Gottarelli 2003; Gottarelli 2013; Mignone 2016; Torelli 1996), further emphasizes the connection between orientation and sunrise for religious ceremonies (for augury, see Driediger-Murphy 2019). Cicero (*Div.* 1.30–31) even links augury with the layout and creation of a vineyard; winegrowing, then, in some way, may have been particularly related to observing the movements of the sky.

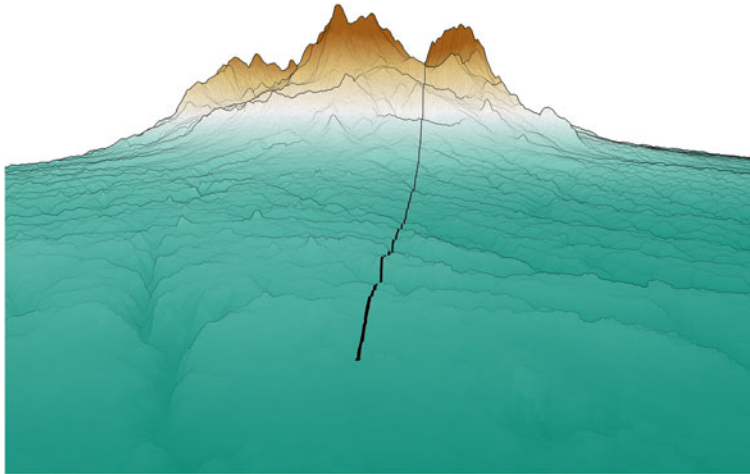


Fig. 4. Digital elevation model (DEM). Azimuth line from the Sanctuary of the Thirteen Altars to the Alban Hills. (Drawing by Aaron Gidding, 2022.)

very particular day in late summer of the seasonal year. Using the ArchaeoLines plugin, we can note to an appropriate level of precision the intersection between the azimuth line (71.7), the altitude line (1.6), and the line of declination of the path of the Sun (Fig. 5).

This particular sunrise, with the upper limb of the Sun appearing over the horizon at this particular azimuth and altitude, occurs on August 22, 575 BCE in the (astronomers' proleptic) Julian calendar (Fig. 6).¹⁹ This date does not neatly translate to August 22 in our Gregorian calendar. Therefore, in order to compare a proleptic Julian date with the Julian dates of festivals as reported in Late Republican and Augustan period calendars and texts, the proleptic dates can be given in relation to equinoxes or solstices. Thus, proleptic August 22 in 575 BCE would have occurred 38 days before the astronomical autumnal equinox on September 29.²⁰ Following Columella and Pliny, as well as agricultural calendars of the 1st c. CE,²¹ I take the conventional Augustan-era calendar autumnal equinox date to be September 24 (VIII Kal. Oct.).²² And taking this September 24 as the autumn equinoctial date, the equivalent Augustan-era calendar date of the sunrise of 38 days earlier

¹⁹ From Google Earth Pro v.7.3.6.9345: distance (27 km) and altitude (938 m) of horizon at azimuth 71.7°; elevation difference from sanctuary (877 m) (938 – 61 m), computed angle of elevation of Sun's upper limb 1.86°; corresponding target altitude of center of Sun 1.6° (1.86 – 0.26). *Stellarium* v. 23.2 output for the Sun at location, N 41.656700° E 12.477734°, 61 m; and at time, -574, 8 /22, 4:26:35 UTC+00:00, ΔT 4h46m06.6s, σ(Δ T) 458.2s: Az./Alt.: 71.6712°/1.6183° (apparent); HA/Dec: 17.25353h/14.6924° (apparent); Ecl. long./lat. (on date): 141.6823°/-0.0009°; Apparent diameter: 0.53187°.

²⁰ According to *Stellarium*, the equinox falls on 9/29 in 575 BCE. Astronomical Autumnal Equinox: ecl. long./lat. (Date -574 9/29 18:33:04): +180.0000°/-0.0023°00.

²¹ Columella, *Rust.* 11.2.66; 9.14.11; Plin. *HN* 18.74. This September 24 date is also listed as the autumnal equinox in the *Menologium Rusticum Colotianum* and the *Menologium Rusticum Vallense*, both dating to the period from 19 to 65 CE (Salzman 1990, 170; Degraasi 1963, 284–91).

²² For a discussion of the dating of the equinoxes, see Nothaft 2018, 31; González-García and Belmonte 2006. *Stellarium* reports the astronomical autumnal equinox (ecliptic longitude 180.0000) as occurring on September 25 in all of the years from 8 BCE to 4 CE – the years covering the period open to scholarly controversy over when the Augustan reform of the Julian calendar was implemented. For the reform, see Feeney 2007.

Ritual time

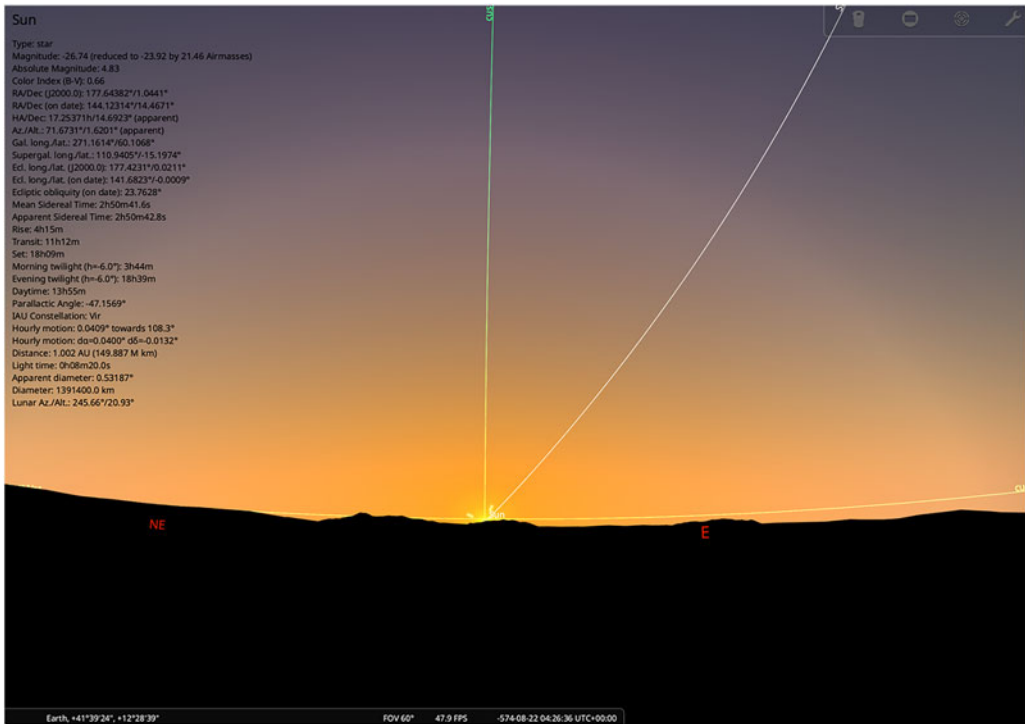


Fig. 5. *Stellarium* sunrise on August 22, 575 BCE (proleptic) Julian with *ArchaeoLines* plugin. The vertically disposed curve represents the projection of the azimuth line (71.7°) onto the celestial sphere; the horizontally disposed curve represents the projection of the altitude line (1.6°); and the intermediate curve represents the line of declination of the path of the Sun.

