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Imagining Roman Ports.
The Contribution of Iconography to the Reconstruction of Roman Mediterranean Portscapes of the Imperial Period

by

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ABSTRACT

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IMAGINING ROMAN PORTS. THE CONTRIBUTION OF ICONOGRAPHY TO THE RECONSTRUCTION OF ROMAN MEDITERRANEAN PORTSCAPES OF THE IMPERIAL PERIOD

Stéphanie Mailleur-Aldbiyat

Under the Roman Empire, harbours played an important role for the image of the city. They were more than utilitarian constructions. The buildings and monuments were organised within the space of the port in a programmatic way that made up a genuine urban landscape that I have described as a "portscape". This term, derived from Zanker's townscape concept, is understood as the urban aspect, layout and design of Roman ports but also as the lived environment with its societies reflected by its cultural characteristics. Despite recent excavations conducted at Roman ports, our knowledge of portscapes under the Roman Empire is very unclear and the reality of port monuments remains poorly understood. Most known ancient Mediterranean ports are not well preserved, and often only preserved archaeologically at the level of their foundations. While archaeologists are able to reconstruct a plan, understanding ports three dimensionally is at best a challenge. What did Roman ports really look like?

Due to the lack of ancient sources relating to Roman ports, using iconography could be useful. This research aims to demonstrate that port depictions, quite abundant during the Imperial period and decorating various type of artistic media (coins, ceramics, mosaics, paintings, gemstones etc.), can make an important contribution for learning more about ports as they are the only source of information that allows us to understand volumetrically, the architecture of ports that no longer survives archaeologically.

Through this work, I will see how the pictorial genre of maritime landscape emerged during the Augustan period as well as the process of its diffusion, reception and standardisation in art during the Imperial period. I will also address the issue of the contexts in which port-themed decoration has been found. I will focus on the main characteristics of portscapes by means of a linguistic approach that distinguishes the different messages conveyed by images according to their contexts (domestic, funeral, politics, etc.).

By means of three specific case studies, I will demonstrate how it is possible to deal with the iconographic and epigraphic evidence in order to better understand the components of Roman portscapes. Case-study 1 focuses on the weighing control systems (*sacomaria*). Case-study 2 studies the single monuments that decorated the portscape, such as freestanding column monuments and honorific arches. Case-study 3 aims to better understand cult spaces in port contexts by using the example of the sanctuaries of Isis.

Finally, I will focus on the urban syntax of the portscape through the case-study of the port of Leptis Magna. Enquiry will ascertain the extent to which the urban programme of its portscape corresponded to a standard design in reality and in iconography.

UNIVERSITÉ LYON II-LUMIÈRE

RÉSUMÉ

UFR Temps et territoires

Archéologie et Histoire des Mondes Anciens

Thèse de Doctorat

IMAGINER LES PORTS ROMAINS. LA CONTRIBUTION DE L'ICONOGRAPHIE A LA RECONSTITUTION DES PAYSAGES PORTUAIRES DE MEDITERRANEE A L'EPOQUE IMPERIALE.

Stéphanie Mailleur-Aldbiyat

Au cours des trois premiers siècles de notre ère, Rome connait son apogée et la domination romaine continue de s'établir tout autour de la Méditerranée. Le contrôle de la *Mare Nostrum* et la connexion entre Rome et ses provinces sont assurés grâce aux réseaux de ports. À l'époque impériale, les ports jouent ainsi un rôle crucial puisqu'ils permettent de maintenir un rayonnement économique et commercial tout autour de l'Empire. Plus qu'une simple interface entre la mer et la terre, les ports font l'objet d'une attention particulière et forment un réel paysage urbain, constitué de bâtiments et de monuments organisés autour de l'espace portuaire de façon scénographique et programmée, que l'on peut qualifier de « *portscape* » (paysage portuaire). Cette notion théorique, que j'ai développée dans cette thèse, est dérivée du concept de « *townscape »* (paysage de la ville) introduit par P. Zanker dans sa publication sur l'urbanisme de Pompéi publiée en 1998[1]. Elle consiste à analyser l'organisation spatiale des bâtiments et monuments, individuellement et dans l'ensemble de l'espace portuaire, ainsi que leurs fonctions respectives. Cette approche a également pour objectif d'étudier la relation entre la fabrication de cet espace urbain et la société. Cette réflexion holistique est combinée au concept de « *maritime cultural landscape »* (paysage culturel maritime), introduit par C. Westerdhal en 1992[2], qui permet d'aborder les aspects culturels de cet espace construit constituant le cadre de vie des sociétés portuaires et de leurs activités.

[1] Zanker 1998, *Pompeii: Public and Private Life*, p. 3.

[2] Westerdahl 1992, "The maritime cultural landscape", *International Journal of Nautical Archaeology*, 21, pp. 5-14.

Le développement disciplinaire de l'archéologie sous-marine et l'intérêt croissant pour les réseaux et le commerce maritime ont mené à la multiplication des études portant sur les infrastructures portuaires au cours des dernières décennies. Malgré cela, la réalité des infrastructures portuaires reste assez mal comprise car les vestiges ne sont généralement pas très bien conservés. Il est donc fondamental d'utiliser d'autres types de sources, comme l'iconographie, pour mieux appréhender les « *portscapes* » romains. Sous l'Empire, les ports apparaissent fréquemment dans les représentations artistiques. Au cours de cette recherche, j'ai rassemblé un corpus de 264 images portuaires sur des supports variés : lampes, monnaies, peintures, mosaïques, sculptures, verres incisés, pierres gravées etc. Sur ces documents figurent des vues générales de paysages maritimes, des éléments architecturaux isolés de ports (tels que des phares) et des activités portuaires suggérant les infrastructures portuaires (comme des scènes de pesée ou bien des scènes de chargement/déchargement de marchandises). Bien que l'essentiel du corpus date de l'époque impériale, l'intégration de documents appartenant aux périodes préromaines et à l'Antiquité tardive permet d'établir des comparaisons diachroniques.

Cette recherche constitue la première tentative d'évaluation, à grande échelle, du potentiel documentaire des sources iconographiques pour comprendre l'aspect, la disposition et le design des ports romains. Considérer les images comme sources historiques est un concept assez récent puisque l'art, longtemps considéré comme étant simplement illustratif, n'occupait qu'une place marginale dans les études d'histoire ancienne. Les images peuvent apporter, en effet, une contribution importante pour l'étude de l'aspect architectural et urbain des principaux ports de Méditerranée car elles montrent ce qui n'existe plus archéologiquement, telles que les élévations de bâtiments portuaires, souvent réduits aujourd'hui à leurs seuls niveaux de fondations.

Ainsi, cette thèse de doctorat soulève les questions de recherche suivantes :

- Quelle contribution l'iconographie peut-elle apporter à notre compréhension des paysages portuaires de l'époque impériale ?
- Quelles sont les caractéristiques du « *portscape* » romain selon les sources iconographiques ?
- Quels sont les éléments réels et quels sont les éléments standardisés ? D'où viennent ces standards ?
- Dans quelle mesure pouvons-nous confronter l'iconographie à d'autres types de sources (comme l'épigraphie et l'archéologie) pour mieux comprendre la « réalité » du paysage portuaire ?

Pour répondre à ces problématiques, ma thèse s'articule en sept chapitres :

Le **chapitre 1** introduit le contexte et l'intérêt de la thèse, les principales questions de recherche à aborder et offre un aperçu du potentiel et des limites de l'usage des sources iconographiques.

Le **chapitre 2** présente les cadres théoriques qui permettent de contextualiser et définir le concept du *portscape* ainsi que les questions relatives à l'influence de la politique et de la religion dans sa fabrication. Bien que des chercheurs aient étudié les contextes maritimes, personne n'a vraiment défini ce qui peut être qualifié de *portscape*. Bien que de nombreuses études aient traité des différents aspects de l'infrastructure portuaire selon différentes approches, peu de chercheurs se sont concentrés sur l'urbanisme portuaire. Jusqu'alors, aucune étude holistique n'avait été menée sur le paysage portuaire en incluant la manière dont les fonctions des bâtiments et des monuments sont réparties dans l'espace public et privé. Du fait des découvertes archéologiques récentes, les informations issues des publications anciennes doivent être reconsidérées et actualisées. L'objectif de cette thèse est ainsi de comparer ces données archéologiques récentes avec les images portuaires afin de mieux comprendre le *portscape* romain.

Le **chapitre 3** traite de l'intérêt d'étudier les œuvres d'art comme source pour appréhender le contexte culturel et social des civilisations anciennes ainsi que leur environnement. Il décrit la manière dont ces images peuvent être utilisées pour une meilleure compréhension des ports romains en s'inspirant des différents outils de lecture et d'interprétation. Ainsi, nous verrons comment aborder l'art romain afin de définir la syntaxe des images portuaires et les façons de les percevoir. Il s'agit dans cette partie de définir le contexte social dans lequel ces images s'inscrivent, afin d'en analyser les fonctions et les significations. Bien que les chercheurs aient étudié certaines représentations de ports et contribué à une meilleure compréhension des œuvres d'art, personne ne s'est intéressé à la fonction ni à la signification de ces images. Cette démarche de mise en perspective constitue à la fois l'originalité et l'intérêt de cette recherche. Il s'agit plus précisément d'examiner comment le matériel iconographique peut fournir des informations sur les architectures ou les aménagements portuaires en comparant les données archéologiques récentes avec des images portuaires.

Bien que les ports aient joué un rôle important dans les civilisations anciennes, nous remarquons un certain désintérêt pour la représentation des paysages portuaires pendant les périodes préromaines. Dans le **chapitre 4**, les quelques exemples présentés ne montrent que des

formes simples pour faire référence aux idées de ports ou de villes maritimes. Ce ne sont que des cadres de scènes et non des sujets en soi car ils n'étaient pas le but de la représentation. La période hellénistique est marquée par un changement significatif. Inspirés par les découvertes géographiques, les alexandrins ont initié la peinture des *topoi* à travers le paysage nilotique ou alexandrin, genre très populaire qui s'est perpétué jusqu'à l'Antiquité tardive comme le montre, par exemple, la mosaïque de Sepphoris. Pendant la période républicaine, les forces navales sont largement mises en évidence, notamment à travers la diffusion du motif des *navalia*, jusqu'à la période impériale. Sous Auguste, les peintures de paysages maritimes en tant que genre se développent considérablement, comme le soulignent Pline l'Ancien et Vitruve. Pendant l'Empire, c'est-à-dire à partir de la frappe des sesterces de Néron en 64, les images portuaires semblent être plus qu'un genre pictural car elles mettent largement en avant le caractère monumental du port. Que cela signifie-t-il ? L'examen du corpus iconographique nous a permis de mieux comprendre non seulement les systèmes de représentations mais aussi l'objet représenté en lui-même : le port romain. Il a souligné l'importance des ports pour les villes et les sociétés romaines et a révélé que les motifs portuaires se sont diffusés sur tous les types de supports artistiques (objets mobiles et objets immobiles), quelles que soient leurs dimensions. Les intailles, parmi les plus petits d'entre eux, ne mesurent ainsi que 1,5 cm. Leur expansion témoigne de l'importance des ports dans l'art romain et pour les sociétés romaines. Ce phénomène semble être lié au contexte historique des trois premiers siècles lorsque Rome, en pleine apogée, a établi le lien avec ses provinces grâce aux réseaux de ports construits tout autour de la *Mare Nostrum*. Dans ce chapitre, nous démontrerons que les images portuaires proviennent d'un syncrétisme de comportements artistiques entre les traditions hellénistiques et du paysage sacro-idyllique. Enfin, nous définirons les différents degrés de significations des images portuaires en fonction de leur contexte social à travers de brèves études de cas. Ainsi, nous verrons que le matériel numismatique peut servir d'outil de propagande de l'Empire ou des cités comme le cas des monnaies du Péloponnèse telles que celles de Corinthe et de Patras. Dans le contexte domestique, nous nous pencherons sur la fonction esthétique de ces images. Enfin, dans les contextes funéraires, nous verrons que les ports semblent être liés à la symbolique du passage.

L'étude de l'iconographie portuaire nous aide à comprendre les paysages architecturaux portuaires. Cependant, nous ne pouvons pas nous fier uniquement à celle-ci en raison des limites de ce type de sources. C'est pourquoi il est fondamental de mettre en regard les données iconographiques avec d'autres sources comme l'épigraphie et l'archéologie et de développer une approche interdisciplinaire pour dépasser ces limites. Le grand défi de cette recherche est de savoir

comment relier ces données. Le **chapitre 5** met la méthodologie en pratique à travers trois études de cas concrètes.

