Interim Report 2, Theme 6:

Unknown Forum Structures in Ostia: The Synthesis of Stratigraphy and Geo-physical Excavation Data regarding the Development of the Forum's Area from the Republic to the early 2nd century CE (GIS)

The focus of my work during the last year has been on creating the first theories on the first Forum of Ostia. This has included analysing a vast amount of empirical material from other comparable cities. This has led to the creation of three phases of the Late Republican Forum of Ostia. These three phases are based on archival studies and excavation journals (*GdS*) in close comparison to comparable cities.¹

Pre-Phases

In the attempt to create the Forum phases, it was deemed important to scrutinise events preceding the first Forum of Ostia. To be able to do this, a vast amount of work was invested, where all photos and all texts from the excavations conducted in the southern half of the Forum in 1922-1923 were analysed slavishly. Based on photos and text, an attempt to create sections of the trenches was made. By approaching the subject in this matter, a refreshingly new overview emerged of what was actually discovered in the southern half of the Forum during those two years and how the different walls interrelated. One excavation plan has always been used, when discussing the Castrum and (Late) Republican Ostia.² Yet, that plan has its flaws, since it provides an insufficient overview of the vast majority of material. Not understanding the interrelation between the walls – especially considering foundation levels of the walls in connection with the utilised tuff - will end with a superficial result. Indeed, there are some references to levels in the published plan, but in comparison to the hand draw plan, it lacks important details.³ It does provide an overview, but to attempt to differentiate between phases, even the small phases, it is required to study the diaries, old drawings and the photographical archive.

The usage of a specific type of tuff does not necessarily provide an absolute dating of that particular wall. However, it can provide some insight into the relative chronology. Data from

¹ Unfortunately, I have not been able to consult the *GdS* regarding the excavations conducted beneath the Imperial Basilica.

² E.g. Calza et al. 1953, fig. 21.

³ The published plan is *PAOst*, *AD* B481, which is fig. 21 in Calza et al. 1953. The hand drawn plan is *PAOst*, *AD* B480.

several excavation sites does indicate that for example cappellaccio tuff⁴ often was used from the 6th through 4th centuries BCE, whereas Grotta Oscura tuff was utilised from the 4th century BCE to the Late Augustan period, thus overlapping the former tuff.⁵ The Castrum walls are built in *Fidenae* tuff, which, according to scholars, was taking into use during the 4th century BCE after conquering Fidenae in 429 BCE.⁶ Hence, knowing the material can be of assistance, when attempting to create an interrelation between the walls.

Doing this did provide some insights into the development of the preceding phases and the first phase(s) of the Forum of Ostia (Fig. 1).

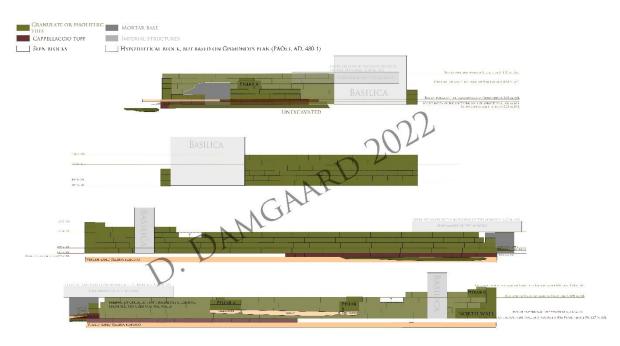


Figure 1. An example of the stratigraphic work based on excavation diaries, drawings and archive photos, here with Structure A as an example (D. Damgaard).

In continuation of this, doing this type of intensive analysis of older plans and photos even further supported a theory about a Late Archaic / late $6^{th} - 5^{th}$ century BCE structure in the middle of the later Castrum. I have reconstructed this as being that of a temple, since the outline of the lowest row of tuff – the cappellaccio tuff – did underline the contour of a temple-like structure (Fig. 2).⁷

⁴ Sometimes also referred to as *Tufo del Palatino* or *Tufo Grigio*. There is another tuff similar to Cappellaccio, which also comes from Rome and Alban Hills, the *Tufo Lionato*. See Panei 2010, 40. Furthermore, Cappellaccio tuff can also be referred to as *Tufo Granulare* (Granulate Tuff) and *Tufo Pisolitico* (Pisolithic Tuff), see Lena 2011, 17-8.

⁵ Lena 2011, 18-20.

⁶ Lena 2011, 21.

⁷ Damgaard 2019, 100-105; Damgaard 2022.