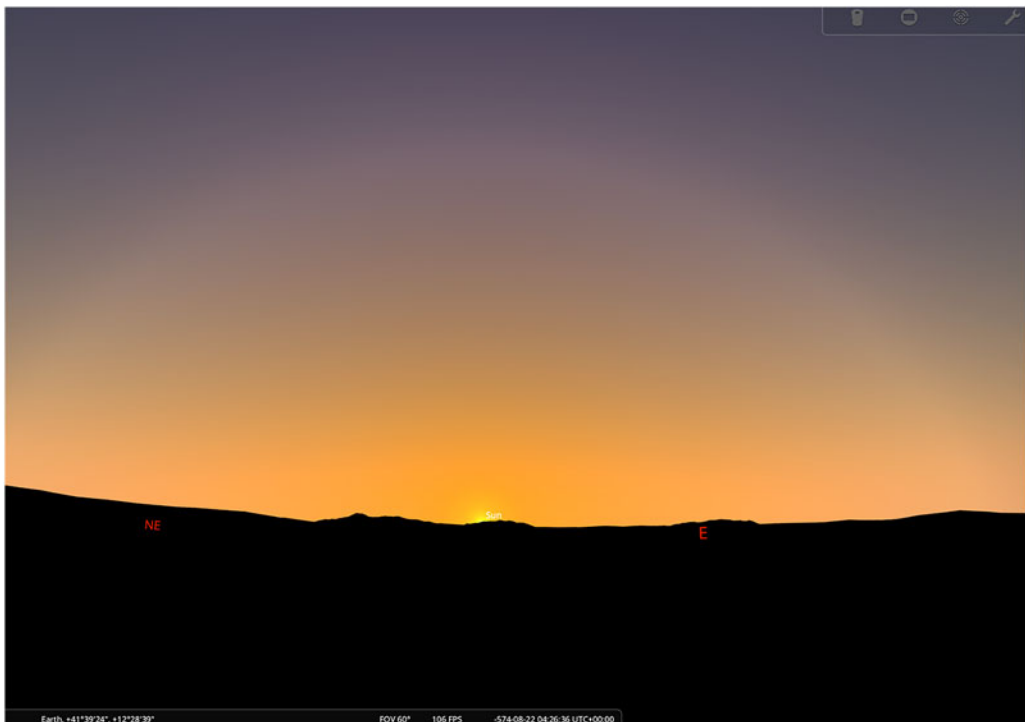


Fig. 6. *Stellarium* sunrise on August 22, 575 BCE (proleptic) Julian.

would be August 17. Strikingly, this date, when translated from our *Stellarium* results into the equinoctial date conventions of the Julian calendar as reported in the agronomic literature, differs by only two days²³ from the date, August 19, of an important traditional agricultural festival noted in later Republican and Imperial *fasti* and texts: the *Vinalia Rustica*.²⁴

The Vinalia Rustica

Traditionally, on August 19 (pre-Julian and continuing to the Julian period), the *Vinalia Rustica* celebrated (in some way) the start of the autumn harvest season, culminating eight months later with the *Vinalia Priora* in April (the first tasting of the new wine, discussed later in this article).²⁵ There has been much scholarship on both what this August festival actually entailed and to which deity it was dedicated, alternatively to Jupiter, Liber, or Venus.²⁶ Olivier de Cazanove argues cogently that the autumn harvest consisted of two separate rituals: the first, a fixed festival (*Vinalia Rustica*), ensuring the prospering and protection of the grapes from bad weather in their final phase of maturation; and the second, a movable festival, the actual beginning of the harvesting of the grapes (*auspicari vindemiam*), depending variably on the local weather, the location of the vines, or the type of grape and the desired type of wine.²⁷

We cannot be sure exactly when the predecessors of the canonical Roman *Vinalia Rustica* and *Vinalia Priora* were first introduced to central Italy, but we have some evidence that suggests the early importance of this wine festival typology to the peoples of Latium. Our earliest secure calendar dates for the *Vinalia Rustica* and *Priora* come from the Late Republican *Fasti Antiates*. We could reasonably argue, however, for a canonical *Vinalia* as early as the mid-Republic:²⁸ Jörg Rüpke maintains that the *Fasti Antiates* was modeled “down to the last detail” on the calendar of M. Fulvius Flaccus; the *Fasti Antiates* thus follows a model from at least the 4th c. BCE.²⁹

We can also look to later texts both for the importance of wine more generally to the region and for the celebration of wine festivals in connection with traditional lore of the

²³ While two days may to some appear to be a wide discrepancy, present-day Gregorian calendar dates for the September equinox, for example, can vary normally by two days and, at times, by as much as four days.

²⁴ Degrassi 1963, 497–99.

²⁵ While the calendar at Lavinium *was* arguably place specific and distinct from the calendar at Rome, the celebration of the *Vinalia* was most likely a regionally widespread holiday, as attested in a variety of local calendars and in a range of place names connected to the *Vinalia* by different authors (Varro, *Ling.* 6.16; Ov. *Fast.* 4.872).

²⁶ For what the festival might have entailed, see De Cazanove 1988; De Cazanove 1995; Coarelli 1995; Braconi 2012. For a discussion of the *Vinalia*'s deity, see De Cazanove 1988, 246–48; Degrassi 1963, 446, 508, 521–22; Montanari 1983.

²⁷ De Cazanove 1995, 216, 218; Braconi 2012, 296.

²⁸ The two *Vinalia* festivals' associations with mid-3rd and 2nd-c. BCE temple dedications may also support a mid-Republican date (Degrassi 1963, 447, 498; Ov. *Fast.* 4.865ff.; Plut. *Quaest. Rom.* 45; *Fasti Vallenses*; Festus 322L).

²⁹ Rüpke 2011, 108. Rüpke (2011, 65) emphatically rejects Mommsen's influential claim that the festivals written in large letters on the *Fasti Antiates* represent 45 *feriale* dating to an Archaic calendar (see Michels 1967, 207–20 for a recapitulation of these arguments). Also see Michels (1967, 132–44) for a discussion of whether the *feriale* in the *Fasti Antiates* could date back to the 5th c. BCE.

Lavinian region.³⁰ For example, a number of later ancient authors confirm that wine was grown around the area of Lavinium at some point in antiquity,³¹ and evidence from a recent botanical study in the area shows that vines were cultivated there.³² More immediately related to the *Vinalia*, a number of aetiological myths associate Aeneas and his Etruscan antagonist, Mezentius, with the origins of the festival.³³ Olivier de Cazanove interprets (rightly, I believe) the oft-noted confusion of the two seasonal *Vinalia* reported in Latin literature to mean that both Mezentius's reference to his right to the grape on the vine and Aeneas's vow to Jupiter took place not on April's *Vinalia Priora* (as Ovid reports)³⁴ but rather on August's *Vinalia Rustica*, before the harvesting of the grapes, promising Jupiter the wine that *would* come from the imminent harvest in the following weeks.³⁵ Therefore, at least in the writings and minds of the early Empire, there is some idea (albeit highly mythologized) that a harvest-time *Vinalia* of some kind was an established ritual at the time of legendary Aeneas. And, indeed, a core of historicity to these legends linking Mezentius and wine ritual is materially evidenced by an Etruscan impasto calice (a large-handled, footed wine cup) from the second quarter of the 7th c. BCE, from Caere, with *Mezentius* inscribed on the body.³⁶

Archaeological finds at Altars XIII, IX, and VIII (Stratum D)

If the 6th-c. altars at Lavinium are indeed oriented to a sunrise that marked the celebration of the *Vinalia Rustica*, then we would expect there to be finds at these early altars associated with the character of this specific festival. The following section will investigate the types of finds excavated in the stratum associated with these altars. The discussion will then move to a brief comparison with excavated material from two contemporary nearby sanctuaries, Satricum and S. Omobono, to see how what we find at Lavinium is distinct from neighboring sacred deposits.

In the late 1960s, the area around each altar was carefully excavated, and the finds that could be associated with each stratum were documented in detail. Stratum E is the pre-altar phase of the area and Stratum A is that of the last use of the structures.³⁷ The 6th-c. stratum corresponding with the earliest phase of the altars is Stratum D. For the most part, material from each stratum was found at all of the built altars or in the unbuilt spaces surrounding yet-to-be-constructed altars, suggesting the sanctuary's continuous use over the three

³⁰ Torelli (1984a and 1984b) intriguingly comes to the same conclusion that the Sanctuary at Lavinium (what he calls La Madonnella, after the nearby church, or the *Aphrodision*) was connected with the *Vinalia Rustica* on August 19. However, I do not follow his arguments, and the approach and methods I employ here are quite divergent from how he arrives at this date.