La première étude de cas met en évidence la question du contrôle de la pesée dans les ports. L'examen de l'iconographie, de l'épigraphie et du matériel archéologique atteste l'existence d'un lieu spécifique, situé près de l'*emporium*, nommé *sacomarium*, qui était dédié au contrôle de la pesée dans les activités portuaires des ports de Puteoli, Portus et Tarraco. Cette étude a confirmé la présence de grandes balances publiques dans des contextes portuaires comme l'indiquent la mosaïque de Sousse et l'*aequipondium* trouvé dans la zone portuaire de Tarraco qui pouvaient soulever jusqu'à 1500 kg. Cependant, cette étude a soulevé certaines questions relatives au type de marchandises contrôlées par les *sacomarii*. À l'exception des poids trouvés à Ocriculum, nous ne disposons pas d'informations épigraphiques concernant la nature des marchandises. La découverte de l'*aequipondium* à Tarraco nous laisse supposer que le *sacomarium* était réservé à la pesée des marchandises pondéreuses telles que des lingots métalliques, la pierre, le bois ou des sacs de sable ou d'autres matériaux de construction.

La deuxième étude de cas souligne, quant à elle, la question des monuments isolés attestés par l'iconographie dans les paysages portuaires comme les colonnes, les arcs et les trophées. Cette étude a permis de soulever la problématique liée à leurs fonctions et leur importance symbolique dans la topographie portuaire. J'ai démontré, à travers les exemples des colonnes de Caesarea Maritima, Cyzicus et Kreusae et de l'arc de Zara, que ces monuments participaient non seulement à la décoration et à la monumentalisation de l'espace portuaire, mais commémoraient et honoraient des personnes, des événements ou des divinités. Au-delà de leurs fonctions honorifiques et commémoratives, les monuments isolés semblent avoir contribué à la matérialisation de la religion dans les paysages portuaires romains. En effet, dans l'imagerie portuaire, nous avons pu identifier plusieurs divinités grâce à l'iconographie et à l'épigraphie. Nous avons pu repérer les statues de Neptune à Portus, Isis Pelagia à Puteoli, Priapos dans la peinture de Nabeul par exemple. Les données épigraphiques indiquent qu'une colonne votive dédiée à Isis Orgia devait se tenir dans le port de Kenchreai tandis que des colonnes votives étaient dédiées au Génie (*CIL* II, 3408), à Mercure et aux *Lares Augustales* (*CIL* II 5929) dans le port de Carthago Nova. Au-delà de leurs fonctions esthétiques et votives, cette étude de cas a souligné que ces colonnes pouvaient également servir de point de repère pour l'amarrage des navires dans les bassins portuaires. Cette fonction utilitaire semble être confirmée par la découverte de colonnes numérotées retrouvées autour du bassin de Trajan à Portus et la base d'une colonne qui mentionne explicitement la réparation de la colonne VII. Quant aux arcs, nous avons vu qu'ils étaient érigés dans les *portscapes* pour commémorer ou honorer quelqu'un comme le montre l'arc érigé dans l'emporium de Zara. Dans certains cas, comme

à Ancône, il marque le passage de la mer à la terre en tant que *Porta Maritima*. Sur la plupart d'entre eux, il y avait un groupe statuaire représentant le char de Neptune ou des Tritons soufflant dans des conques. La question des trophées dans le *portscape* reste cependant assez floue en raison du manque d'information. Finalement, une similitude significative de la syntaxe architecturale entre les *pilae* (jetée sur piles) avec les ponts peut être soulignée à travers l'exemple des deux arcs aux extrémités du pont Flavien de Saint-Chamas dans le sud de la France et la paire de colonnes aux extrémités du pont sur l'Euphrate actuellement en Turquie.

La troisième étude de cas analyse les espaces sacrés dans les ports romains en se concentrant sur les sanctuaires d'Isis. Il démontre l'importance de la religion dans les contextes portuaires et la prépondérance des divinités ou des structures religieuses (temples) dans les paysages portuaires romains. A travers une dizaine d'exemples de sanctuaires d'Isis localisés dans des ports de Méditerranée (Puteoli, Pompéi, Portus/Ostia, Cumae, Kenchreai, Delos, Baelo Claudia, Emporiae et Sabratha), j'ai essayé de comprendre quelles étaient leurs fonctions, comment ils s'intégraient dans le paysage portuaire et quel était le lien entre l'architecture, la liturgie et les activités maritimes. Nous avons vu que les sanctuaires d'Isis occupaient une place topographique importante dans les paysages portuaires. Certains d'entre eux étaient intégrés au centre civique comme à Pompéi et Baelo Claudia ou étaient situés à un endroit important de la ville comme à Emporiae où l'*iseum* se trouvait immédiatement à droite de l'entrée monumentale de la ville, sur une terrasse surélevée. La plupart d'entre eux étaient facilement accessibles depuis la mer comme à Baelo Claudia, Pompéi et Sabratha. Les cas de Puteoli et de Kenchreai restent cependant assez problématiques car les données archéologiques n'ont pas encore confirmé leur existence. Des éléments intéressants ont pu toutefois être observés en iconographie et en épigraphie. La série de vases de verre de Pouzzoles-Baia indique la présence d'un temple proéminent dans le paysage portuaire de Puteoli qui devait correspondre au temple supposé de Sérapis dont l'existence est confirmée par la *lex parieti*. Sur le vase d'Odemira, la présence d'un temple au fronton triangulaire orné d'emblèmes identiques à ceux du temple de Sérapis (un disque à plus et deux cornes) laisse supposer qu'il s'agissait vraisemblablement d'un temple isiaque. L'inscription *ISIV*(*M*) sur le vase de Prague renforce cette idée. À l'exception de ces deux indices et du matériel isiaque retrouvé à Puteoli, la présence d'un *iseum* n'est pas si évidente. Le nouvel examen du supposé sanctuaire isiaque de Kenchreai a également fourni de nouvelles perspectives sur certaines problématiques relatives au paysage sacré de l'Isthme de Corinthe. Cependant, les données archéologiques actuelles ne permettent pas de conclure si l'édifice était un sanctuaire d'Isis ou bien un *nympheum*. L'hypothèse d'un *nympheum* associé à un sanctuaire d'Isis n'est pas non plus impossible car cette

combinaison est attestée dans le sanctuaire hellénistique de Fortuna Primigenia à Palestrina et dans l'*Iseum Campense* qui se tenait à Rome.

Enfin, le **chapitre 6** répond à la question relative à l'organisation spatiale des ports romains. En se concentrant sur l'étude de cas de Leptis Magna, il analyse comment les principaux monuments portuaires comme le phare, les monuments religieux, les monuments de l'approvisionnement en céréales (les *horrea*) et les portiques s'articulent dans l'espace. L'intérêt de ce chapitre est de vérifier si les monuments portuaires suivaient un plan urbain prédéfini et s'ils correspondaient à une conception standard du *portscape* en réalité et en iconographie. Dans ce chapitre, il a été démontré qu'aucun monument n'était placé au hasard dans un paysage portuaire romain. Chacun d'entre eux dépendait d'un programme bien pensé et avait sa propre valeur symbolique. Le phare de Leptis Magna s'inscrit dans l'influence du modèle du Pharos d'Alexandrie. Sa représentation sur l'arc de triomphe de Septime Sévère montre son importance dans le port. En plus de marquer l'entrée du port, il matérialisait également le début de la procession triomphale de Septime Sévère. Les monuments religieux étaient également des éléments importants du paysage portuaire de Leptis Magna. Le temple flavien dédié à la famille impériale semble avoir joué un rôle central dans le port avant les aménagements de l'époque sévérienne. Il semble avoir été le monument le plus important du port avant la construction du temple de Jupiter Dolichenus. Il pourrait avoir exercé une fonction similaire au temple de Rome et d'Auguste à Caesarea Maritima et au temple d'Auguste à Alexandrie. Après les aménagements de Septime Sévère, le temple de Jupiter Dolichenus se tenait à l'emplacement le plus important du port sévérien. J'ai démontré qu'il avait un emplacement similaire au temple de *Liber Pater Commodianus* situé dans le bassin hexagonal du port de Trajan. Nous avons vu que ces temples qui étaient placés au centre des paysages portuaires de Leptis Magna et Portus étaient indirectement liés aux empereurs. Nous avons remarqué que les deux petits temples doriques distyles, avec des colonnes *in antis,* placés à chaque extrémité des môles, marquant l'entrée du port de Leptis Magna, correspondaient à une image archétype du port qui pourrait être mise en relation avec les monnaies de Kenchreai et de Patras. La présence d'un autel près du temple, au bout du môle, se retrouve également à Portus, avec le sesterce de Néron. Des autels similaires situés entre un temple et un phare sont également attestés par les monnaies qui représentent les ports de Caesarea Germanica et Pompeiopolis. Quant aux *horrea*, cette étude a souligné qu'ils n'étaient pas seulement des monuments publics pour le stockage et le ravitaillement en blé mais qu'ils sont devenus une composante majeure du *portscape* et ont participé à sa décoration et à sa monumentalisation. Leur position sur le môle a permis non seulement de faciliter le transport, le chargement/déchargement et le stockage des marchandises, mais avait également un but de propagande car ils font largement la promotion de la richesse de l'Empire. Enfin, les

portiques dans les ports ornaient la façade des entrepôts afin d'en sublimer leur architecture. Ils étaient construits pour unifier, monumentaliser et homogénéiser les paysages portuaires (comme dans n'importe quel espace public). La fonction symbolique des portiques dans les ports romains est confirmée par le portique de Claude à Portus, une colonnade monumentale qui définissait le front de mer ouest de la principale zone terrestre du port claudien. Ce portique devait fournir une façade monumentale pour les navires qui s'approchaient du bassin. Enfin, nous avons vu que le programme urbain du paysage portuaire de Leptis Magna correspond à un modèle urbain du port disséminé autour de la Méditerranée. Ce modèle, devenu standard iconographique, a été reproduit sur les monnaies puis sur d'autres types de supports, comme les mosaïques.

Enfin, le **chapitre 7** fait la synthèse des chapitres précédents. Il apporte les résultats de la recherche et fait état des limites et des possibles directions des futures recherches.

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List of abbreviations

AE: Année épigraphique

BCH: Bulletin de Correspondance Hellénique

BMC: British Museum Coins

CIL: Corpus inscriptionum latinarum

D.: Justinian's Digest

ID: identité documentaire (in the *PortusLimen* Database)

ID: Inscriptions de Délos

IG: Inscriptiones Graecae (Berlin, 1873-)

IGR: Inscriptiones Graecae ad res Romanas pertinentes, R. Cagnat, J. Toutain, et al., eds., Vol 1, 2, 4 (no more publ.) (Paris 1901-27, repr. Rome 1964)

IvE: Die Inschriften von Ephesos

IJNA: International Journal of Nautical Archaeology

ILS: Inscriptiones latinae selectee (Dessau 1892)

JRA: Journal of Roman Archaeology

MEFRA: Mélanges de l'Ecole Française de Rome

OGIS : Orientis Graeci Inscriptiones Selectae (Dittemberg 1902)

REA : Revue des études anciennes

SEG : Supplementum Epigraphicum Graecum

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Declaration of authorship

I, Stéphanie Mailleur-Aldbiyat, declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

Imagining Roman Ports. The Contribution of Iconography to the Reconstruction of Roman Mediterranean Portscapes of the Imperial Period.

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;

2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;

3. Where I have consulted the published work of others, this is always clearly attributed;

4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;

5. I have acknowledged all main sources of help;

6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;

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Signed:
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Date: Friday, 30th January, 2020

Chapter 1

Introduction: the spatial and architectural outlook of Roman Mediterranean ports and the evidence of images

1.1. The significance of the research topic

During Antiquity, the Mediterranean was a place of crossroads and trades. During the first three centuries AD, Roman domination was established all around the *Mare Nostrum* and commercial exchanges increased considerably. To ensure an economic and commercial influence in the whole Empire as well as the circulation of persons and goods, it was essential to develop infrastructures on its shores. This research focuses on the Imperial period (27 BC-476 AD), when the Mediterranean witnessed an extensive development of port facilities[3] to reinforce the network of the maritime trade in the Mediterranean Sea as it is shown in Figure 1 below.