Indeed, reconstructing the temple based solely on fundaments would not be sufficient. There are therefore also inaccuracies, which could speak against the theory, however, the finding of several architectural terracottas in that exact location, does indicate the existence of a temple – or at least of a public building dating to a period preceding the Castrum.⁸ The comparisons for the architectural terracottas are nonetheless stemming from contemporary temples around Latium and Etruria.⁹

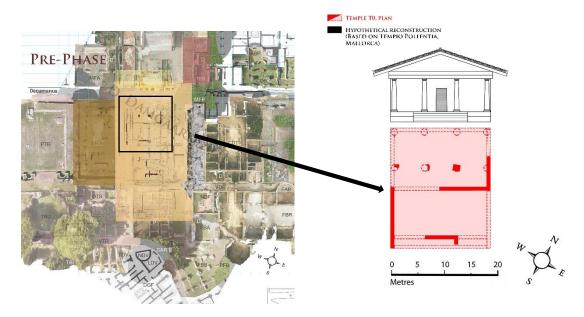


Figure 2. Left: The outline of the temple, Structure A. Right: The reconstructed temple plan based on the outline (Damgaard 2022, fig. 7).

It does seem as if the temple-like structure was demolished contemporary with the foundation of the Castrum sometime around 300 BCE. The fundaments in cappellaccio tuff of the pronaos were reused after the structure was demolished. A wall of another type of tuff was built on top. This tuff is being described as *tufo olivigno*. According to Lena, the tuff utilised in the so-called simple constructions in the southern Forum's plaza all consisted of *tufo granulate*, which belong to the same type of tuff as Cappellaccio.¹⁰ Nonetheless, in the excavation publications, Guido Calza clearly differentiates between the two types by calling the fundaments Cappellaccio and the tuff above for *tufo olivigno*.¹¹ This would therefore indicate that we are dealing with two different types of tuff, but within the same category – in this case that of granulate tuff. In continuation of this, Lena also states that Cappellaccio tuff was very useful for fundaments, wells, cisterns and other moist areas. On the contrary, Cappellaccio tuff does not go well in

⁸ For the inaccuracies, see Damgaard 2022, 223-226.

⁹ Damgaard 2019, 95-99.

¹⁰ Lena 2011. 18-9.

¹¹ Calze et al. 1953, 72.

open air, since it is very fragile when exposed to air.¹² Hence, the blocks above the fundaments must have been better suited for this purpose, and thus of a different kind of tuff – however, still of the granulate type.¹³

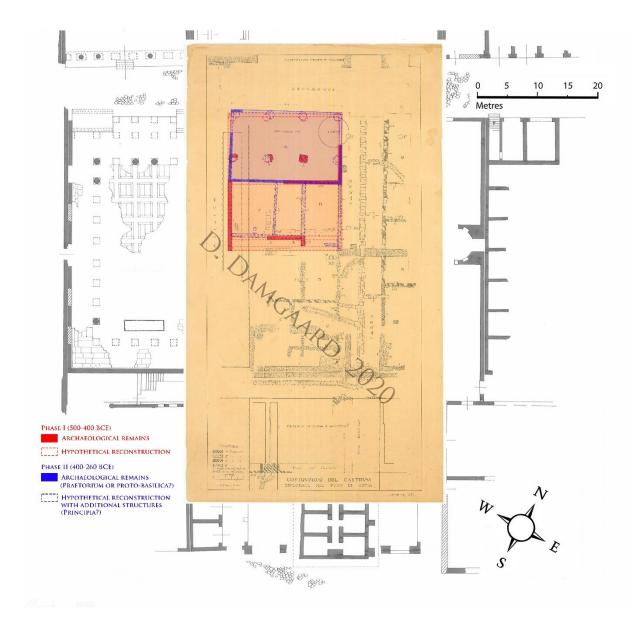


Figure 3. The two phases of Structure A. The red phase being the temple and the blue phase being the Praetorium or Principium with buildings behind (south of) (Damgaard 2022, fig. 8).

After the levelling of the temple-like structure, the pronaos, Structure A, was turned slightly more towards the magnetic north (Fig. 3). Behind Structure A, several buildings were constructed in different kinds of tuff and sandstone – these do also relate to each other in different ways. Sewers and drains were constructed leading out of the different buildings

¹² Lena 2011, 18.