³¹ Tchernia 1986, 324–25. For the Aminean variety of wine grown in the region, see Columella, *Rust.* 3.2.7, 3.9.2; Plin. *HN* 14.5.41.

³² Rocchetti et al. 2022. I thank Giulia Rocchetti and Flavia Bartoli for detailed information from their paleobotanical survey in the area.

³³ Macrob. *Sat.* 3.5.10; Festus 322 L; Ov. *Fast.* 4.891–94; Plut. *Quaest. Rom.* 45; see also Coarelli 1995, 199–200.

³⁴ *Fast.* 4.891–94.

³⁵ De Cazanove 1995, 223, citing Plin. *HN* 14.88. See also Menichetti 2002.

³⁶ Louvre Museum CP 3414 (<https://collections.louvre.fr/en/ark:/53355/cl010258861>). See also Briquel 1989.

³⁷ Castagnoli 1975.

centuries. The exceptional thoroughness of the excavation record allows us to study the finds related to specific altars and strata and to distinguish patterns and anomalies.

There is a degree of consistency within the assemblage from all phases at the sanctuary. The finds throughout all strata are of quite common types and fall into categories of what we would generally expect in Late Archaic and Republican sanctuary deposits throughout central Italy. The majority of the items belong to a familiar range of basic types – domestic ceramics, terracotta statuettes, bronze figurines, and anatomical votives. However, within this overall pattern, at the group of the first, 6th-c. altars, there is something more particular: a great prevalence of finds strongly connected with wine drinking. In Stratum D, fragments representing 186 Italic ware vessels have been recorded in local bucchero, depurated or partially sandy clay, and impasto. Out of these vessel fragments, two types conspicuously predominate: the bucchero kantharos (20%) (a ceremoniously high, two-handled wine drinking cup) and the impasto olla, a jar (20%) (Fig. 7). The Lavinian kantharoi are largely bucchero (Fig. 8) and belong to Rasmussen Type 3A (Ramage Type 5A),³⁸ one of the earliest forms of kantharos, dating to the last quarter of the 7th c., with a low ring foot, handles that are round in section, and a carination (without notches).³⁹ As for the olle, the excavators at Lavinium report fragments of two preponderant impasto olla types from Stratum D: the globular olla, often in impasto rosso-bruno, and the paracylindrical (or ovoid) olla (Fig. 9a–b).⁴⁰

In addition to the local pottery in Stratum D, fragments of imported vessels were also found. These foreign wares were unique to this stratum (with the exception of one red-figure vase found in Stratum C). Complementing the emphasis on drinking evident in the domestic vessel types, out of the 41 imported vessels in this stratum (which make up 18% of Stratum D's total assemblage), only six are *not* cups.⁴¹ The variety of imported cups found – Siana cups, Lip cups, Eye cups – as well as two *dinoi* (mixing bowls for wine drinking), reinforces the connection of Stratum D's ceramic assemblage to wine. If we combine the data of the imported vessel types with the assemblage data from the domestic forms, then the overall assemblage of imported and domestic finds in Stratum D shows an overwhelming majority of cups (of all types) (38%), strongly suggesting the connection of wine drinking with the religious practices of the early sanctuary (Fig. 10). A lack of residue testing means we cannot know for sure if these cups held wine during the ritual, but given the functionality and full size of the vessels, we can arguably consider these deposits as objects that would actually have been used, perhaps as part of a communal celebration or as vessels for libation, and not simply buried.⁴²

Wine: the kantharos and the olla

At the time of the first phase of the altars, in Etruria especially and throughout central Italy, wine drinking and its representations asserted and affirmed “a politico-cultural

³⁸ Castagnoli 1975, 85 n. 1; Ramage 1970; Rasmussen 1979.

³⁹ Ramage 1970, 28, figs. 14.1 and 19.1, 3; Rasmussen 1979, 102–3.

⁴⁰ Castagnoli 1975, 87. Guaitoli (1975, 429) states that the globular olla was “very common in Lavinium in the 6th and 5th centuries BCE.” For the globular shape, see Bartoloni et al. 2012, 216–18, 236–38; Colonna 1963–1964, 12. Carlo Regoli (personal communication, 2023) confirms the presence of both types of olle at Lavinium and states that, in general, the globular shape appears somewhat earlier than does the cylindrical, as part of a stylistic progression.

⁴¹ For the catalogue of these imported vessels, see Castagnoli 1975, 361–94.

⁴² For vessels from funerary banqueting deposits, see Riva 2021, 222.

Ritual time

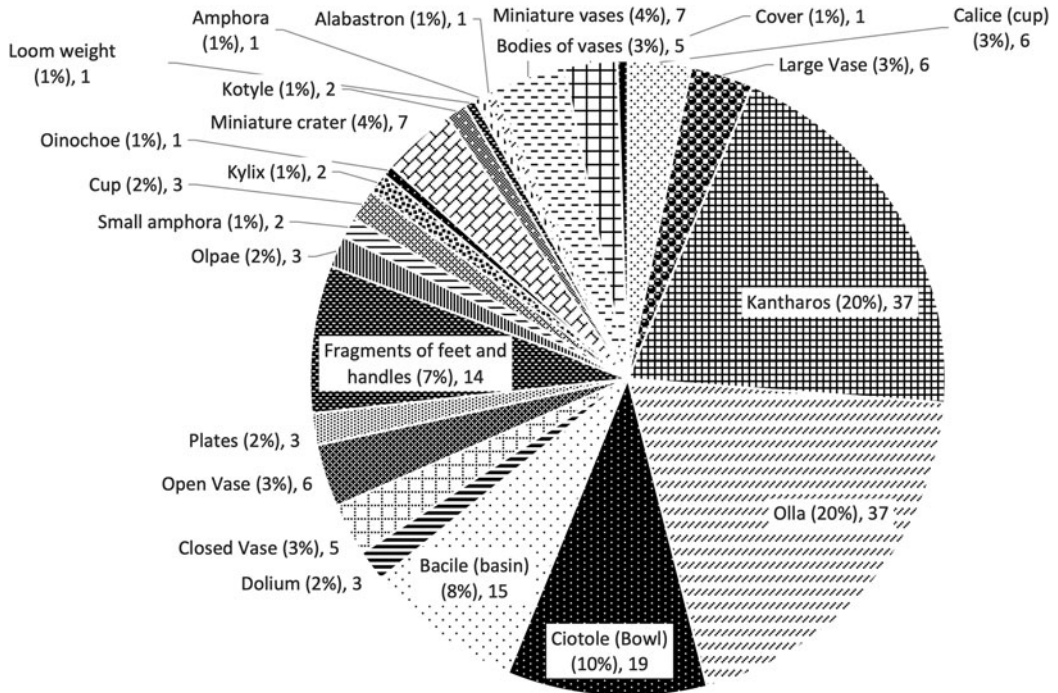


Fig. 7. Chart of local vessels in Stratum D. (Chart by author.)