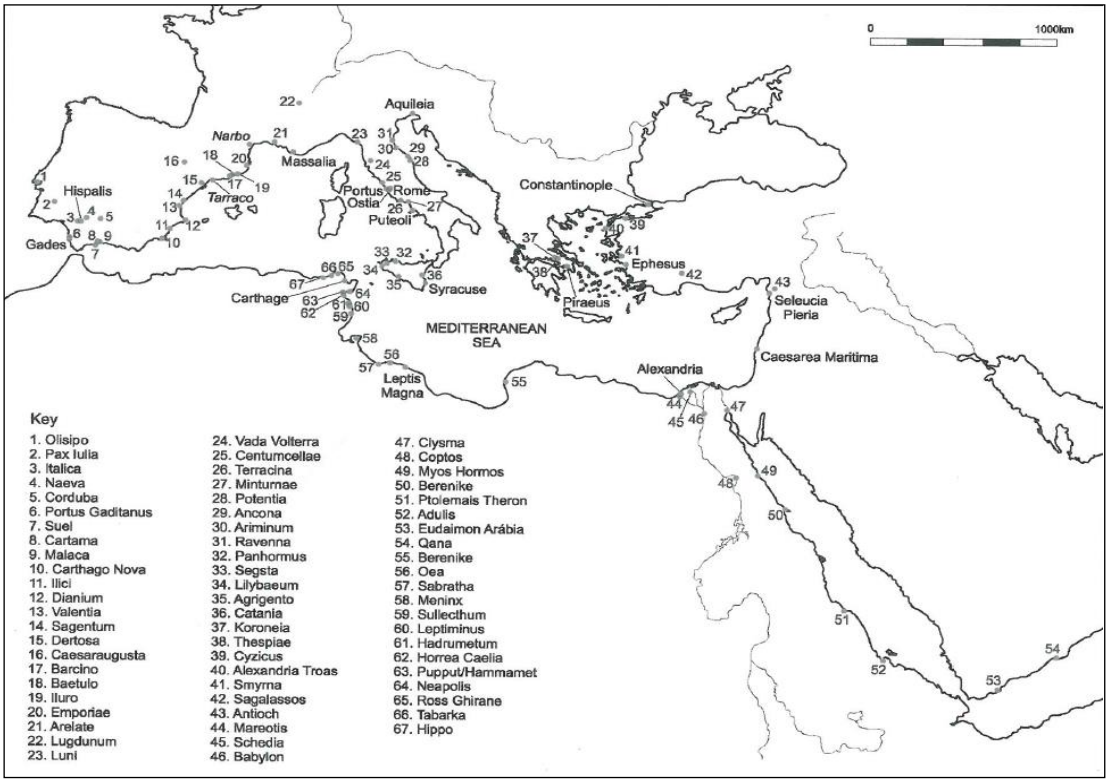

Figure 1: Map showing the location of the main Roman ports[4].

[3] Under the Imperial period, the epigraphy attests that several ports, quays, breakwaters or lighthouses were built or restored. For instance, Hadrian repaired the port of Ephesus (*IvE* II, 274) and the *pilae* of Puteoli (*CIL* X, 1640 = D 336 and *CIL* X, 1641 (Add. p. 1008)). Septimius Severus enlarged the port of Leptis Magna (quay and eastern pier) and repaired a column of Portus, broken by a storm (*CIL* XIV, 113) etc.

[4] Keay 2012, fig. 1.1, p. 6

In the Roman period, ports were not only places to accommodate and protect boats and ships but also a place of residence for merchants and sailors. Moreover, they ensured the loading and unloading of goods as well as their control (quality and weight) and their storage. They were complex structures. Their studies by scholars have increased in the last decades due to the development of the discipline of maritime archaeology and the interest in maritime networks and trade. Several interdisciplinary researchers have focused on the remains of submerged or silted port basins and jetties. Nevertheless, despite the recent excavations conducted on Roman ports, our knowledge related to port architectures under the Roman Empire is very unclear and the reality of the port infrastructures persists to be poorly understood. The majority of ancient Mediterranean ports are often archaeologically preserved only at their foundation level or not well preserved as the remains are subject to several problems such as marine disintegration, changes in sea level or construction projects[5]. Archaeologists are able to reconstruct a plan but the third dimension is difficult to imagine[6]. What did Roman ports really look like?

The lack of monuments and the difficulty in interpreting the archaeological data require a different approach to Roman ports. Ancient texts may help, at some points, to understand port remains. During the first century BC, Vitruvius wrote a technical chapter[7] dedicated to harbours, breakwaters and ship shed construction as well as using the pozzolanic sand as hydraulic concrete[8]. He provided only detailed descriptions of how Romans constructed concrete structures[9]. For some harbour sites, ancient descriptions exist. They essentially come from geographers like Strabo[10] who described Alexandria for example. Ancient historians also provided some details on ports. For instance, Appian[11] described the port of Carthage[12] during its destruction by Romans. Flavius Josephus[13] gave information on Caesarea Maritima harbour[14]. Suetonius[15] spoke about Portus and Pliny the Younger about Centumcellae[16]. Even though literary texts are interesting sources of information, they do not allow us to reconstruct port landscapes properly as, like in archaeological data, spatial and functional information on port infrastructures are missing. Due to the significant lack of ancient sources relating to Roman ports, using another type of ancient evidence, such as

[5] Felici 1998 ; Blackman 1982a
[6] Blackman 1982a, p. 80
[7] Vitruvius, *De Architectura*, V, 12
[8] Dubois 1902a
[9] Brandon et al. 2014
[10] Strabo, *Geographia* XVII 1
[11] Appian, *The Punic Wars* 25, 121-124 and 26, 127 and *Libyca* 96
[12] Hurst 2010 ; Carayon et al. 2017
[13] Flavius Josephus, *Antiquities of Jews* 15.331-39 and *Jewish Wars* 1.408-15
[14] Raban 1992
[15] Suetonius, *Claudius* XX
[16] Pliny the Younger, *Epist*. 6.31

iconography, could be useful to fill this gap. Since Augustus, ports are largely represented in art during the Imperial period. In the course of this research, 264 documents have been collected. They come from all around the Empire (Figure 27) and they are found in a number of different media (Figure 31): lamps, coins, gems, glasses, paintings, mosaics, sculpture etc.

The potential of port images has been considerably underestimated. It needs to be remembered that images, as evidence for historical studies, are actually a relevant recent concept. Thirty years ago, art had a marginal place in ancient history and was only considered as illustrative. Historians have recognised only recently that images are important evidence and sources of information. This research aims to demonstrate that port depictions can make an important contribution for learning more about ports as they are the only source of information that shows the third dimension of port architectures that no longer exist archaeologically. This PhD is the first attempt to assess their documentary value for imagining Roman ports. It fits in the ERC-Advanced Grant funded Rome's Mediterranean Ports Project (*PortusLimen*) (n°339123) that is funded under the European Research Council. It contributes to the inter-disciplinary methodology developed in this project that intends, namely, to know more about the daily harbour life and the context of how Roman trade was conducted by focusing upon the study of the layout of Roman ports and the organisation of commercial activity.

1.2. The importance of portscapes in Roman cities and societies

According to Vitruvius[17], Roman harbours were, by nature, public infrastructures like *fora* [18]. They were dedicated to the public utility (*utilitas publica*) but they were also a place for the 'divine Emperor'. Indeed, one of the main principles of Roman urban space is the *maiestas imperii* as Vitruvius explains in the preface of his *De Architectura*[19]. Considered as signs of richness and abundance, ports are listed as well by Menander Rhetor[20], among public monuments that collaborate to the positive aspect of the city like porticoes or sanctuaries. Later, Julian of Ascalon[21], in his treatise on urbanism, dated to the sixth century AD, also conceived harbours as an ornamental element of the city. Therefore, under the Roman Empire, harbours played a role in the appearance of the urban cityscape. They were more than a simple interface between the land and the sea or utilitarian infrastructures as they also had an ornamental function. The quality of a port qualifies the

[17] *De Architectura*, I, 3
[18] Arnaud 2012, p. 173; Digest D. 1, 8, 4, 1
[19] Pont 2010, p. 207 ; Vitruvius, I, *Praef*. 2
[20] Men. Rh. 2.382, 386
[21] Jul. Ascal. 52.3-4

most beautiful cities. For instance, Smyrna was the most beautiful city of Asia according to Strabo[22] and Aelius Aristides[23], thanks to its beautiful port, unlike Ephesus whose port was often silted up. Ports were, in this way, the display front of the city as it gave to the sailors, arriving from the sea, the first impression of the city[24]. This explains the monumental development of ports that emphasise the symbolism of these utilitarian constructions[25]. Consequently, buildings and monuments were organised throughout port space with a particular attention and a programmatic and scenographic way as MacDonald points out:

> *"Architects and engineers paid much attention to port-building […]: to build a large port meant creating a specialised suburb with enough features of complete towns to give it an acceptably urban aspect"*[26].

Ports formed a real urban landscape that can be described under the term portscape. I chose the term "portscape" and not "harbourscape" because the term "port" refers to the entire city which is adjacent to the sea, contrary to the term "harbour" that is strictly limited to the infrastructures around the basin[27]. This theoretical notion, which will be further developed in Chapter 2, is derived from the 'townscape' concept which has been introduced by Zanker, in his publication on Pompeii town planning, published in 1998[28]. It consists of analysing the spatial organisation of buildings and monuments, individually and throughout the port area, as well as their respective political and social functions. This approach also aims to study the relationship between the making of this urban space and society. This holistic reflection is combined with the concept of

[22] Strabo, 14, 1, 37.
[23] Aristid., Or, 17.9-11 and 18.5-6
[24] Example of the series of coins of Patras in Papageorgiadou 2015, p. 107
[25] Rougé 1966, p. 156; Flavius Josephus, *Jewish Wars*, I, 409-415) emphasises the monumental character of the entrance of Caesarea Maritima harbour
[26] MacDonald 1988, p. 262
[27] See the definition in Rickman 1985, p. 105 : "*A harbour is an area of water partially enclosed, and so protected from storms as to provide safe and suitable accommodation for vessels seeking refuge, supplies, re-fuelling, repairs, or the transfer of cargo ... A port is a sheltered harbour, where marine terminal facilities are provided, consisting of piers or wharves at which ships berth, while loading and unloading cargo, transit sheds, and other storage areas, where ships may discharge incoming cargo, and warehouses where goods may be stored for longer periods while awaiting distribution, or sailing. Thus the terminal must be served by railroad, highway, or inland waterway connections, and in this respect the area of influence of the port reaches out for a considerable distance beyond the harbour. The tributary area of a port consists of that portion of the adjacent area, for which freight transportation costs are lower than they are to competing ports. A harbour is merely a very important part of a comprehensive system of works and services, which comprise a port*''.
[28] Zanker 1998

'maritime cultural landscape', introduced by Westerdhal in 1992[29], which allows us to address the cultural aspects of this built space, constituting the living environment of the port societies and contextualising their activities. This research aims concretely to understand, under the term portscape, the urban aspect, layout and design of Roman ports as well as the way they functioned and related buildings and monuments were distributed through space. In other words, the underlying principles that structured port space. Portscape refers more precisely to a lived environment with cultural meanings that can be studied archaeologically.

1.3. Rethinking Roman portscapes from the perspective of iconographic evidence

The iconographic material analysed in this work needs to be understood as art that characterises Roman material culture, and as evidence. This approach, which is innovative as it stands in contrast to the usual traditions of study, will help us to understand the relationships between the urbanism of ports, art, culture and society. As a consequence, this thesis addresses the following research questions:

- Are port images realistic or idealised? Can we appreciate their degree of realism? Do they follow conventions of representation? If so, where do they come from?
- What did port images mean for different levels of Roman societies? What messages did they convey?
- To what extent can we use iconographic sources to enhance understanding of Mediterranean portscapes?
- Which spatial and architectural features of Roman portscapes can be understood from the perspective of the iconographic evidence? What type of buildings and monuments do we find in Roman portscapes?
- What are their respective functions? What were their symbolic and their visual role in port topography?
- What was their spatial organisation? Does an archetypal layout of buildings and monuments exist (in iconography and in reality)?

All of these questions are connected and raise important points related to our understanding of key issues in the architecture and urbanism of Roman ports. They allow us to bring a new perspective to our knowledge related to the urban aspect of Roman ports and they will namely help us to better understand port administration and the organisation of commercial

[29] Westerdahl 1992

activities through the study of the functions of the buildings, such as systems of storage and mooring etc. Furthermore, as can be expected, these questions will help us to better understand artistic practices in Roman society, which in turn can help us to better evaluate the significance of ports in the Roman world.