¹³ The Archaic temple at St. Omobono in Rome was built in Cappellaccio tuff – also the walls above the ground level. This temple was built no later than 570 BCE. Pers. comm. Vincenzo Timpano.

towards the main sewer beneath the Cardo. The hitherto identification of Structure A would be that of a *Praetorium* or *Principium* – the main seat for the commander of the Castrum.

Forum Phases

The working hypothesis is that this layout would be the same until the 2nd century BCE. In the period preceding this, Ostia had become the seat of the quaestor Ostiensis (an official taking care of the fleet) in 267 BCE.¹⁴ It is to be believed that in this period, as Ostia gained importance and shortly after the foundation of the Castrum, the first Ostian sanctuaries appeared in and around the Castrum.¹⁵ For instance, the Tempio dell'Ara Rotonda in the Area Sacra Repubblicana has been dated to the 3rd century BCE based on Heraklesschalen.¹⁶ In continuation of this, the newly discovered sanctuary in the centre of Ostia (Sanctuary TFR) cast a new light on the religious landscape in the Castrum in this period. This sanctuary has been dated to before the end of the 3rd century BCE and consists of a temple and an altar with traces of several phases.¹⁷ This sanctuary is placed directly at the intersection between the two main streets, the Cardo Maximus and the Decumanus Maximus.¹⁸ Due to its central position, there are hypotheses that this sanctuary could have been dedicated to Vulcan - the main deity of Ostia. However, in its first phase, it is unlikely that it was dedicated to Vulcan, since it is believed that Vulcan arrived at Ostia during the 2nd century BCE.¹⁹ Several fragments of ceramics that were found during the excavations point toward a sanctuary dedicated to several deities. A bowl with the inscription A P L O N I, which is an Etruscan form of Apollon, was found along with a rim fragment containing the inscription M I I, which can be interpreted as being associated with Minerva.²⁰

The temple of this sanctuary was initially facing north, which means that the back wall of the temple would have faced the Decumanus. This would seem a curious orientation, but in the first Castrum phases, the focus must have been towards the Tiber, where Ostia would have her main support line to and from Rome.²¹ The existence of the Decumanus as a main street already with

¹⁴ Zevi 2001; Salomon et al. 2018, 267.

¹⁵ As mentioned earlier, it is a possibility that there already was a sanctuary in the area before the foundation of the Castrum. However, the hypothesis is that that sanctuary would have been some kind of regional sanctuary, whereas the sanctuaries appearing in and around the Castrum after its foundation are to be considered Roman and Ostian sanctuaries.

¹⁶ Zevi 2012, 556.

¹⁷ Menge 2022, tab. 1.

¹⁸ For more on this sanctuary, I refer to the dissertations of Sophie Menge and Trine Bak Pedersen, and to the ongoing work of Prof. Dr. Axel Gering. See also, Zevi 2009.

¹⁹ Pers. comm. Prof. Dr. Axel Gering. For the arrival of Vulcan in Ostia, see Zevi 2009.

²⁰ For more on this, see the interim report from Trine Bak Pedersen, Theme 4.

²¹ Gering forthcoming.

the foundation of the Castrum has also been questioned. Indeed, the part of the Decumanus, which is located within the Castrum, is evidenced through the eastern and western Castrum gates, but the Decumanus as a main street to Rome cannot directly be proven. There are some evidence in Ficana, which would support the hypothesis of a street to Ostia already in the Castrum period, and maybe even before, but whether that street would go directly to the eastern gate of the Castrum or to the river harbour is unknown. Furthermore, it is also uncertain whether the street, if it existed in a pre-Castrum period, would follow the same route as the later Decumanus.²²

Nevertheless, there could be several reasons for the curious orientation of the temple, but one of them could be the Tiber. A northern orientation is also connected to the chthonic deities, which would suit a Vulcan identification though.²³ Additionally, this orientation could also indicate that the sanctuary could date to a period before the foundation of the Castrum. In this period, the Tiber ran closer to the (later) Castrum – the coast of the river would have been situated roughly in the middle between the Hadrianic Capitolium and the end of the northern Cardo.²⁴ The dating of the Sanctuary TFR does however corroborate the dating of the Castrum as suggested by Martin.²⁵ At one point, maybe after the creation of the Castrum around 300 BCE, the Tiber shifted its course and moved some 100 metres north and away from the Castrum.²⁶

Our research furthermore indicates that in the early 2nd century BCE, some major changes were made to the temple inside the sanctuary. This involved changing the orientation of the temple 180°, which meant that it was now facing the Decumanus. This event probably had an effect on the structures on the opposite side of the Decumanus. Structure B, placed opposite the sanctuary on the southern side of the Decumanus, was levelled at 0.75 m. ASL. Most of the so-called Castrum structures have been levelled at around 1.00 m. ASL. The levelling of Structure B has always been curious, but with the discoveries in TFR, we might be able to explain this. The level of 0.75 m. ASL does also correspond to the levels discovered in connection with the changing orientation of the temple. By levelling Structure B, a plaza was created in front of the sanctuary.