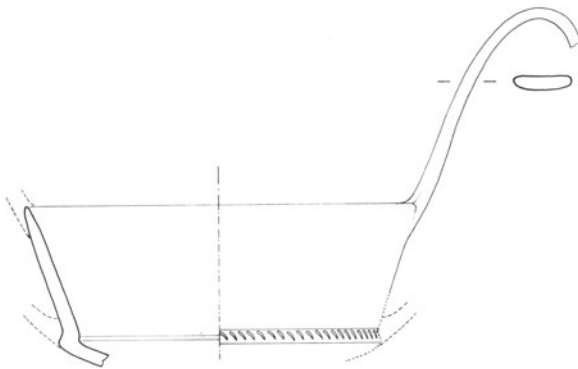


Fig. 8. Kantharos from Lavinium. Dimensions: 7 x 5.2 cm. (After Castagnoli 1975, cat. no. 230.)

identity” or “social standing”;⁴³ this was a period when a “codification of ritualised drinking” at tombs and sanctuaries coincided with a “specialised understanding of the divine.”⁴⁴ In the 7th and 6th c. BCE, with an increase in the cultivation, processing, and exchange of wine connected to social status, central Italy saw the end-use of wine-drinking vessels moving from aristocratic, elite, personal gift-giving and funerary practices to, in the 6th c., objects of non-elite donatives to deities in urban or emporia sanctuaries.⁴⁵ Wine during this period plays a prominent role in cultural interactions, facilitating the exchange of goods and ideas both intra- and inter-regionally.⁴⁶

⁴³ Riva 2017, 254.

⁴⁴ Riva 2023a, 322.

⁴⁵ Smith 1996, 88; Riva 2017, 239; Riva 2010, 217–19.

⁴⁶ Izzet 2004; Riva 2010; Riva 2017.

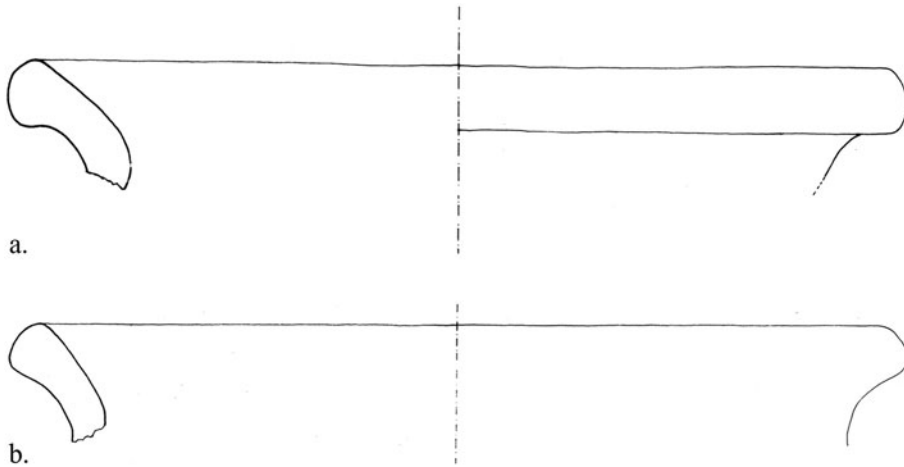


Fig. 9. Globular olle from Lavinium ((a) after Castagnoli 1975, cat. no. 125, dimensions: 3.5 x 3.2 cm; (b) after Castagnoli 1975, cat. no. 357, dimensions: 5.5 x 3.3 cm).

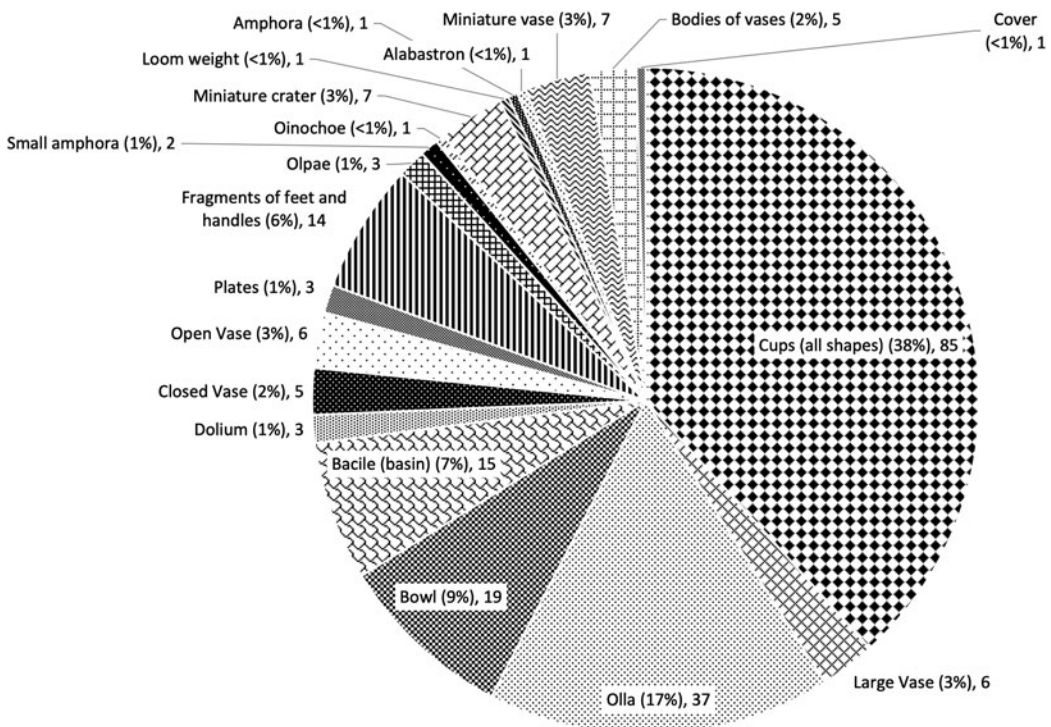


Fig. 10. Chart of Stratum D with imported vessels and cups. (Chart by author.)

Certain vessels – like the kantharos and the olla found in Stratum D at Lavinium – were especially connected to wine drinking and emblematic of the practice’s social significance in 6th-c. society. We will see later in this article how other shapes and sizes of vessels connected to wine were emblematic of the social circumstances of the 5th c.

The Bucchero kantharos

The high-handled kantharos in particular played a unique part in the material expression of elite social relations in urbanizing central Italy – a banqueting and ritual vessel set apart, in form and in representation, from low-handled types (kylikes, for example). Kantharoi appear in Latium, in different varieties, as early as the end of the 8th c. BCE, and later in Etruria, in the first half of the 7th c. BCE, commonly in tombs, and seemingly distinct from any related development in the Greek world.⁴⁷ These vessels were found occasionally in wealthy funerary contexts of the 6th c., as they had been, in greater quantity, in the previous century; in this later period, however, they were more often encountered as votives in urban sanctuaries such as at Tarquinia,⁴⁸ or in images of non-funerary banqueting.⁴⁹

Quite possibly preceding and influencing the Attic kantharoi of the later 6th c.,⁵⁰ the Italic bucchero kantharos was a vessel reserved for special, highly social occasions. Its high handles, for example, demanded skilled craftsmanship (particularly in the case of a thin, fine ware, such as *bucchero sottile*), and it has been argued that these handles worked to accentuate the “convivial” associations of the cup, calling for it to be passed from one diner to the next.⁵¹ In the 6th c., the Italic kantharos, a “prestige” ware,⁵² was often exported along with amphora, thus becoming a vessel with both a “transactional value” and a ritual value.⁵³

The 6th-c. olla at Lavinium

Just as the assemblage of bucchero kantharoi at Lavinium conveys the elite status of wine drinking in the 6th-c. urbanizing world of Lavinium, so too, perhaps, can the other prevalent find in the stratum of the early altars, the common-ware impasto olla (or jar), suggest a socially broader ritual role for wine at the altars in this period. While the kantharos was always designated as a vessel for wine, the olla was not exclusively for wine, and could be seen to take on many distinct roles depending on its particular form and the location and context of the find; for example, the olla could be linked to cooking, or could hold first fruits or grain.⁵⁴ The jar as a miniature vessel was also quite common in the Early Iron Age and Archaic periods.⁵⁵ Viewed out of context,

⁴⁷ Gras 1984, 325, 326, 328; Batino 1998, 28; Bartoloni et al. 2012, 258–59; Ramage (1970, 27) dates the earliest use of Etruscan kantharoi to 625 BCE.