They emphasise the role of the sea and harbours in Roman societies and how they were perceived through Roman eyes. This question is very important as we can notice certain mutations in the Roman Imperial period regarding the perception of the sea. For the Greeks, the sea was omnipresent in their life and had an ambivalent character[30]. The Mediterranean was associated with a positive concept of nourishment, beauty, fertility and divinity in Greek literature. For instance, Homer, in the *Iliad*[31], qualifies the sea as "divine" and "bright". In mythology, the sea is inhabited by the beautiful Nereids (like Amphitrite, wife of Poseidon and Thetis, mother of Achilles). They form the procession of Poseidon. The sea provided with food and allowed commerce, transport and colonisation of new fertile lands, like Magna Graecia. Despite its advantages, Greeks had also a negative vision of the sea. Effectively, it was a disquieting empty and barren space that evokes death and can even lead to Hades[32]. Moreover, Greeks had a certain '*thalassophobia'* recommended by Isocrates[33] who disapproved of Athenian imperialism and considered that maritime peoples have more inclination for disorder than continental people. Plato explains in the *Laws*[34] and in the *Republic*[35], the refusal of maritime activities for his 'Ideal City'[36]. He argues that a city should be built at a distance of nine kilometers distant from the sea but was also aware of the utility of a port. According to him, the opening on the sea was considered as dangerous as it was a place for barbarism, where the attacks of pirates or invaders could happen. Later, Cicero, in his *De Republica* written in 54 av. J.-C., had the same vision[37]. For him, maritime cities had corrupting influence that goes against the good values as well. In Roman period, the sea continues to be an ambiguous force. Although Romans always feared the sea, as evidenced by the many sacrifices addressed to the different marine deities to ensure a safe journey, this vision of the sea and ports changed under the Empire. Romans conceived the Mediterranean as *Mare Nostrum*, understood as an entity[38]. "The claim of the Romans over 'their' sea was part of a political and cultural process by which they progressively defined the place of Rome at the heart of an Inhabited World – an *Oecumene* or *Orbis*

[30] Beaulieu 2016
[31] E.g. *Iliad* I, 141
[32] Cousin 2012
[33] Isocrates, *On the Peace* 64, 102, 115
[34] Plato *Laws* 704d-5b
[35] Plato, *Republic* 425d
[36] Klosko 2006, p. 228-229
[37] Cicero, *Republic* II, 79-80
[38] Purcell and Horden 2000, p. 125

Terrarum with the Mediterranean at its centre."[39] Mediterranean was at the centre of their power strategy and the dominance of the sea was an important component of their imperial history[40].

1.4. Overview of chapters

This work is divided into a further seven chapters:

Chapter 2 follows on from Chapter 1 by acting as a literature review concerning the architecture and the spatial organisation of Roman ports. It also provides a theoretical definition of the portscape concept from the conceptual frameworks.

Chapter 3 is concerned with the use of images as historical evidence, and proposes a methodology for reading and interpreting port images. It underlines the different tools and theoretical frameworks of the visual semiotic - such as the Panofsky's system or the Peirce's triadic model for interpreting signs. It raises also the question of using interdisciplinary approaches for understanding Roman portscapes, such as the use of epigraphic data. It includes the main works and tools - reading and interpretation - related to Roman art and puts into perspective the critical discussion of previous interpretative frameworks.

Chapter 4 describes the origins and the process of the diffusion and adoption of port and maritime imagery until the Imperial period. It raises the issue of Hellenistic influences upon Roman port imagery. It also analyses how the pictorial genre of maritime landscape emerged during the Augustan period as well as the process of its diffusion, reception and standardisation in art during the Imperial period. It presents the nature of the corpus of images collected for this thesis as well as its chronological and geographical distribution. It also identifies the contexts in which port-themed decorations have been identified. Finally, it determines the main characteristics of portscapes by means of a linguistic approach and distinguishes the different messages conveyed by images according to their contexts (domestic, funeral, politics, etc.) and from the perspective of the viewers (to whom this type of image is addressed? what are the motivations of the sponsors?).

Chapter 5 focuses on the relevance of the concept of portscape from both a theoretical perspective and by means of three case studies. Its objective is to study more precisely the installations and infrastructures (lighthouses, warehouses, moles, etc.), spaces for control and administration (offices, weighing places, custom offices, etc.), sacred areas, the elements of decoration and monumentalisation of the port area (column-monuments, arches, etc.). In particular,

[39] Purcell and Horden 2000, p. 12
[40] Hohlfelder 2008, p. 2

it will explore the extent to which politics and society - ethnic groups, corporations, euergestists, etc. - played a role in the creation of the port and the materialisation of ideology in the portscape. In other words, it explores how far politics and religion were embedded into the portscape? The case-study 1 focuses on the weighing control systems (*sacomaria*). The case-study 2 studies the single monuments that decorated the portscape such as freestanding column monuments and honorific arches. The case-study 3 aims to better understand the cultic spaces in port contexts throughout the example of the sanctuaries of Isis in port contexts.

Chapter 6 seeks to study the overall urban aspect of Roman ports. It aims to study the urban syntax of portscape through an interdisciplinary approach. Through the case-study of the port of Leptis Magna, it will be examined if the urban programme of its portscape corresponded to a replicative design in reality and in iconography. In this Chapter, will be analysed the different components of the portscape of Leptis Magna from Nero to Septimius Severus and their symbolic role: the lighthouse, the religious monuments (the Neronian temple, the Flavian temple, the Severan temple to Jupiter Dolichenus, the two small temples at the port entrance), the monuments to the grain supply and the porticoes.

Finally, Chapter 7 acts as a general discussion. It summarises the findings from previous chapters and the overall results of the research. It explores the implications, limitations and the possible directions for future study.

Chapter 2

Roman portscapes studies in the scholarly records

Despite interests by maritime researchers, port studies are regularly trade focused and maritime infrastructure has been quite neglected by modern scholarship over these last decades. Since the 1990's, many urban studies have been undertaken in the field of archaeology. They are essentially focused on the showcases of Pompeii[41] and Ostia[42]. However, in the field of Roman urbanism, nobody has paid sufficient attention to the role of the port within the townscape. In addition, conceptualising what may be termed as the Roman "portscape" has never been attempted, neither categorising port structures nor making an overall study. This chapter will demonstrate the interest of this research compared to previous literature on port landscapes and port architectures. It will highlight the following topics:

- Conceptual frameworks;
- Portscape concept;
- Major works on ports.

2.1. Conceptual frameworks

This section addresses the different conceptual frameworks within which this research is conducted in order to attempt to introduce and define what is meant by portscape. Several scholars have paid attention to the different concepts related to maritime contexts such as "seascapes", "waterscapes" and "maritime cultural landscapes". All of these notions need to be introduced in order to understand where the portscape concept comes from. In 2011, Ford made the point, in his introduction in *The Archaeology of Maritime Landscapes*[43], on the nuances between the notions of seascapes, waterscapes and maritime cultural landscapes:

[41] Zanker 1998
[42] Stöger 2011 ; Laurence and Newsome 2011
[43] Ford 2011, introduction, p. 1-9

2.1.1. Seascape and waterscape concepts

Some scholars[44] use the term seascape to describe any landscape viewed from the sea. This concept includes the waterfront installations such as ports and harbours. The term waterscape refers to a view or a depiction of a body of water in the general sense (sea, lake, river etc.). This term has been widely used by Rogers through his studies focused on the role of water in the Roman urban fabric[45]. He deals with the way in which towns adapted to control, exploit and transform the landscapes in which they were situated paying particular attention to water.

2.1.2. Maritime cultural landscape concept

One important development has been the concept of the maritime cultural landscape, first introduced by Westerdhal in 1992[46] to refer to "a scientific term for the unity of remnants of maritime culture on land as well as underwater". This concept, including ancient monuments used by humans for an economic perspective, has sought a holistic approach to understanding coastal archaeology. The maritime cultural landscape "comprises the whole network of sailing routes, old as well as new, with ports and harbours along the coast, and its related constructions and remains of human activity, underwater as well as terrestrial." It combines the physical aspects of landscape and seascape to analyse the culture of maritime people within a spatial context. This notion has been widely developed by Westerdahl[47] and several other scholars like Parker[48] who emphasised the need to recognise that port quays only formed one part of the structural and natural features that were used in maritime activities which could also include beaches, coves, sheds, river-bank moorings, settlements, roads and paths.

2.1.3. Townscape concept

After having introduced the different theories and concepts developed in the field of maritime contexts, it is important to check what research has been undertaken into Roman urban landscape studies for conceptualising port landscapes. For this, we will focus on Zanker's contribution to Pompeian research[49], published in 1998, in which he introduces the "townscape"

[44] Breen and Lane 2003; McNiven 2004
[45] Rogers 2012a; 2012b; 2013a
[46] Westerdahl 1992
[47] Westerdahl 1992; 2003; 2006; 2013
[48] Parker 1999; 2001
[49] Zanker 1998

concept (*Stadtbilder*) to "describe the outward appearance of a city in the most comprehensive sense, meaning not so much the architecture of single buildings as their function within the total context of public space"[50]. It marks the beginning of a series of studies on Roman urbanism which focus upon social and political questions and away from descriptive art-history and archaeological topography. The strength of Zanker's approach is that he has analysed the overall organisation of space in a city and understood it in relation to society since the townscape for him represents "the framework within which urban life takes place".

2.2. Portscape concept

2.2.1. Definition

For port context, we can adopt Zanker's reflection and analyse the overall organisation of space in the port and study the function of single buildings within the total context of port space. This holistic approach, combined with the maritime cultural landscape concept, helps us to understand that the term "portscape" can encompass the urban aspect of a port, its layout and design as well as the way the functions and related buildings and monuments were distributed through public and private space. It takes into account that portscape frames port activities and interactions within port societies. Portscape refers more precisely to a lived environment with cultural meanings that can be studied archaeologically. This concept aims to understand places and spaces in the port. This approach includes the study of the urban syntax of the portscape (port facilities and utilitarian infrastructures, space related to port administration and control, urban decoration and the elements of monumentalisation and sacred areas)[51] and what it reflects, namely the extent to which it was a reflection of the port societies, and how the maritime façade reflects the broader city. This approach has been developed by Rogers[52] who focused upon social archaeological approaches to the study of ports and harbours in order to develop more critical perspectives on the archaeological material and place them within their social and historical contexts. However, nobody has attempted to apply the concept of townscape to ports.

[50] Zanker 1998, p. 3
[51] The urban syntax analysis will be described in Chapter 3
[52] Rogers 2013b

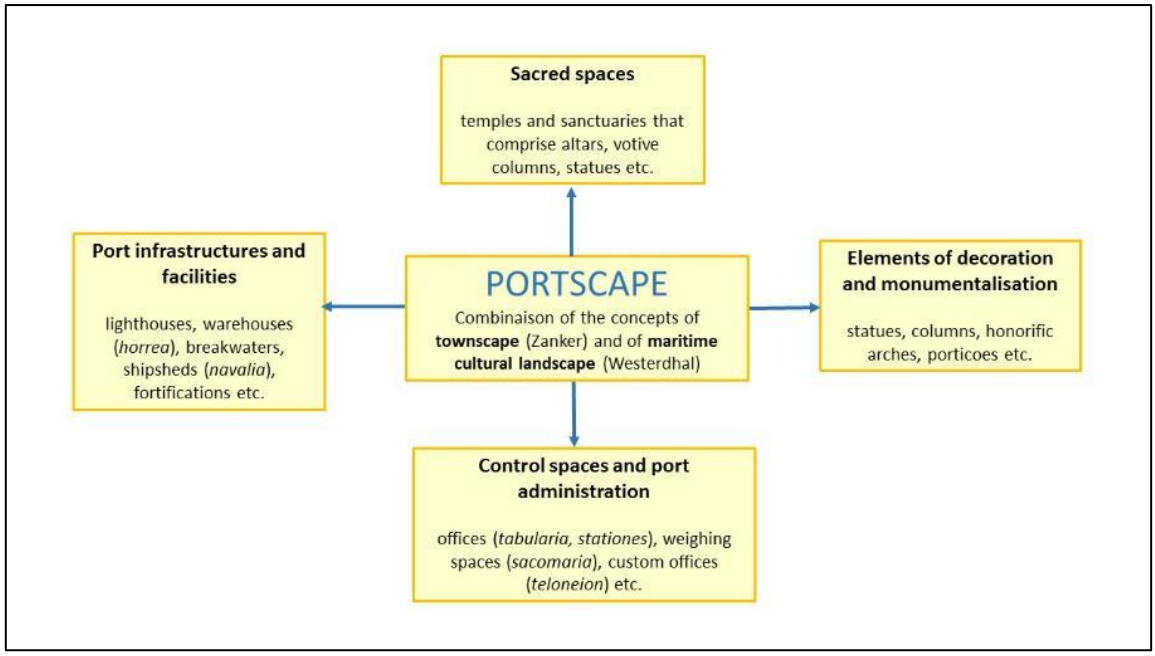

Figure 2: Portscape concept.