²² Brandt 2002.

²³ Torelli 2015, 188.

²⁴ Salomon et al. 2018, fig. 7.

²⁵ Martin 1996.

²⁶ Salomon et al. 2018, fig. 7.

The exact dating of this levelling is uncertain, but based on our research conducted in TFR it is likely that it happened in the 2nd century BCE.²⁷

The walls comprising Structure B have always been identified as part of the first Castrum structures, which they also seem to be.²⁸ Now, with this new aspect, it is therefore possible to write the life history of Structure B. It appears it was constructed together with the Castrum around 300 BCE (maybe built on top of an earlier structure from a period before the Castrum foundation) and was in function until the newly discovered temple opposite the Decumanus changed its orientation from north to south in the 2nd century BCE. The identification of Structure B is unknown, since we only have the western and parts of the southern side preserved. Only one wall, Wall d, divides the structure in two. The length of the northern room is 18 metres and its width is unknown. Regardless hereof, it does seem as if the northern room is quite large, and a well, P1, that was found inside that large room belongs to the first phase of the structure.²⁹ The shape and size of Structure B lead the thoughts to parts of the palatial complexes of the 6th – 5th centuries BCE, as for instance the Palatial Complex in Pyrgi.³⁰ However, such an identification of Structure B based solely on three walls and a well is farfetched and near to unlikely in its Castrum phase. Attempting to identify Structure B would require a complete overview of the finds and their contexts, and these are unfortunately not at hand. Nevertheless, the demolishing of Structure B would have had some impact on the local administration, since the Structure B, based on its location and size, would have had a public function. That function was then either removed or relocated during the 2nd century BCE. Its position was replaced by a plaza, and probably the first Forum's plaza in Ostia. Structures A and C were still standing in this first Forum phase.

I have established the first fora before Augustan times. The first Forum, as shortly introduced above, can be dated to the 2nd century BCE followed by the next phase around 100 BCE and finally the last Forum phase before Augustan times can be dated to the middle of the 1st century BCE contemporary with the construction of the city wall. Events happening in this last phase

²⁷ I would here refer to the ongoing work and dissertations of Sophie Menge and Trine Bak Pedersen, and to the ongoing work of Prof. Dr. Axel Gering.

²⁸ There are indications that the fundament of Structure B is part of an earlier and pre-Castrum phase as well. In continuation of this, in front of the southwestern corner of the structure, a level comprising crushed tuff (*It. battuto di scaglie di tufo*) – a typical pavement seen in the 7th through 4th centuries BCE – was found at 0.17 m. BSL. This, together with a similar level found directly south of Structure A at 0.23 m. BSL, could be the evidence of the first known pavement and level in the area. Based on the fundament levels of the Castrum walls and southern gate at 0.29 m. ASL, this does indicate an earlier phase, thus a pre-Castrum phase. See *PAOst*, *AD* B480 and *AD* B652.

²⁹ Calza et al. 1953, 73.

³⁰ Baglione et al. 2017, 205-208.

is evidenced through the inscription mentioning Publius Lucilius Gamala, also known as Gamala Senior.³¹

Regarding the fora, I will also be discussing what actually comprise a Forum. Throughout the decades discussing urbanism and Romanisation, it is clear that no specific definition of a forum exist. There is the ideological definition regarding Roman colonies, of which Ostia is one, put forward by e.g. Paul Zanker, which states that a forum comprise an open plaza, a main temple towards the main street connected to Rome and a basilica and/or a public meeting place such as a comitium or curia.³² In Cosa for example, a Roman colony founded in 273 BCE, the forum was already planned with the foundation of the town.³³ In addition to this, the main temple of the town, the Capitolium, was not placed in the forum, but on the Arx, which most likely should be seen as an imitation of the situation in Rome, where the Jupiter Optimus Maximus temple was placed on the Capitol Hill overlooking the Forum. The first forum of Cosa thus consisted of an open plaza with the comitium-curia complex in the middle axis of one of the long sides. The three remaining sides consisted of atrium houses, with one of them, Atrium House I, not having any tablinum or triclinium, but tabernae, cubiculae and alae. This was used as an argument for identifying this atrium house as an *atrium publicum* – a public office containing the state/town archives. It was not until the following forum phase, which has been dated to between 197 and the 1st century BCE that the forum of Cosa got its first temple, Temple B.³⁴ This therefore indicates that the forum of Cosa initially did not follow the ideological concept of a forum. The question is whether the ideological concept was an original idea or defined later as most fora in the Republic already was built.