⁴⁸ Locatelli 2001, 238–39; Duranti (2012, 190, 211) discusses kantharoi in ritual deposits.

⁴⁹ For example, at Chiusi, at the site Monte S. Paolo (Cappuccini 2011, 51 fig. 16b), showing a seated figure holding a kantharos, or on plaques from Tarquinia showing banquet scenes with the images of a kantharos (Romanelli 1948, 234, nos. 9, 42, fig. 25a, b).

⁵⁰ Rasmussen 1979, 34.

⁵¹ Riva 2017, 249; Bartoloni et al. 2012, 251. Particularly in the first two-thirds of the 6th c., bucchero is seen mostly in prestigious wine vessels; by the last third of the 6th c., bucchero becomes a more utilitarian category of ware (Riva 2010, 223).

⁵² Gras 1984, 326.

⁵³ Riva 2017, 254.

⁵⁴ See Bouma 1996, vol. 1, 219 n. 16 for a list of the various cult places during this period at which the olla is predominant. For cooking: Bouma 1996, vol. 1, 110, 220; Attema et al. 2001–2002, 357. For first fruits and grain: Bouma 1996, vol. 1, 222; Galieti 1928, 87, 105.

⁵⁵ See note 71 below. The 30,000 miniature olle that were found at the Northeast Sanctuary at Lavinium are of the globular shape and are thought to have been either containers for water or, due to their size, meant as references to their monumental models, which themselves held

the versatile olla might not necessarily suggest uses specifically linked to wine; however, taken together with the kantharoi and fine-ware imports in Stratum D, the presence of these modest jars serves to amplify the viticultural character of the 6th-c. assemblage.

The olla's large mouth made it a particularly useful vessel for holding liquids: water, it would seem, in more ancient periods,⁵⁶ but most significantly, at later banquets or symposia, a mixture of wine and water (and in representations of banquets, as well, we can see olle, at times high-footed, employed as serving vessels).⁵⁷ In its role as a container for wine, the olla was a predecessor to the crater (but derived independently from the morphology of the Greek crater),⁵⁸ and olle often appear in assemblages with drinking cups or with other vases for mixing or drinking, such as small kyathoi or calices.

A comparison of ceramic finds: Lavinium, S. Omobono, and Satricum

Certainly, we need to acknowledge that multi-purpose vessels for eating and drinking (such as cups and jars) are fairly common finds, evident in the deposits of many sanctuaries during the 6th c. BCE.⁵⁹ But through a comparison with select contemporary sanctuary deposits in central Italy, we can see that the preference at Lavinium for drinking cups (particularly kantharoi) over other types of vessels marks this assemblage in Stratum D at the altars as exceptional. The votive deposits at S. Omobono, directly in front of the altar of Temple B, and the deposits from Votive Deposit II and earlier pits throughout Satricum (near the temple but not directly in front of an altar) provide excellent comparanda based on their neighboring geographic locations in Latium, their phases of construction being contemporary to the altars at Lavinium (each sanctuary also having both pre-monumental and later Republican phases), and the continuous phases of votive deposition over multiple centuries. The ceramic assemblages from all three sites have been thoroughly studied.

In the 6th-c. deposits in front of the Archaic altar at S. Omobono (Sectors II and IV), the two predominant vessel shapes in impasto rosso-bruno are the bowl (and cover) and the olla.⁶⁰ Colonna notes that at S. Omobono, the most common type of olla is the cylindrical-ovoid shape.⁶¹ Regoli also remarks on the frequency of this particular shape of olla at S. Omobono and at other sites in central Italy and notes that some of the olla at

water. In the so-called recent votive deposit in the eastern sector of the urban area at Lavinium (dated to the 4th–3rd c. BCE), thousands of miniature impasto grezzo globular olle and stemmed olle were found (Jaia 2022, 263). Jaia (2022, 264) connects the miniature vessels at this urban deposit to wine.

⁵⁶ Bouma 1996, vol. 1, 221; Colonna 1980, 53; Colonna 1963–1964, 13, 14.

⁵⁷ Colonna 1980, 53; Naso 1991, 109; Batino 1998, 26; Attema et al. 2001–2002, 357. For representations, see the olla on the mid-7th-c. cinerary urn from Montescudaio (Batino 1998, 26; Nicosia 1969, 389, 391).

⁵⁸ Delpino 2012, 193; Colonna 1980; Bartoloni et al. 2012, 201, 238.

⁵⁹ In addition to deposits at sanctuaries, see also the collection of over 100 cups (kyathoi) at the “Casa del Re” at Populonia, which the excavators think were most likely used for wine (Acconcia and Bartoloni 2007, 19). For the connection between consumption of wine and architecture, see the so-called Edificio delle Venti Celle at Pyrgi (Riva 2021, 225; Gentili 2015, 107–9).

⁶⁰ Regoli (2016, 100), based on an analysis of over 14,000 ceramic fragments from these two trenches.

⁶¹ Group C, according to Colonna's classification (1963–1964, 14).

S. Omobono had traces of burning.⁶² In the early 5th-c. Votive Deposit II at Satricum, as well, the cylindrical-ovoid olla is the predominant vessel type, along with the bowl,⁶³ and in the early 6th-c. deposits from the same site, there is a prevalence of vessels connected to cooking (over those for eating and drinking).⁶⁴ This particular type of olla at Satricum has been linked not to serving wine, but rather to cooking and to meat offerings, based on the associated charcoal and faunal remains found in the same context and even within some jars.⁶⁵

In contrast to the finds at Lavinium, at both Satricum and S. Omobono, there are almost no cups. At S. Omobono, Regoli categorizes only *seven* fragments of cups, compared to the 150 or so of bowls and jars in this same assemblage; at Satricum in Votive Deposit II, a total of only six kantharoi were found in all of the strata, and these are from later contexts.⁶⁶ In addition, 6th-c. sanctuary deposits in central Italy commonly have numerous miniature vessels: for example, at S. Maria della Vittoria, Lapis Niger, and the Capitoline deposit in Rome.⁶⁷ This is certainly true of the S. Omobono deposits, in which, after olla and bowl, the next most frequent category of finds from these two trenches is that of miniature vessels, again primarily in the shape of bowls and jars.⁶⁸ And the early 6th-c. votive deposits at Satricum also have many miniature vessels, particularly in the form of olle, handled jars, bowls, mugs, cups, and plates.⁶⁹

But at Lavinium's Thirteen Altars, somewhat surprisingly, miniature vessels are nearly absent in the 6th-c. stratum. This absence is made even more remarkable by the presence of other large assemblages of miniature vessels at sanctuaries in Lavinium. For example, at the Sanctuary of the Thirteen Altars itself, in Stratum C (the later 5th-c. phase), miniature craters are very popular deposits, as will be discussed below.⁷⁰ And contemporary with Stratum D, from the second half of the 7th to the beginning of the 6th c. BCE at the neighboring sanctuary at Lavinium, the so-called Northeast Sanctuary, there is an overwhelming majority of miniature olle: over 30,000 fragments and over 1,500 intact miniature vessels.⁷¹

From this brief comparison of the patterns of finds at nearby sites, we can clearly note that – regionally speaking – there is something anomalous about the ceramic assemblage at Lavinium. Only this assemblage has such a large presence of drinking vessels, in comparison with the more common bowls that we see at S. Omobono and at Satricum. It can also be noted that the near complete absence of the miniature vessel, examples of which were

⁶² Regoli 2016, 101 n. 108, 101–3. I thank Carlo Regoli for discussing these olle with me, and for these insights.

⁶³ Bouma 1996, vol. 1, 106, 108, 109, 110; Appendix C.