2.2.2. Creation of the portscape, euergetism and politics

Developing the portscape concept involves examining the relationship between port architecture/spatial organisation and society/politics. This approach was attempted in an article by Zuiderhoek[53] in reference to urban public space in Roman Asia Minor. He examined the influence of politics in the development of urban landscapes and the how individuals manage and control the built environment for their own political ends. Urban landscape is indeed reflective of the decision of political authorities. This leads us to Smith's "political landscapes" concept[54] developed in her book entitled "The political landscape: constellations of authority in early complex polities", in which she focuses on how landscapes contribute to the making of politics. Horster in "Urban Infrastructure and Euergetism outside the city of Rome"[55] has also explored the connections between monumentalisation of cities and the involvement of benefactors in the provision of civic buildings. The term "euvergetism", coming from the Greek εὐεργετέω ("doing good deeds"), was coined by the French historian Veyne in the 1970's[56] "to describe the social practice of an individual providing financial support and benefactions for a civic community"[57]. As Arnaud underlined, port infrastructure depends upon both public and private initiative[58]. Indeed, portscape results from the

[53] Zuiderhoek 2014
[54] Smith 2003
[55] Horster 2014
[56] Veyne 1976
[57] Horster 2014, p. 516
[58] Arnaud 2012

wishes of politics or local authorities as well as collectivism (communities, corporations, fishermen etc.).

As is the case in the city[59], Roman ports seem to have been the field of euergetism and munificence relating to the building and the maintenance of infrastructures. Constructions or repairs are known from honorific inscriptions[60], testifying the recognition of the euergetist or *benefactor*. As we have seen in Chapter 1, ports were considered as ornamental elements of the city. Thus, providing financial support for the construction or the repair of port buildings means embellishing the city (τήν πόλιν κοσμεῖν), which was one of the duties of a good wealthy man in the public interest. This ornament contributed to his reputation and glory, and made him a good citizen. The idea of the "ornament of the city" was developed by Pont[61]. It refers, more precisely, to the aesthetics of the urban landscape, that reflects, according to the Sophists, the κόσμος (*kosmos*) of the city. In this way, the "ornament of the city" helped provide a positive image of Roman societies living in harmony and with good moral values. In Greek and Roman times, the urban landscape was a symbol of belonging to civilisation and stood in opposition to barbarism. Consequently, Greeks and Romans paid particular attention to the appearance of their cities by ornamenting them. The idea of ornamenting the city[62] was especially developed during the Roman Imperial period. In particular, cities increased the number of public buildings in order to sustain a positive image between the end of the first and the third century.

Lastly, it is important to highlight another significant issue in relation to the visual and symbolic power of port architecture, namely how portscapes were transformed into political and ideological landscape. In order to address this, we can explore the concept of "materialisation of ideology"[63] published by De Marrais, Castillo and Earle so that we can describe the process by which ideologies are assumed to have a physical form that reveals the human culture. They argue that ideology is a component of power strategies that configure socio-political systems. To illustrate that, they base their reflexion on case studies from Neolithic and Bronze Age in Denmark, Moche states in Peru under the Inca Empire. They define the term materialisation as "the transformation of ideas, values, stories, myths, and the like into a physical reality that can take the form of ceremonial events, symbolic objects, monuments, and writing systems."[64] Among the forms of materialisation of

[59] Zuiderhoek 2007, 2009, 2011, 2012, 2014 ; Horster 2014
[60] The next section will develop the question of the epigraphy
[61] Pont 2010
[62] Pont 2010, p. 11
[63] DeMarrais et al. 1996 ; Zuiderhoek 2014, p. 100
[64] DeMarrais et al. 1996, p. 6

ideology, they mention the "public monuments and landscapes"[65]. Through this, they address the issue of the symbolic role and the message that monumental architecture can convey such as disseminating propaganda. This line of thinking can be applied to Roman societies and we can adopt this reflexion to study the materialisation of ideology in Roman portscapes.

2.2.3. Portscape making and religion

To finish introducing the portscape concept, it is important to underline a final point related to the omnipresence of worship in Roman portscapes, and how religious practice is embedded within portscapes. In other words, there is a need to study the visual display of religious activities and religious identities[66] in portscapes. Religious landscapes include the ritual and cultural practices in the sphere of religion as well as mythological traditions[67] and sacred features depicted in Roman art. Polignac recently studied these questions and provided a definition of the religious landscape[68] at a conference with Scheid. In the development of this topic, he expanded his study to include maritime religious landscapes[69].

2.3. Major works on ports

2.3.1. General studies

As we have seen in Chapter 1, there is no precise description of Roman ports in ancient literature excepting the theoretical text of Vitruvius[70], in which he explained how an ideal port should be built and others texts which describe port cities such as that of Pausanias for Kenchreai[71] or Strabo for Alexandria[72]. Modern studies of ancient ports really began in 1923 with Lehmann-Hartleben[73] who published a pioneering book about ancient harbours around the Mediterranean Sea. His book, referencing 303 harbours, remains an important study since he made the first attempt to analyse the development of harbour constructions in antiquity. However, it was a compilation based essentially on literary evidence and does not really consider iconographic sources. Since the

[65] DeMarrais et al. 1996, p. 9
[66] Spencer 2010 ; Raja 2012
[67] Horster 2010
[68] Scheid and Polignac 2010
[69] de Polignac 2015; 2016
[70] Vitruvius, *De Architectura*, Book V, Chapter 12
[71] Strabo, *Geographia* XVII 1
[72] Pausanias, II, 2, 3
[73] Lehmann-Hartleben 1923

1920's, maritime research has developed. In 1967, Rougé[74] published "*Recherches sur l'organisation du commerce maritime en Méditerranée sous l'empire romain*" in which he wrote a section on the infrastructure of maritime commerce. In this, three sections are dedicated to commercial ports (ports terminology, the main ports and the construction of ports). Over some thirty pages, he touched upon the main elements of port infrastructure: the quays and mooring systems, the installations for loading and unloading ships, the porticoes and warehouses and other types of buildings such as offices, *deigma* and *stationes* etc. In 1972, the *International Journal of Nautical Archaeology* was introduced but the Roman port infrastructures remained underestimated by scholarly studies. Very little was written on this topic in the 1980's with the exception of works by Blackman[75], Rickman[76] and McCann[77]. Moreover, Reddé published a book focused on the infrastructures of the navy under the Roman Empire in 1986[78], although its military focus meant that it excluded commercial ports. Very few scholars have focused on port urbanism except for Bouras who worked recently on the evolution of the spatial organisation of harbours in the Aegean Sea[79]. Also, in those works which have been published, no account has been taken of the iconographic sources, while the creation of portscape remains poorly understood. More recently, Arnaud[80] emphasises the diversity of maritime infrastructures in term of technical level, costs and size through written and archaeological evidence. In this article, Arnaud also underlined the different involvement of the public and private spheres in the realisation of port buildings.

2.3.2. Epigraphy relating to port architectures and infrastructures

Several inscriptions commemorate euergetists or benefactors who have funded port buildings. They could be dedicatory, funerary or honorific in character and were inscribed on various types of monuments in the port area[81]. This leads us to address the question of the "epigraphic habit" and the integration of the epigraphic monuments with Roman portscapes. In other words, why did Romans publicly display writing in Roman ports? What was the role of epigraphy in port areas? How does epigraphy (especially inscribed monuments) fit into the portscape? The concept of the "epigraphic habit" was developed by MacMullen[82], in 1982, to describe the Roman cultural

[74] Rougé 1967
[75] Blackman 1982a; 1982b
[76] Rickman 1985; 1988
[77] McCann 1987
[78] Reddé 1986
[79] Bouras 2014
[80] Arnaud 2014
[81] The epigraphic material will be described in detail in Chapter 3
[82] MacMullen 1982

inclination to permanently inscribe monuments in public. The term has been broadly used in subsequent scholarship, enhancing its importance in the understanding of Roman imperial society. Other authors, such as Woolf, have studied MacMullen's concept, relating it to the development of urbanism and relationships between epigraphic culture, monuments and the expansion of Roman society[83].

Understanding epigraphy is entirely connected to the portscape concept as it enables us to understand how portscapes were created and the process of portscape making by learning about such issues as who decides, who manages, who controls and who sponsored port buildings. It also raises other questions, such as what a portscape reflects from a political and social point of view? How do politics and collectivism contribute to the making of portscapes? Arnaud[84] addressed these questions in a recent article in which he underlined the role of cities in managing their ports and the importance of personal patronage and social intermediation (personal and civic networks) in the development of port-building policies. However, the epigraphy of port infrastructures has not been studied very widely. Scholars such as Tran[85] have paid more attention to corporations, port societies and port occupations while Terpstra[86] has studied port communities. There have been few studies of the epigraphic evidence of port infrastructures. For instance, the study by Franzot[87], analyses port terminology on inscriptions from Aquileia and Roman ports in Italy, Baetica, Sicily, Dalmatia, Moesia and Aegypt. This study is interesting since it categorises the main kinds of infrastructure that we are supposed to find at harbours. Franzot also refers to around twenty documents that he attempts to link with the different structures and inscriptions. The study "*L'epigrafia dei porti*" published by Zaccaria[88] focuses upon several aspects of port epigraphy such as transport, magistrates or port infrastructure. In his introduction, he attempts to define what he understands by the term port epigraphy. Through examples, he gives an overview of port epigraphy concerning facilities, infrastructure, professions and administration.

Some recent epigraphic studies add a new perspective to the problematic issues related to port architectures, facilities and administration. Burrel, for example, wrote about the six inscriptions inscribed on the two columns found at Caesarea Maritima[89], while Alföldy published an inscription commemorating the rebuilding of the lighthouse of Caesarea Maritima by Pontius Pilate[90] and Jones

[83] Woolf 1996
[84] Arnaud 2015a
[85] Tran 2008; 2012
[86] Terpstra 2014; 2015; 2015
[87] Franzot 1999
[88] Zaccaria 2014
[89] Burrel 1993
[90] Alfoldy 2012

published the Neronian dedication referring to the construction of the lighthouse of Patara[91]. In another study, Kokkinia published an article about the inscription inscribed on the grave of a certain Opramoas[92] at Rhodiapolis that refers to the building of a double portico near the harbour[93]. Some epigraphic studies concerning the infrastructures of Ephesus harbour have been published recently. For instance, Bouras[94] published an article upon the edict by the *proconsul asiae* (*IvE* I, 23) from Ephesus which forbade the storage of wood and marble in the port because of the damage caused to the *pilae* (λιμένος πείλας) on account of their weight. In this article, she points out the trade and the storage of materials (wood and stone) at Ephesus, and showed that storage spaces and stonemasons workshops existed in the harbour area. Kokkinia[95] published an article about the construction and maintenance of infrastructures in the provinces, focusing on Ephesus as a case study, also studying the same edict of the *proconsul asiae* as Bouras. For this, she examined as well as Bouras the edict of the *proconsul asiae*. Finally, an interesting article on the *teloneion* of Ephesus[96] was published by Lytle.