Hence, we do not have a clear and exact definition of what a forum comprise. Indeed, we can collect components and institutions needed for a forum with the most obvious component being the open plaza in the centre of a city partly surrounded by buildings, whether those are religious or profane.

"Grid Approach"

Finally, I want to introduce a theoretical approach, I have chosen to utilise. This could be called "Grid Approach". I have encountered this approach before, but never heard a name for it.³⁵ It is basically dividing the centre into equally large parcels, and based on these parcels, houses,

³¹ CIL, XIV 375. For more on Publius Lucilius Gamala, see Zevi 1973; 2004; Mazini 2014; Cuyler 2019.

³² Zanker 2000,

³³ Lackner 2008, 80-86.

 ³⁴ Brown 1980, 33-35, fig. 38; Brown et al. 1993, 101-103; Lackner 2008, 84-85, 348. The year of 197 BCE is based on the end of the Second Punic War as well as the arrival of 1000 families in Cosa, see Lackner 2008, 84.
 ³⁵ Others who have used this approach, also concerning Ostia, is e.g. Hesberg 1985; Brandt 2002.

temples and other buildings can be discerned and on this back drop, the different phase might slowly appear. With the development of the Roman cities, the accumulation of buildings, extensions of the city and the population growth, these lines might be diluted. However, in most cases, it is still possible to discern earlier limits by looking at later structures. More recently, Gering has attempted to reconstruct the centre of Ostia as the Castrum was founded.³⁶

Final remarks

Now in the process of my dissertation, I am initiating the intensive analysis of the different buildings. This involves measuring and describing them. I will start the process with the pre-Castrum and Castrum phase, since that makes most sense. In that way, I can create the diachronic perspective, and it becomes possible to maintain an overview of the development of each individual building, which in turn can be used to interpret on the overall development of the centre and Ostia as a city.

I am planning to divide the dissertation into two main parts; Part I is the intensive analysis of the remains. Part II will be the interpretation of it all and its meaning to Ostia as a whole and the possible impact on Rome. These two parts will of course be subdivided into the defined phases.

Before this is going to be possible, I will have to clear several things. There will therefore be an introduction with not only the 'Problem Statement', theoretical and methodological approaches and demarcation, but also a chapter concerning the problems with the lack of proper information regarding the excavation history. This also includes the discussion on plans related to the excavations. I have already begun the writing phase, where I introduce the important plans from the excavations in 1922-1924. Two plans are of special importance for the understanding of the entire development of the area including the pre-Castrum phase, the Castrum phase and the first fora phases.³⁷ It is vital to present these plans and to clarify several aspects. Some of the ideas regarding the pre-Castrum and Castrum phases have already been published.³⁸

³⁶ Gering, forthcoming.

³⁷ *PAOst*, AD B480 and B481.

³⁸ Damgaard 2019; 2022.