⁶⁴ See Brandt 2009 for a study comparing these ceramic assemblages. For Satricum: Brandt 2009, 102 table 6, rows 52–57, stratum IIB – IIC; for Lavinium: Brandt 2009, 102 table 6, row 59. For the earliest votive deposits at Satricum, see Bouma 1996, vol. 1, 124–32.

⁶⁵ Bouma 1996, vol. 1, 109, 112 fig. 3, 220.

⁶⁶ Bouma 1996, vol. 1, Appendix C: Stratum 8 (440 – 430 – 375 BCE) assemblage north 12, assemblage north 13, assemblage north 16, assemblage north 17; Stratum 10 (from 375 BCE on) assemblage 1 and 5.

⁶⁷ Regoli 2012.

⁶⁸ See Regoli 2012, 61–76 for a discussion of the miniature vessels found in these two trenches.

⁶⁹ Bouma 1996, vol. 1, 131.

⁷⁰ The significance of the finds from this later stratum will be discussed in detail later in this article.

⁷¹ Bouma 1996, vol. 1, 210 n. 16; Bouma 1996, vol. 3, 47; Edlund-Berry 2004, 373; Fenelli 1984, 331; Fenelli 1991, 490; Nijboer 1998, 137. Also see note 55.

popular in the Archaic deposits at S. Omobono and Satricum (and, arguably, throughout 6th-c. sanctuary deposits in Latium), further highlights the predominantly viticultural, drinking-related character of the finds at Lavinium. Independently of the orientation of the 6th-c. altars at Lavinium, then, the character and quality of the ceramic depositions taken together with the monumentality of the altars would suggest an elite involvement with the religious coordination of wine-related practices. Yet this conspicuous elite character of the 6th-c. Lavinian sanctuary, as I will argue in the next section, would take a turn in a more communal direction in the 5th c. BCE.

The complete bi-annual wine festival at Lavinium: explaining the 5th-c. shift in orientation

This study has so far argued, using depositional, topographic, and literary evidence, as well as, above all, altar placement, for a correlation between the orientation of the first set of 6th-c. Lavinian altars and an annual sunrise occurring at a distinct location on the horizon in the Alban Hills that signaled the celebration of an archetypal *Vinalia Rustica* in the later part of August. But the phenomenon of the Sun rising at a particular point on the horizon occurs not just once but *twice* annually. We will now turn, as a complement to our detailed discussion of the 6th-c. BCE celebration of the *Vinalia Rustica*, to a brief investigation of the significance of this second annual sunrise and the concomitant implications for communal religious festivals at Lavinium.

We have already established that at the azimuth of 71.7° of the early altars, the Sun rises over the horizon 38 days before the fall equinox, a solar date within two days of August 19, which marks the celebration of the *Vinalia Rustica* in later Roman calendars. The other, complementary sunrise that would have been observed in the spring of this same year, 575 BCE, at this same orientation and location on the horizon in the Alban Hills, occurred on May 6 (proleptic Julian), about 40 days after the spring equinox (which took place on March 27 in the 6th c. BCE).⁷² This date corresponds to May 4 in the calendar of the Augustan period,⁷³ 40 days after the Julian equinox conventionally occurring on calendar date March 25, according to 1st-c. CE calendars and literary sources.⁷⁴ Curiously, this date is about two weeks off from the date of the corresponding spring festival of the new vintage, the *Vinalia Priora*, held on April 23 in the Augustan calendar.⁷⁵ For a community so seemingly meticulous in its concern for coordinating the orientation of the 6th-c. altars to sunrise on the date of the fall wine festival, a two-week difference for the spring festival is quite surprising and calls for an explanation.

⁷² The equinox date is from *Stellarium*: Ecl. long./lat. (-574 March 27 14:52:37 UTC): 0.0000°/-0.0010°.

⁷³ *Stellarium* v. 23.2 reports the Sun's center at az/alt: $71.7476^\circ/1.5441^\circ$ (apparent) on -574 May 6 4:18:05 UTC.

⁷⁴ For Augustan calendar equinox conventions, see Degrassi 1963, 431–32; Nothaft 2018, 31; González-García and Belmonte 2006, 97; Rüpke 2011, 112. See Plin. *NH* 18.66 and Columella, *Rust.* 11.2.31 for the March 25 date of the autumnal equinox (VIII Kalends April). The *Menologia Rusticum Colotianum* and *Menologia Rusticum Vallense* also list March 25 as the vernal equinox.

⁷⁵ Degrassi 1963, 446–47.

Proposing an explanation

As mentioned above, around 450 BCE, a line of altars, I–V, was added at an orientation different from that of the first three altars and at a distance of 8.22 m from the earlier structures (altar VIII to altar V) (Fig. 1). This new set of altars is oriented to an azimuth of 76.9°, a 5.2° shift further south from the alignment of altars XIII, VIII, and IX. The altars of this later, second set of monuments are all closely related to each other in basic design, incorporating new 5th-c. developments in style, while at the same time recalling the form of the earlier structures. Given the close similarity in form and construction of these later, 5th-c. altars to their 6th-c. predecessors, the shift in orientation is all the more striking. Central Italic builders were exactly precise in matters of architectural alignment, and a difference as substantial as 5.2° cannot be satisfactorily accounted for as a mere error in calculation or construction.

Perhaps altars I–V were meant to echo and complement their predecessors in a more significant way than just style. If, as discussed above, the sunrise at the azimuth of the 6th-c. altars failed to correspond closely enough to the seasonal timing of the *Vinalia Priora* – the spring counterpart festival to the late summer *Vinalia Rustica* – perhaps the builders of the next phase of the altars sought to remedy the inconvenience of this misalignment by creating a new set of altars that would signal the proper seasonal timing of the communal spring wine festival.⁷⁶

At the azimuth of the new 5th-c. altars, 76.9°, the monuments would face a sunrise over the horizon in the Alban Hills that occurred on April 23 (proleptic Julian),⁷⁷ a date 28 days after the spring equinox (which occurred in 450 BCE on March 26) (Fig. 11).⁷⁸ Again, when we count the days between the sunrise and equinox events we see a number strikingly close – a difference of only one day – to the figure obtained by reckoning the number of days between the conventional spring equinox calendar date (which, as noted above, fell on March 25) and the calendar date of an important wine festival, the *Vinalia Priora*, celebrated in the later Augustan period on the Julian calendar date of April 23.⁷⁹

In scholarship on the wine harvest, the two festivals are always linked – the start and the end of the eight-month harvest season. But if the 5th-c. altars were in fact correlated with sunrise on the *Vinalia Priora*, the question must certainly be raised as to whether the *Vinalia Priora* had a place at Lavinium before the mid-5th c. In wine-making, the harvest and its processing go hand in hand. We certainly do not have any manifest reason to suppose that the *Vinalia Priora* was introduced later than the *Vinalia Rustica* to central Italy, nor that the *Vinalia Priora* was ignored or passed over in an earlier period. Rather, as I will

⁷⁶ For details about what the *Vinalia Priora* entailed, with an emphasis on public celebration, see Varro, *Ling.* 6.16; Plut. *Quaest. Rom.* 45; Ov. *Fasti* 4.877–900; Fest. P. 57L; Plin. *HN* 18.287. See also De Cazanove 1995, 214–15.

⁷⁷ From Google Earth v. 7.3.6.9345: distance from sanctuary (23.8 km) and altitude (607 m) of horizon at azimuth 76.86°; elevation difference (546 m) (607 – 61 m); computed angle of elevation of Sun's upper limb 1.31°; corresponding target altitude of center of Sun 1.05° (1.31 – 0.26). *Stellarium* v. 23.2 output for the Sun at location, N 41.656700° E 12.477734°, 61m; and at time, -449 4 /23, 4:34:21 UTC+00:00, ΔT 4h14m31.9s, σ(ΔT) 458.2s; Az./Alt.: 76.8572°/1.1129° (apparent); HA/Dec: 17.46760h/10.5307° (apparent); Ecl. long./lat. (on date): 26.2826°/-0.0023°; Apparent diameter: 0.52534°.