2.3.3. Studies of ports infrastructure

All of the archaeological fieldwork undertaken in the main Mediterranean ports have ineluctably looked on the study of infrastructures since the 1950's:

- Leptis Magna by Bartoccini[97] in the 1950's and by Laronde[98] in 1980-1990's;
- Puteoli by Picard at the end of the 1950's[99] ;
- Gianfrotta published several studies on the different ports of the bay of Puteoli and Baiae conducted since the 1990's[100];
- Hohlfelder published research conducted on the port of Kenchreai[101];
- Keay and his team[102] have published several papers and monographs[103] on Portus;

[91] Jones 2008
[92] Opramoas was an important civic benefactor in the second century at the Lycian town of Rhodiapolis
[93] Kokkinia 2001
[94] Bouras 2009
[95] Kokkinia 2014
[96] Lytle 2012
[97] Bartoccini et al. 1958; Laronde 1988a; 1994a
[98] Laronde 1988; 1994
[99] Picard 1959
[100] Gianfrotta 1996; 2009; 2011; 2012
[101] Hohlfelder 1976
[102] http://www.portusproject.org/
[103] Keay and Millett 2005; Goiran et al. 2007; 2008; 2009; Keay et al. 2009; Keay 2010; Goiran et al. 2011a; Keay 2011; Goiran et al. 2012; Keay 2012; Salomon et al. 2012; Salomon 2013; Mladenović and Keay 2014; Salomon et al. 2014

- Macias[104] published about Tarraco;
- Ladstätter[105] published the results of the recent archaeological researches conducted in Ephesus etc.

Others studies have focused more on port infrastructures themselves:

- ***Lighthouses***

Lighthouses of the great Mediterranean harbours have been studied since the beginning of the twentieth century. Thiersh[106] explored Alexandria's lighthouse and Stuhlfauth[107] focused more on the lighthouse of Portus and has proposed a 3D reconstruction from iconographic and literary documentation. Since, the studies about lighthouses have multiplied: in 1952, Marcadé wrote an article on the lighthouse of Alexandria[108], in 1979, Reddé published an article about lighthouse depictions under the Roman Empire[109], in 1990, Martínez Maganto[110] studied the maritime lights more in general. More recently, Giardina[111] published a compilation of the different lighthouses known from antiquity to the Middle Ages and Christiansen's thesis studies the maritime and port signaling in antiquity bringing new perspectives on the systems of lighthouses in harbours[112]. His research is based on a database referencing antique coastal towers that may have played a role in navigation in Mediterranean Sea between in the 6th century BC and 5th century AD.

- ***Horrea, warehouses***

Since the nineteenth century, several scholars[113] have been interested in the analysis of *horrea* (storebuildings) and systems of storage that were indispensable to the understanding of the economy of the Roman Empire[114]. In the 1970's, new perspectives were allowed thanks to the archaeological excavations in the study of the design, the structures and the organisation of *horrea*. The strategies of the storage of foodstuffs in Roman Empire have been largely studied by Rickman[115] and Meiggs[116] who wrote an important contribution about Ostia. Since, concerning the storage at

[104] Macias Solé and Remolà Vallverdú 2004; 2010; Macias Solé and Roda de Llanza 2015
[105] Ladstätter and Pülz 2007; Ladstätter et al. 2014
[106] Thiersch 1909
[107] Stuhlfauth 1938
[108] Marcadé 1952
[109] Reddé 1979
[110] Martínez Maganto 1990
[111] Giardina 2010a
[112] Christiansen 2014
[113] Hirschfeld 1870 ; Cagnat 1916
[114] Salido Dominguez 2008
[115] Rickman 1971
[116] Meiggs 1973

Portus, several papers have been already published[117], in particular in the frame of the *Agence National de la Recherche* project "*Entrepôts et lieux de stockage dans le monde gréco-romain antique*"[118], under the supervision of Virlouvet and Chankowski (2009-2012)[119]. The results have been published recently in the *Bulletin des Correspondances Helléniques* focused on warehouses and distribution systems in the ancient Mediterranean[120]. Other scholars have focused more on the eastern part of the Empire, like Cavalier, who studied the Lycian *horrea* of Andriake and Patara[121] and addressed the issue concerning the function of this type of buildings and their relation with Rome. Other studies were also published on warehouses in Hispania like Arce and Goffaux[122] who analysed the logics of storage and distribution and redistribution networks in the Mediterranean comparing the horrea of the Iberian Peninsula with Italy, Africa and Middle East. There is also work by Salido Domínguez on warehouses in Hispania[123]. Finally, Tran[124] focused on the professionals (*horrearii*) who worked in *horrea* through the epigraphy.

- ***Breakwaters or jetties***

In his technical chapter concerning port construction[125], Vitruvius described the methods used for the foundations of the jetties thanks to the pozzolanic mortar. These technical aspects have been studied by several scholars like Dubois[126] who analysed this Vitruvius' passage in question. Others recent publications also focused on Roman concrete engineering in the sea like Oleson[127], Brandon et al. [128] and Felici[129]. Some studies have been conducted on the archaeological remains of breakwaters. Dubois[130] and Gianfrotta[131] focused on the structures of Puteoli, Blanchère[132] on Terracina, Laronde[133] on Leptis Magna and Raban[134] on Caesarea Maritima whose jetty is also evoked by Flavius Josephus[135].

[117] Rickman 2002
[118] http://www.entrepots-anr.efa.gr/
[119] Bukowiecki and Rousse 2007; Bukowiecki et al. 2008; Boetto et al. 2010; Bukowiecki et al. 2011; Goiran et al. 2012; Bukowiecki and Panzieri 2013
[120] Chankowski et al. 2018
[121] Cavalier 2007
[122] Arce and Goffaux 2011
[123] Salido Dominguez 2008; Salido Domínguez 2010; Salido Dominguez and Neira Jimenez 2014; Salido Domínguez 2017
[124] Tran 2008; 2012
[125] Vitruvius, *De Architectura* V, 12
[126] Dubois 1902a
[127] Oleson et al. 2004
[128] Brandon et al. 2014
[129] Felici 2016
[130] Dubois 1907; Dubois 1902a
[131] Gianfrotta 2009
[132] Blanchère 1881
[133] Laronde 1988a; 1994a

- ***Infrastructures of control***

The studies conducted on infrastructures of control are essentially based on epigraphy. For instance, as we have seen before, the toll-offices (*teloneia*) related to port activities in Asia Minor have been studied through an epigraphic approach[136], despite the recent archaeological investigations in Ephesus by the Austrian team. Concerning the infrastructures of weighing controls in harbours, little has been written[137] and they remain poorly understood. The objective of this thesis is to demonstrate the presence of a weighing place in or close to the harbour, apparently called *sacomarium* as the vase of Prague attests[138]. The *tabularia* and other offices are also known by epigraphy of professionals but their architectural aspect remains poorly understood.

- ***Elements of decoration and monumentalisation***

Elements of decoration or monumentalisation - like statuary, columns, trophies or arches - in Roman ports have not been studied. Tuck has studied the process of monumentalisation of the waterfront by focusing on the imperial monuments at the harbours of Ostia and Lepcis Magna[139]. The role of the arches and the columns in Roman harbours is still unclear. A few words concerning the columns found in Portus have been written by Testaguzza[140] and Carcopino[141].

- ***Temples and sanctuaries***

A series of studies have been devoted to the deities in port cities, namely on Ostia since the Taylor in 1912[142] until the synthesis of Rieger[143], Steuernagel[144] and Van Haepperen[145]. Most of scholars have focused on the cults of port communities but nobody has paid attention to the religious infrastructures neither their topography in port contexts.

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[134] Raban 1992
[135] Flavius Josephus, *Jewish War* I, 408-14
[136] Lytle 2012
[137] See Rodríguez Martorell and Ruiz de Arbulo Bayona 2016 about the *aequipondium* found in the harbour area of Tarraco
[138] Mailleur 2017
[139] Tuck 2008
[140] Testaguzza 1970
[141] Carcopino 1929, see the numbered columns found at Portus (Uffizzi drawings) p. 19, pl. 51
[142] Taylor 1912
[143] Rieger 2004
[144] Steuernagel 2004; 2009
[145] Haeperen 2011; Van Haeperen 2019a

2.4. Conclusions

This chapter has outlined some theoretical frameworks to contextualise and define the portscape concept as well as its issues relating to the influence of politics and religion in its making. Despite the fact that several scholars have studied the maritime contexts, nobody has recognised or defined what may be termed as a portscape. Nor has there been any holistic study of port landscapes that includes the urban layout and design, or the way that the functions of buildings and monuments was distributed in terms of public and private space. Nor has there been much - focus upon the ways in which portscapes may frame port activities and interact with port societies.

The chapter has argued that port infrastructure has been studied through different scholarly approaches. Few have focused on port urbanism and nobody has attempted to approach the portscape in a holistic way. There have been many studies published about different aspects of port infrastructure. However, the older publications need to be reconsidered and updated by the recent archaeological discoveries. My intention is to compare these recent archaeological data with port images in order to better understand the Roman portscape. In the next chapter, my attention will focus upon the use of iconographic evidence, and will encompass a description of the theoretical frameworks and the tools needed for reading and interpreting the different kinds of artistic evidence. Furthermore, a method for linking the iconographic material with the other kinds of source material will be developed in order to enhance our understanding of Roman portscapes.

Chapter 3

Using images as evidence

This chapter is the review of the theoretical framework underlying the methodological approach adopted by this thesis. It is primarily concerned with the use of images as historical evidence and proposes a methodology for reading and interpreting port images. This is based upon the different tools and theoretical frameworks[146] of the visual semiotic, such as Panofsky's system or Peirce's triad model for interpreting signs. It also explores the different approaches used for viewing Roman art. The purpose of the chapter is thus to develop a method for "visualising beyond images"[147] and describe the ways of using them. It aims to understand the visual potency of the images and to demonstrate how to use their iconography as a heuristic tool for better understanding Roman portscapes. Once presented, there will be a literature review on previous research into the depiction of Roman ports. The chapter also outlines the iconographic material recorded in the *PortusLimen* database. Lastly, it raises broad issues relating to the potential and limitations of using iconographic data for an integrated and interdisciplinary approach to understanding Roman portscapes.

3.1. Reading and interpreting images: methodological review and tools

3.1.1. Preliminary remarks on the genesis of iconography/iconology as a science

Since Prehistory, human beings have made artworks illustrating, according to the civilisations and the periods, different topics, more or less accurately, of their daily life (hunting, fishing, religious practices, crafts, commerce, technics etc.) and their environment (landscapes, architecture, townscapes etc.). Using art as historical evidence is a recent practice and in the past was not considered to be a real source of information, as Burke emphasised: "It may well be the case that historians still do not take the evidence of images seriously enough, so that a recent discussion speaks of 'the invisibility of the visual'."[148] Study of ancient imagery is indeed theoretically and methodologically underdeveloped in archaeology[149]. Whereas the first ancient descriptions of

[146] Recently, a very useful synthesis has been published. It compiles the different theories methods and tools in art history and the different scholars who have contributed to the fundamental principles in art history (Huys and Vernant 2014).
[147] Back Danielsson et al. 2012.
[148] Burke 2001, p. 9-10.
[149] Back Danielsson et al. 2012.

artworks[150] are the *Natural History* written by Pliny[151] in 77 AD and the *Imagines* of Philostratus[152], from the third century AD, the earliest works on iconography – as a science of identification, description and interpretation of symbols in visual art – began to be published in the sixteenth century. The most famous works are the *Lives of the Most Excellent Painters, Sculptors, and Architects* of Vasari[153], first published in 1550, and Cesare Ripa's *Iconologia*[154]*,* published in 1593, that describes the Egyptian, Greek and Roman allegorical figures. However, iconographical studies *per se* started in the eighteenth and nineteenth centuries when archaeologists began to classify subjects and motifs on ancient monuments[155]. Works published at this time attest to an interest in ancient myths depicted on medals and in glyptic media. In the *Dictionnaire de la Fable* (1801), Noël defines 'iconology' as the "science that looks at the depictions of humans, gods and allegorical beings"[156]. Since the beginning of the twentieth century, scholars started to encourage the study of cultural history based upon images as well as texts. In order to understand the meaning of the artworks, two art historians, Warburg (1866-1929) and Panofsky (1892-1968), proposed to relate them to the texts which inspired them and to proceed by stratified analyses, using forms and symbols. Warburg introduced iconography and iconology[157] as a method of interpretation in cultural history and the history of art that included the cultural, social, and historical background of themes and subjects in the visual arts. Based on the previous works of Ripa[158] and Warburg[159], Panofsky is one of the major authors for understanding the stakes of the interpretation and meaning of artworks. The following table shows the Panofsky's system published in "*Studies in iconology: humanistic themes in the art of the renaissance*" in 1939[160] which shows three levels of art-historical understanding:

[150] Reflections about the aesthetics of art already started with Plato in his *Republic* written around 380 BC.
[151] The books XXXIII-XXXVII are devoted to art.
[152] See section 3.2
[153] This work is considered as the founding writing of the history of art.
[154] Ripa 2012
[155] Recht 2013
[156] Noël 1801, II, p. 59
[157] De Tervarent 1965
[158] Ripa 2012
[159] Warburg et al. 2010, p.673-679.
[160] Panofsky 1939

OBJECT OF INTERPRETATION	ACT OF INTERPRETATION	EQUIPMENT INTERPRETATION	CORRECTIVE PRICIPLE OF INTERPRETATION (*History of Tradition*)
I *Primary or natural subject* matter- (A) factual, (B) expressional, constituting the world of artistic motifs	*Pre-iconographical description* (and pseudo-formal analysis)	*Practical expression* (familiarity with *objects* and *events*)	History of *style* (insight into the manner in which, under varying historical conditions, *objects* and *events* were expressed by *forms*)
II *Secondary* or *conventional* subject matter, constituting the world of *images, stories* and *allegories*	*Iconographical analysis*	*Knowledge of literary sources* (familiar with specific *themes* and *concepts)*	History of *types* (insight into the manner in which, under varying historical *conditions,* specific *themes* or concepts were expressed by *objects* and *events*)
III *Intrinsic meaning* or *content,* constituting the world of *'symbolic' values*	*Iconological interpretation*	*Synthetic intuition* (familiarity with the *essential tendencies of the human mind*), conditioned by personal psychology and *'Weltanschauung'*	History of *cultural symptoms* or *'symbols'* in general (insight into the manner in which, under varying historical conditions, *essential tendencies of the human mind* were expressed by specific *themes* and *concepts)*

Figure 3: Synoptic table showing the Panofsky's system (1939).