Bibliography

- Baglione, M. P.; Marchesini, B. Belelli; Carlucci, C.; Michetti, L. M. 2017, "Pyrgi, Harbour and Sanctuary of Caere: Landscape, Urbanistic Panning and Architectural Features", in *Archeologia e Calcolatori* vol. 28.2. Pp. 201-210.
- Brandt, Johann Rasmus. 2002, "Ostia and Ficana. Two Tales of One City", in *MeditArch* vol. 15. Pp. 23-39.
- Brown, Frank. 1980, Cosa. The Making of a Roman Town. Ann Arbor.
- Brown, Frank; Richardson, Emeline Hill; Richardson, jr, L. 1993, Cosa III. The Buildings of the Forum. Colony, Municipium, and Village. MAAR vol. XXXVII. Pennsylvania.
- Calza, G., G. Becatti, I. Gismondi, G. de Angelis D'Ossat & H. Bloch. 1953, Scavi di Ostia. Vol. I. Topografia Generale. Rome.
- Cuyler, Mary Jane. 2019, "Legend and Archaeology in Ostia: P. Lucilius Gamala and the Quattro Tempietti", in *BABESCH* vol. 94. Pp. 127-146.
- Damgaard, Daniel. 2019, "Architectural Terracottas from Etrusco-Italic Temples on the Later Forum of Ostia. Archaic Ostia Revisited", in *Analecta Romana Instituti Danici* (*ARID*), vol. 43 (2018). Pp. 91-109.
- Damgaard, Daniel. 2022, "Traces of Early Ostia: A Late Archaic Temple in the Later Forum of Ostia", in G. Mainet & M. S. Graziano (eds.), *Ad Ostium Tiberis. Proceedings* of the Conference Ricerche Archeologiche alla Foce del Tevere (December 2018,18th-20th). Pp. 209-226.
- Gering, Axel. Forthcoming, "The *insula* as a grid and architectural unit: The role of two recently discovered sanctuaries from an old excavation in Ostia's centre", in Sven Straumann (ed.), *Insulae in Context. International Colloquium at University of Basel/Augusta Raurica (CH), September 25th-28th 2019.*
- Hesberg, Henner von. 1985, "Zur Plangestaltung der Coloniae Maritimae", in *RM*, vol. 92. Pp. 127-150.
- Lackner, Eva-Maria. 2008, Republikanische Fora. Heidelberg.
- Lena, Gioacchino. 2011, "Le qaulità di tufo impiegate nell'edilizia ostiense: aspetti geoarcheologici", in *Lavori e studi promossi dal DISMA (2008-2010)*, (ed. Pani, Clara).
 Pp. 17-27.
- Manzini, Ilaria. 2014, "I *Lucilii Gamalae* a Ostia. Storia di una famiglia", in *MEFRA*, vol. 126/1. Pp. 55-68.

- Martin, Archer. 1996, "Un saggio sulle mura del castrum di Ostia (reg. I, ins. X, 3)", in
 A. G. Zevi & A. Claridge (eds.), *Roman Ostia Revisited*. Pp. 19-38.
- Menge, Sophie. 2022, Second Interim Report: Theme 2. PhD-Project: The recently discovered Sanctuary on the Forum of Ostia. Ceramics in Context: The Development of the Sacred Area from the Middle Republic to the Hadrianic Period. Online publication (https://ostiagraduiertenkolleg.com/theme-2-interim-reports.html)
- Panei, Liliana. 2010, "The tuffs of the "Servian Wall" in Rome: Materials from the local quarries and from the conquered territories", in *ArcheoSciences, revue d'archéométrie*, vol. 34. Pp. 39-43.
- Salomon, Ferréol et al. 2018, "Geoarchaeology of the Roman port-city of Ostia: Fluviocoastal mobility, urban development and resilience", in *Earth-Science Reviews*, vol. 177 (2018). Pp. 265-283.
- Torelli, Mario. 2015, "Conclusioni", in La scoperta di una struttura templare sul Quirinale presso l'ex Regio Ufficio Geologico (eds. Arizza, Marco & Mirella Serlorenzi). Pp. 185-189.
- Zanker, Paul. 2000. "The city as a symbol: Rome and the creation of an urban image", in *Romanization and the city: creation, transformations, and failures. Proceedings of a conference held at the American Academy in Rome to celebrate the 50th anniversary of the excavations at Cosa, 14-16 May, 1998, JRA Suppl. 38.* Pp. 25-41.
- Zevi, Fausto. 1973, "P. Lucilio Gamala senior e i quattro tempietti di Ostia", in *MEFRA* vol. 85. 555-581.
- Zevi, F., 2001, "Les débuts d'Ostie", in Descoeudres J.-P. (ed.), Ostia port et porte de Rome antique. p. 3-9.
- Zevi, Fausto. 2004, "P. Lucilio Gamala senior: un riepilogo tren'anni dopo", in Ostia, Cicero, Gamala, Feasts & Economy (Papers in the Memory of John D'Arms. Atti della Giornate di Studio del 27 giugno 2002 al Castello di Ostia dedicata al ricordo di J. H. D'Arms) JRS suppl. vol. 57. Pp. 47-67.
- Zevi, Fausto. 2009, "Catone e i cavalieri grassi. Il culto di Vulcano ad Ostia : una proposta di lettura storica", in *MEFRA* vol. 121/2. Pp. 503-513.
- Zevi, Fausto. 2012, "Culti ed edifici templari di Ostia repubblicana", in *Ostraka: rivista di antichità* vol. speciale. Pp. 537-563.