⁷⁸ The March 26 date for the vernal equinox is as reported by *Stellarium*: ecl. long./lat. (-449 3/26 21:40:14): 0.0000°/-0.0013°.

⁷⁹ See note 74 above.

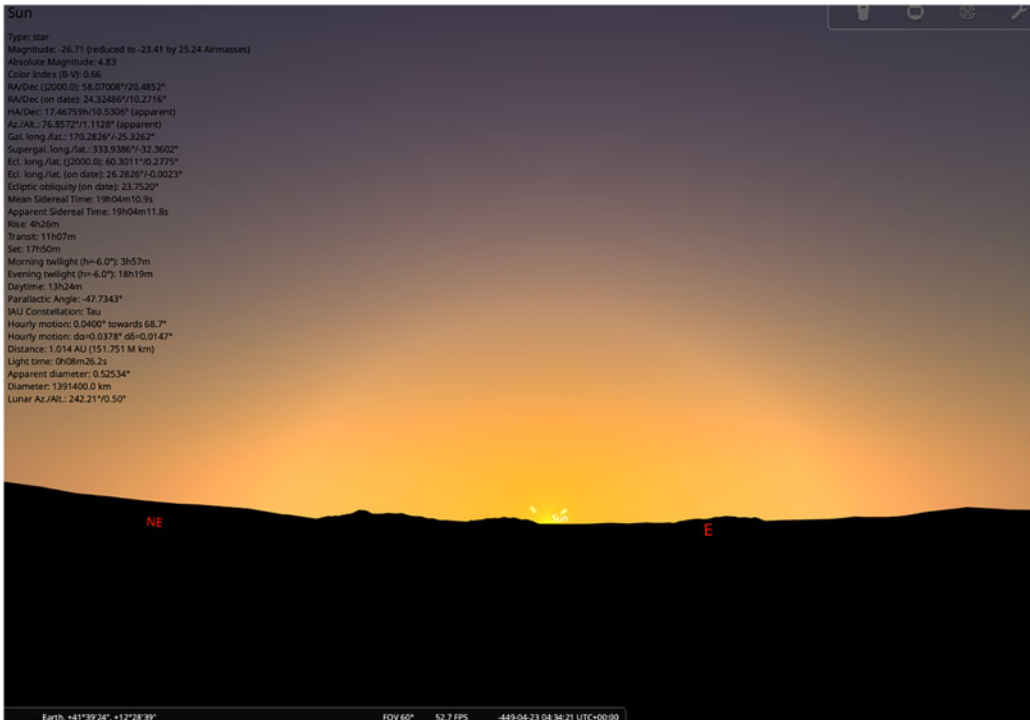


Fig. 11. *Stellarium sunrise on April 23, 450 BCE (proleptic) Julian.*

argue below, the reoriented second phase of the altars suggests a *Vinalia Priora* emerging from a Lavinian religious community quite distinct in its practices from those contemporary with the first phase of the sanctuary’s monumentalization. We see, in turn, this 5th-c. sanctuary community displacing older practices with new ones; in their more communal character, these new practices had greater traction with, and were better suited to, the shifting religious concerns and circumstances of an urbanizing, collective mid-5th-c. society.

As this article has maintained, the careful correlation between the orientation of the monumental 6th-c. altars and the start of the autumn vintage can be seen to highlight the scale of the Late Archaic investment in the managed coordination of harvest activities occurring at a time when Roman religious festivals are believed to have been intimately tied in general to agricultural interests.⁸⁰ In the religious sphere, it was a period when agro-economic expansion shaped worshippers’ behaviors and relationships with the gods, as Riva argues, a time when agricultural surplus “became a means of exchange between worshippers and deity that cut across social boundaries.”⁸¹ At Lavinium, then, the first three altars and their rituals superintend a crucial early phase of the integrative socioeconomic process of becoming urban, of crafting the conditions necessary for the formation of the Lavinian city and of its heterarchical community, part of “the time of making the city rather than of being a city.”⁸²

⁸⁰ Smith and Laurence 1995–1996; Forsythe 2005, 129; Forsythe 2012, 9; North 1989.

⁸¹ Riva 2023b, 16.

⁸² Smith 2005, 102. For a discussion of the urban and religion, see Rüpke 2020a; Rüpke 2019; Urciuoli and Rüpke 2018.

But with the region's shifts in the social, political, material, and religious circumstances of the 5th c. BCE, the second phase of the Lavinian altars, connected now with the more pervasively communal spring *Vinalia Priora*, represents a case of Lavinian participation in a region-wide, religion-mediated, political and social transformation. In the 5th c., religion becomes, as Fay Glinister has argued, a "major arena for elite competition,"⁸³ sacred space becomes contested, and aristocratic competition develops around temple foundations and major priesthoods. But despite these contests over religious control (or in fact because of them), there prevailed an overarching sense that cults and priesthoods belonged and responded more to the broader community.⁸⁴ Christopher Smith has argued quite convincingly that the 5th c. represents a turn to communal action, that there was at this time a prioritization of the community over competing individual interests, that religion was "referring symbolically to the interests of the community," with "elite" and "audience" working together.⁸⁵ We begin to see this growth of community integration in the 5th c., creating something that "rebooted Roman society as something distinctly different from what had gone before,"⁸⁶ something with increased "participation in the urban community through religion."⁸⁷ And perhaps, therefore, we can see the *Vinalia Priora* as a response to these new shifting priorities.

Archaeological finds connected with Altars I–V

If in fact the 5th-c. altars, I–V, were designed to be more closely aligned with the sunrise on the horizon in coordination with the spring wine festival, the *Vinalia Priora*, we would then expect that, as in the case of the 6th-c. altars, the materials found in connection – proximally and chronologically – with these later altars would likewise show a strong emphasis on wine drinking and a new emphasis on communal practice.

A total of 111 miniature craters (Fig. 12) were found in Stratum C, representing the significant majority of the vessels excavated in this stratum (53%) (Fig. 13).⁸⁸ In its full-sized

⁸³ Glinister 2017, 70.

⁸⁴ Smith 2017.

⁸⁵ Smith 2017, 243. The changes in religion and religious power in the 5th c. BCE can also be tied to major changes in the religious calendar at this time, and we can perhaps read the correlation between altars I–V and the *Vinalia Priora* as a reaction to the changes in the mid-5th-c. Roman calendar. In the 5th c., we can see the start of a move away from elite control over the calendar and towards a more shared version in which priests, though still in control, interactively shaped a community's sense of time (Bernard 2023, 187).

⁸⁶ Smith 2017, 237.

⁸⁷ Riva 2023b, 6.

⁸⁸ The second largest category of ceramic finds was the olla (9%), followed by *bacile* (basin/bowls) (7%), then *ciotole* (bowls) (6%) and miniature vases in general (not including craters) (6%). The stratum, dated by fragments of Attic red-figure vases and interpreted as a terminus post quem non for the construction phase of altars VI and VII and as a stratum connected chronologically to the phase of altars I–V, has been described as a layer of artificial leveling. The gap, possibly marshy and perhaps serving originally as an assembly zone between the two sets of altars, was filled in somewhat in the later 5th- to mid-4th c. by altars VI and VII. The preponderance of the miniature craters was found in the lowest levels of Stratum C below the area of the then-empty gap. Perhaps these miniature craters were deposited in the space that would have been empty in the mid-5th-c. phase as a way to connect the new practices of the *Vinalia Priora* with the traditions of the *Vinalia Rustica*.