These works introduced the iconological interpretation of artworks and have considerably influenced the modern "visual studies"[161] approach. Iconology and iconography propose the use of artwork or images as a historical source to reconstruct the past[162]. Many modern historians have written about art history and visual culture studies to understand history such as Haskell[163], Burke[164], Rabb and Brown[165]. Images can tell us much as the famous idiom says: "A picture is worth a thousand words". Artworks make manifest the habits of people and allow us to frame the cultural and social context of ancient civilisations as well as their environment. For Zanker, "Art and architecture are mirrors of a society. They reflect the state of its values"[166]. Artworks reveal cultural aspects of a civilisation and help us to highlight historical questions such as, in this thesis, the character of Roman portscapes.

[161] Deluermoz et al. 2014
[162] Frugoni 1992
[163] Haskell 1993
[164] Burke 2001
[165] Rabb and Brown 1986
[166] Zanker 1988, preface

3.1.2. Understanding images from linguistic and semiotic: general theoretical frameworks

The linguistic approach to the study of art comes from Goodman, a logician and philosopher who considers the modes of symbolic functioning through the "languages of art"[167]. His approach uses the linguistic tools established by Saussure, a Swiss linguist and semiotician, who invented the linguistic principles of analysis[168]. The language is, for him, a system of signs. To this extent, considering art as language means that they have syntax and grammar that are valuable tools for analysing artistic productions[169]. The relationships between art and semiotic are among the most interesting aspects of studies but also probably the most problematic. Semiotic analysis anchors its methodology in the study of *semiosis* processes, which concerns the way in which meaning is constructed. Saussure defined semiotics - from the Greek: *semeion*, meaning sense - as a science which studies the life of signs as part of social life. Peirce, a logician and philosopher, is the most important proponent of Anglo-Saxon semiotics[170]. He introduced a relevant triad for interpreting signs composed by the object, the sign, the *representamen* and the interpretant (Figure 4). The interpreter and the interpretant ensure the interpretability of the object in question. The interpreter is defined by his place in the social game, his cultural points of reference, his memory, his history. The interpretant, for his part, is an interpretation in the sense of the product of an interpretive process. An interpretant is the effect of a sign on someone who comprehends it. The Peircian semiotics presents the advantage of introducing circumstance and historicity into the analysis of the organisation of the process of meaning.

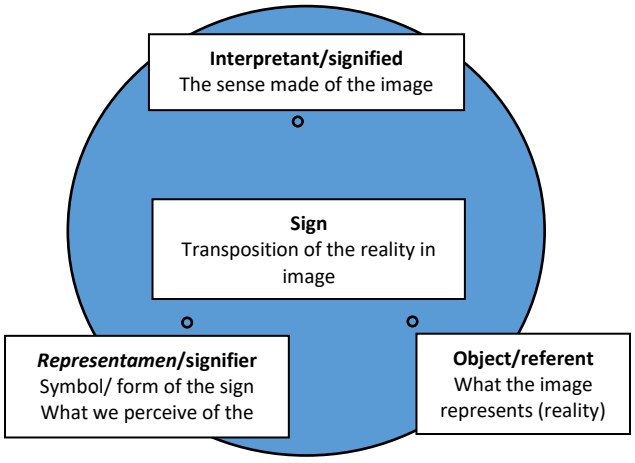

Figure 4: Diagram showing Peirce's triad model for interpreting signs.

[167] Goodman 1968
[168] Saussure 1968
[169] Mitchell 1980
[170] Peirce et al. 1978 ; Deledalle and Réthoré 1979

3.1.3. Previous approaches to contextual archaeology and material culture

3.1.3.1. Contextual archaeology

An approach to archaeological interpretation proposed by Ian Hodder in the mid-1980's in which emphasis is placed on methods of identifying and studying contexts in order to understand meaning. In his book published in 1986[171], Hodder studied the relationship between material culture and society. Why societies represent and express themselves? How material culture relates to people? How archaeologist interpret the past? How do we infer cultural meanings in material remains from the past? Hodder argues in his book that in explaining the behaviour of past societies a concern with meaning[172] must be joined to the study of economic and social process. Hodder suggests to translate "the meaning of past texts into their own contemporary language". He discusses about the stylistic similarities between artefacts that increased as interaction between people increased (*eg*. in the case of my research, the Hellenistic influence in Roman art). He also focuses on the continuities in cultural traditions and explains that the diffusion and cultural continuity are social processes. Preucel[173] also reconsiders material culture[174] as social practice and artefacts as "mirror of man". He defines semiotics as "the field devoted to study of the innate capacity of humans to produce and understand signs". All the signs can be ideas, words, images, sounds and objects that are implicated in a communicative process. Semiotics investigates sign systems and the modes of representations. He also focuses on the role of artefacts in the construction of social identities and the production of culture. He demonstrates how material culture often plays a central role in mediating social identities and relations and how representational practices mediate power and authority.

In the frame of this research, it would be interesting to show how the circulation of port images helps establish Roman identity. We have that, from antiquity, ports become central to ideas about national identity and empire building and the way in which they were represented in material culture and visual images suggests that they were a vital instrument of power and outward-facing approaches to the world.

[171] Hodder 1986
[172] About the archaeology of contextual meaning, see also Hodder 1987
[173] Preucel 2006
[174] Preucel defines the material culture as the manifestation of culture through material fabrications, as the product of human activity.

3.1.3.2. Material and iconography

There are some really interesting observations regarding the way in which material constrains iconography. For non-semiotic approach to images, Gell's publication [175] has opened a new direction for anthropological theory by challenging the assumed primacy of the social over the material and cultural. He presents a theory of art based neither on aesthetics nor on visual communication. Gell shows how art objects embody complex intentionalities and mediate social agency. He explores the psychology of patterns and perceptions, art and personhood, the control of knowledge, and the interpretation of meaning. His approaches were developed by several scholars like Chua and Elliott[176] who focused on the meaning and the mattering of objects. Though nine case studies, Osborne and Tanner[177] proposed to apply Gell's theory to art history. Their book re-articulates the relationship of the anthropology of art to key methodological and theoretical approaches in art history, sociology, and linguistics. More recently, Jones and Cochrane[178] were interested in how archaeologists interpret ancient art and images if they do not treat them as symbols or signifiers of identity. They focused on the material character of archaeological evidence though the examples of rock art, figurines, beadwork, murals, coffin decorations, sculpture and architecture from Europe, the Americas, Asia, Australia, and north Africa.

3.1.4. Approaching Roman art: visual language and ways of seeing

Focusing on the fundamental works of their predecessors, modern scholars have approached Roman art in various ways. Some of them have focused on its visual language, others on the ways of seeing art and others more on social approaches of the context of Roman art:

3.1.4.1. The linguistic approach of visual arts in Ancient Roman

One of the most important is Zanker's essay published in 1988 entitled "*The Power of Images in the Age of Augustus*"[179]. This study developed an interpretation of Augustan art as a visual language that expressed the transformation of Roman society under the reign of Augustus. He argued that the S*aeculum Augustum* was a turning point concerning the system of visual communication. The political change under Augustus leads to new artistic forms that included the

[175] Gell 1998
[176] Chua and Elliott 2013
[177] Osborne and Tanner 2007
[178] Jones and Cochrane 2018
[179] Zanker 1988

adaptation and the assimilation of previous forms of artistic expression from Greek art. Zanker demonstrated the preponderance of the image of the emperor and his cult under the imperial period and shows that "in the standardised visual language of Roman Imperial art, the emperor and the state stood at the centre"[180]. Indeed, politics and emperor are embedded in art, architecture and city planning. He explained that the use of political imagery in the everyday art conveyed civic virtues and values. Zanker also showed that the political imagery also affected art in the private sphere[181]. He argued this in the domestic context with the painting of the Villa Farnesina, which commemorates the battle of Actium in 31 BC and in the Campanian paintings in the Third Style decoration[182], which correspond to a new system of values. Drawing upon Zanker's work, this thesis aims to study the visual language of port depictions and demonstrate that they follow a standardised system of visual communication proper to the Imperial period that puts in evidence, in some cases, the figure of the Emperor as in the case of Nero's *sestertii* (ID 048 and ID 056).

Goodman's linguistic approach was developed and applied to Roman art by Hölscher in "*The Language of Images in Roman Art"*[183], published in 2004. His essay developed a new theory for the understanding of Roman pictorial art. He considered it as a semantic system and established connections between artistic forms and the ideological message. More recently, Hölscher published a paper about the representative style in the system of Roman art[184]. It highlights the problematic term "*arte popolare*" and explains the Roman perspective as a network of old practices (partly Greek) in representation and pictorial schemata and new levels of meaning and intentions of expression.

3.1.4.2. Ways of viewing Roman art

Elsner[185] published "*Art and the Roman viewer: the transformation of art from the Pagan world to Christianity*" in 1995. This study highlights the transformation undergone in art from the age of Augustus to the age of Justinian and emphasises the different perspectives on civic and religious art. Elsner's aim is to create what he describes as a "history of viewing" by applying methods of deconstruction and analysis to the evidence of Roman visual culture. He defines the viewing as the "activity in which people confront the world"[186], and argues that it is influenced by

[180] Zanker 1988, p. 335
[181] Zanker 1988, p. 265
[182] Zanker 1988, p. 282-287
[183] Hölscher 2004
[184] Hölscher 2012
[185] Elsner 1995
[186] Elsner 1995, p. 4

the observer's knowledge, which results in a multiplicity of interpretations. In other words, it studies the different ways in which people choose to understand a picture and raises the problem that the perception and interpretation of images is a complex process that is not the same for everybody. In 2007, Elsner[187] continued this line of thinking and published "*Roman eyes: visuality and subjectivity in art and text*". This book is also a significant contribution to understanding Roman art as it underlines multiple ways that Romans viewed their own artworks highlighting issues related to perception of Roman art by its viewers. His approach is useful for understanding the perception of port depictions and analysing the process of viewing of port images by Romans and the dynamics of their interpretation, none of which have been addressed before. In particular, it allows us to try to identify the viewers of port images, and their interpretations of what they saw, for the first time.

In doing this, he drew parallels between the making and transmitting of images, as the following table illustrates:

MAKING OF IMAGE		TRANSMISSION OF IMAGES	
WHO IS PATRON?	*WHO IS ARTIST?*	*VIEWER ADDRESS*	*WHO IS VIEWER?*
Patron's social status: Elite Non-elite: freeborn freedman slave foreigner	Training and ability	Location of image: street temple dining room tomb house tavern latrine in moving procession	Viewer's social status: Elite Non-elite: freeborn freedman slave foreigner
Patron's gender role			Viewer's gender role
Patron's motivations: advertisement of goods or services commemoration entertainment mediation–to resolve community tensions appeasing gods or propitiation competition or one-upmanship announcement of status or wealth apotropaic/admonition civic benefaction		Viewing context –seen while: working walking standing praying dining shopping mourning visiting defecating –seen with what other images? Size and scale of image: close viewing distant viewing	Viewer's past experience –image seen before in: temple forum theater coin house pattern book procession or triumph
Patron's understanding of image: knows/does not know model or referent	Has models: understands/does not understand models Has no models: invents from observation invents through pastiche		Viewer's understanding of image: knows/does not know model or referent believes/does not believe image is a god or goddess
Literate/illiterate Patron's occupation or profession	Literate/illiterate	Cost and medium of image Writing/no writing on image	Literate/illiterate Viewer's occupation or profession

Figure 5: Clarke's model for the reception of visual art in ancient Rome (Clarke 2003, fig. 3).