Fig. 12. *Miniature craters from Lavinium. Dimensions: cat. no. 101 – h. 6.2 cm, diam. lip 5.4 cm, diam. foot 3.4 cm; cat. no. 102 – h. 5.6 cm, diam. lip 4.2 cm, diam. foot 2.8 cm; cat. no. 103 – h. 5 cm, diam. lip 4.8 cm, diam. foot 3.5 cm; cat. no. 104 h. 5.8 cm, diam. lip 6.5 cm, diam. foot 3.3 cm. (After Castagnoli 1975, cat. nos. 101–4).*

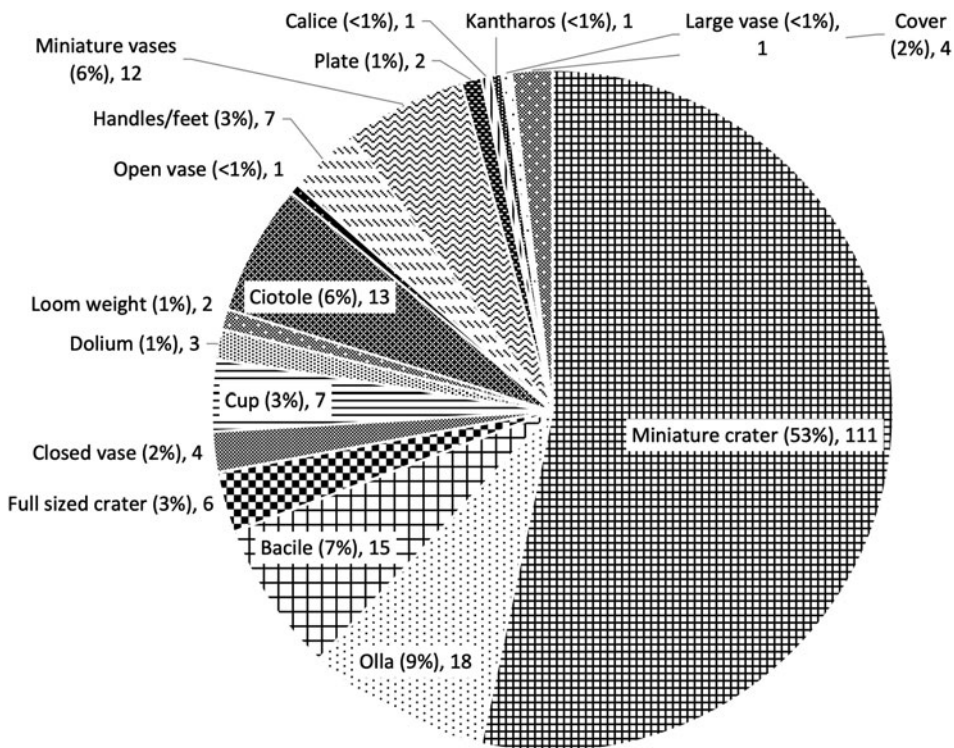


Fig. 13. *Chart of Stratum C finds. (Chart by author.)*

version, the crater was a vessel type – frequently fine-ware – used for mixing wine and water, playing a central role at a symposium or banquet, and, in the Greek world, often seen in gift-giving contexts.⁸⁹ The full-sized crater appears in funerary assemblages in central Italy connected to the consumption of wine in the Villanovan period, as early as the mid-8th c. BCE, both as Greek imports and as locally crafted variations; it was likewise

⁸⁹ Homer's *Odyssey* 15.115–19 discusses the crater as a gift from Menelaus to Telemachus (Bartoloni et al. 2012, 213).

depicted in banquet scenes on vases, its presence diminishing in later times, when it was displaced by the olla.⁹⁰

If the *Vinalia Priora* was a festival seasonally timed to optimize readiness for the first tasting of the new wine, if it was a festival grounded in a newly heterarchical community of interests vested in the outcome of the vintage, we may easily infer the practical necessity of having some kind of large fine-ware ceremonial and communal vessel (like the traditional, but no longer fashionable, elite crater) holding the place of honor as the visual focus of the ritual. Although lacking actual evidence in Stratum C for such a full-scale model, we may nonetheless imagine how the deposition of the miniature craters might have functioned as allusive individual responses to the ceremonial communal distribution of the first samplings of the annual vintage from a venerable large-sized crater.⁹¹ The reduction in size of the full-scale model allows a larger public to access the celebration of the vintage, providing more individuals with more opportunities to participate in the ceremony. As discussed earlier in this article, miniatures were a popular phenomenon in 7th-c. and particularly 6th-c. central Italy, and Bouma observes that miniature vessels lost their popularity during the 6th c. and are quite rare in later periods.⁹² At the Sanctuary of the Thirteen Altars at Lavinium, we see just the opposite phenomenon: miniature vessels are nearly absent from the 6th-c. stratum at this Sanctuary, but exceedingly popular in the 5th-c. stratum.

With these diminutive votives therefore out of place in terms of both scale and time period, their distancing from practical use serves to amplify the effect of their role in the ritual as reductive representations.⁹³ As miniature models, the craters replicated salient features of their ancestral full-size, notionally monumental versions, singling out certain aspects as iconic while ignoring others. And through this very process of selective miniaturization, these religious instruments become active objects, having an effect on both those who viewed them and those who used them, eliciting from offerers memories and inferences about their monumental model and its function in the ritual.⁹⁴ The value of these 5th-c. miniature craters, then, lies not in their use as emblems of outmoded elite banqueting and funerary practices but rather in the entanglements or metonymic networks (to borrow Knappett's idea) these material agents engender among the offerer, the priest-led ritual, and the communal aspects of the wine.⁹⁵ The downscaling of an older fine-ware type in size, fabric quality, craftsmanship, and consumer marketability clearly would have allowed for and invited broad, communal, and individual inclusion in the material character of the elite rituals of the early urban community at Lavinium. Through their part in negotiating the

⁹⁰ Delpino 2012, 192; Bartoloni et al. 2012, 228, 236.

⁹¹ Maaskant-Kleibrink (1997–1998, 444, 447) notices that miniature vessels were created to “faithfully” imitate normal-sized ceramics in their material and fabric.

⁹² Bouma 1996, vol. 1, 216 n. 8.

⁹³ On the other end of the scale spectrum, we could point to the oversized cups (especially kantharoi) that were intended to be used not for drinking but rather as gifts to the gods at Greek sanctuaries and at Etruscan emporia (such as Pyrgi and Gravisca), as well as in tombs (Riva 2021, 222).

⁹⁴ Moser 2019, chapter 2 for a discussion of miniature votives from Largo Argentina as a democratization of ritual practice.

⁹⁵ Knappett 2012, 91; Bailey 2005, 28. For some theories on miniaturization, see Bailey 2005; Knappett 2012; Platt 2006; Stewart 1993.

priorities of a new urban community, these were no longer top-down, rustic wine rituals dictated and micromanaged by an elite priesthood. With the miniature crater and the public celebration of the vintage, everyone, in some sense, got to be priest and not just audience.

Conclusion

At the Sanctuary of the Thirteen Altars at Lavinium, a detailed analysis of the ceramic finds, a survey of the topographic situation, and an examination of relevant literary sources, together with a study of the orientation of the first and second groups of altars with respect to particular annual sunrise events, combine to argue for complementary August and April festivals coinciding with seasonally recurring practices in wine production. At Lavinium we see a continued, yet differentiated, emphasis on a ritual connected to wine production (in the 6th c.) and consumption (in the 5th c.). What we have, then, is evidence of the deliberate management of local monumental religious construction in urbanizing, early 6th–5th-c. BCE central Italy in such a way as to create a broadly accessible and practical seasonal calendar responsive to the changing religious and societal ideals of that time. In their combined effect, the reiterative ensemble of altars became both agent and instrument, a religiously authorized reference framework for the coordination of significant seasonally recurring agricultural and economic practices. And, in its individuality, each altar – not merely functioning as guide to immediate utilitarian action but rather serving in its proper capacity as the focal point of annual sacrifice – would have anchored in the here and now the ways in which these important seasonal events were experienced and understood as transactions with worlds and times before and beyond.

Competing interests: The author, Claudia Moser, declares none.

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