3.1.4.3. The social context of Roman art

Iconographic analyses, which aim to understand the original meaning or intent of an artwork through the icons and symbols, need to be familiar with the culture and people that created it. This leads us to another interesting approach concerning the functions and reception of Roman art that

[187] Elsner 2007

has been developed by Stewart[188]. He focused on social-historical analyses and contextual approaches. His work on the "social history of art" refers to a general attempt to contextualise art. The main questions that he raises are: what do we know about the artists? Who made Roman art? What is the role of the patrons in the creation of art? In turn, they also raise the question of the intentionality of art: the *kunstwollen* concept[189] that was invented by the Austrian art historian Riegl, in his book *Late Roman art industry* (1901)[190]*.* He understood art to be the result of an impulse or artistic will, and believed that the stylistic forms flowed between each other[191], thereby allowing us to relate to Focillon's comment that iconography was a "variation of the shapes with mutual meaning, either as variation of meanings through the same shape"[192]. We will see later that this is the case in the port depictions. I will argue that models of portscapes were distributed across the Roman world on account of the expansion of the Empire but that there were variations in them on account of the interpretation of the artist or craftsman[193] who copied them.

Swift published in 2009 *Style and function in Roman decoration: living with objects and interiors*[194], an essay about the social anthropology of certain objects that contributes to the study of ancient material culture. In her introduction, she proposes a "new interpretation of decoration in Roman art". Her study is inspired by the twentieth century analyses of Semper's theories[195] concerning issues related to decoration and Riegl's work (1856; 1858)[196]*,* and investigates Roman decoration and the visual properties of Roman arts. She states that decoration has socially symbolic properties. In Chapter 2 of this work, Swift develops an interesting reflection about floor mosaics and other domestic decoration that is based on Elsner's work - for the "ways of seeing" - and Clarke's analysis about the domestic contexts and the meaning of decoration in Roman culture[197]. Her methodological approach, to study the relationship between forms and functions, was influenced by Gell's work on the agency of objects[198] in which he puts forward a new anthropological theory of visual art and studies the impact of decoration upon people within the social world.

[188] Stewart 2008
[189] Carboni 2012 ; Elsner 2006
[190] Riegl and Winkes 1985
[191] Holly 1983
[192] Focillon 1934, p. 6
[193] *Ars* in Latin or *tekhne* in Greek refer to skill and talent. The *artifex* who makes this *ars* is more a craftsman than what we call today "artist". About these questions see: Talon-Hugon 2014; 2018
[194] Swift 2009
[195] Semper 1856; 1878
[196] Riegl and Winkes 1985
[197] Clarke 1991
[198] Gell 1998

In her recent publication[199], Swift investigates also the Roman artefacts in a new way by using design theory. She contributes to better understand the relationships between artefacts and people. She considers how we can use artefacts to understand particular aspects of Roman behaviours and experience through artefacts design. She shows that design intentions, everyday habits of use and the constraints of production processes each contribute to the reproduction and transformation of material culture. For her, the physical features of objects have a very direct relationship to social practices. Artefact features can provide information about the use of objects, the social practice and about the persistence of tradition and social convention.

Tanner[200] focuses on the interpretative decoding of the work of art. He underlines what art does in contexts of social interaction and what role it plays in the constitution, reproduction and transformation of social relationships, social groups and social structures. Tanner propose to look at iconography as a system. He defines the style as a "focus of analytic attention from the phenomenal properties of particular images to the underlying codes which generate them, from the particular 'meanings' instantiated in single works of art, to the way in which a set of generative codes conditions the possibilities of affective communication"[201].

All of these works are very useful in approaching port depictions in Roman art. They will allow us to frame the study of the symbolic and significance of them within their social contexts as well as to define their role in Roman culture. Now, we will focus on the different research conducted on port images in Roman art.

3.2. Research into the depictions of Roman ports

This section highlights the different studies conducted on the depictions of Roman ports. It aims to demonstrate the lack of a general study in port iconography and the absence of any integration of iconographic evidence in the field of port research. It will also show to what extent this research will fill the gap and bring new perspectives in port studies.

3.2.1. Ancient texts

Ancient literature gives us a brief overview about the pictorial genre of port images that decorated the luxury houses that can be observed on the Campanian paintings of the third style[202].

[199] Swift 2017
[200] Tanner 2006
[201] Tanner 2006, p. 70
[202] Croisille 2010

Under the reign of Augustus, around 30 BC, Vitruvius[203] mentioned the term *topia* (from the Greek term TOPOS meaning geographical place)[204] to refer to a certain number of pictorial motifs used for the ornaments of galleries (*ambulationes*). These seem to be inspired by geographical criteria derived from topographical descriptions of real landscapes by voyagers from the coast to inland[205], as well as Hellenistic geographers and historians[206]. Among the motifs, he listed the ports (*portus*) as we can see in the many examples of the Campanian paintings of the third style (*e.g.* ID 83-85-86-87).

> *"In spacious apartments, such as exedræ, […] they decorated with varied landscapes [...]. In these they also painted ports, promontories, the coasts of the sea, rivers, fountains […]".*
>
> Vitruvius, *De Architectura*, VII, 5, 1-2

Pliny the Elder, in his *Natural History*[207], written in AD 70-75, used the expression of *topiaria opera*[208] to refer to the arrangement of the natural environment. This expression refers to pictorial themes representing typical elements of places[209] like, as he lists: sacred groves (*lucos*), woods (*nemora*), fishponds (*piscinas*), streams (*euripos*), rivers (*amnes*) and shores (*litora*). Conversely, ports and villas do not belong to the natural environment, as they featured of anthropised landscapes. Pliny speaks about a painter, called Studius, who was, according to him, contemporary of Vitruvius. Pliny considered him as a pioneer in Roman landscape painting[210]. He painted natural landscapes and anthropised landscapes like ports as well as seaside cities (*maritimas urbes*) that German scholars called "*villenlandschaft*", a term that refers to landscape, from realistic inspiration, where buildings, and often porticoes, appear in a maritime context.

> "*Studius too, of the period of the Divine Augustus, must not be cheated of his due. He first introduced the most attractive fashion of painting walls with villas, porticoes (harbours?), and landscape gardens, groves, woods, hills, fish-pools, canals, rivers, coasts-whatever one could wish, and in them various representations of people strolling about, people sailing, people travelling overland to villas on donkey*

[203] Vitruvius, *De Architectura*, VII, 5, 1-2
[204] Croisille 2005, p. 204-219
[205] Rouveret 2004, p. 332 et 2006, p. 65.
[206] See Chapter 4 about the beginning of landscape depictions during the Hellenistic period
[207] Pliny, *Natural History*, XXXV, 16
[208] Cicero uses, in one of his letters to his brother Quintus (Q. III, 1, 5) in 54 BC, the term *topiaria* to refer to garden art and *topiarius* for the gardener.
[209] Grimal 1969, p. 93
[210] Ling 1977

back or in carriages, and in addition people fishing, fowling, hunting, or even gathering the vintage. His pictures include noble villas reached across marshes, men tottering along with women, trembling burdens, on their shoulders, carried for a wager, and very many such lively and witty subjects besides. It was the same man who introduced the practice of painting seaside cities in open terraces, producing a charming effect with minimal expense."[211]

Pliny, *Natural History*, XXXV, 116-117

Several texts also show an interest in maritime villas and landscapes by ancient authors. For example, in Statius (I, 3: II, 2), at the end of the first century AD, we find a poetic evocation of the luxury villas of the Neapolitan region. Pliny the Younger speaks about his Villa Laurentina in Tuscia in his letter[212]. During the third century AD, in the *Imagines* (Εἰκόνες), that describes sixty-four pictures in a gallery at Neapolis, Philostratus[213] shows an interest in the natural environment and in particular maritime landscapes[214]. He gives an *ekphrasis* – description of piece of art – of the sea and seasides[215].

Several modern scholars commented upon and studied these statements. Croisille[216] focused on the origins of the pictorial genre of landscape, while Ling has worked on Roman paintings[217] and Studius[218], Clarke[219] and Schefold[220] wrote about the Pompeian paintings. Rouveret's article[221] established the genesis of the concept of landscape from the Hellenistic period to the Roman Empire, while Spencer[222] studied the culture and identity of Roman landscapes. Barbet[223] published on the paintings of the Vesuvian cities. While these studies are fundamental to a better comprehension of the relationship between the ancient texts and the paintings as well as the origins of the landscapes in Roman art, they have only focused upon the paintings and they not have considered the impact of the diffusion of this pictorial genre on other types of media in the course of the Empire.

[211] Pliny, *Natural History*, XXXV, 116-117 (translation after Ling 1977)
[212] Pliny the Younger, *Letter* V, 6
[213] Lehmann-Hartleben 1941 ; Prioux 2016
[214] Rouveret 2006
[215] Thein 2017
[216] Croisille 2005, p. 204-219 ; 2010
[217] Ling 1991
[218] Ling 1977
[219] Clarke 1991, p. 55-57
[220] Schefold and Charles-Picard 1972, p. 117-118
[221] Rouveret 2004
[222] Spencer 2010
[223] Barbet and Compoint 1999; Barbet 2009

3.2.2. General studies concerning port iconography

Concerning the modern literature, several articles have been written on specific topics but there is not a comprehensive overall study. Nevertheless, Blackman, in the Part 1 of "*Ancient Harbours in the Mediterranean*", starts his article by making the point on the literary and pictorial evidence available to archaeologists in the 1980's[224]. This article, focused essentially on the Roman period, also encompasses pre-Roman depictions of ports. It deals with the different types of media on which port depictions have been found and mentions the most emblematic documents such as Nero's *sestertii* depicting Portus (ID 048 and ID 056), the Torlonia relief (ID 072), the Vatican relief and the *opus sectile* panels of Kenchreai etc.

Since Blackman's study, studies have been multiplying on the theme of marine and townscapes depictions on Roman mosaics and several Spanish papers have been written these last decades. Blázquez Martínez and García-Gelabert Pérez's article, published in 1991, focuses on the maritime transport according to representations on Roman mosaics, reliefs and paintings of Ostia[225]. López Monteagudo published a paper in 1994 studying townscapes depictions in Roman mosaics from North Africa[226]. Neira Jimenez published an article in 1997 about the maritime townscapes depictions on Roman mosaics[227]. In 2002, Blázquez Martínez published an article concerning the mosaics with marine themes in Syria, Israel, Jordan, North Africa, Hispania and Cyprus[228]. Moreover, another Spanish article, published in 1995[229] by J. M. Noguera Celdrán, attempts to give a general synthesis on the depictions of Roman port facilities. This interesting article based on an iconographic corpus of around twenty documents, is divided into four parts. The first part, acting as the introduction, highlights the research status in the 1990's through a succinct literature review. The second part demonstrates the Hellenistic and more precisely the Alexandrian origins of port depictions. It focuses on the townscapes and ports depictions in Roman paintings as well as the iconographic models of port facilities. The third part addresses the issues related to the problems of interpretation and identification of the iconography of the main harbours like Ostia-Portus, Carthage and Alexandria. The fourth part discusses the anchorages and ports in iconography and focuses on ports facilities and activities. Finally, more recently, a paper, written by Neira Jimenez and Salido

[224] Blackman 1982a, p. 79-85
[225] Blázquez Martínez and García-Gelabert Pérez 1991a
[226] López Monteagudo 1994
[227] Neira Jimenez 1997
[228] Blázquez Martínez 2002
[229] Celdrán 1995

Dominguez in 2014, introduces a new perspective on the issues of identification of *horrea* depictions on mosaics[230].

Port iconography has also been studied in the German project "Images and representations of Roman port facilities", conducted by Feuser in 2012-2015 and funded by the German Research Foundation (DFG) as part of the program "*Häfen von der Römischen Kaiserzeit bis zum Mittelalter*" ("Ports from the Roman Empire to the Middle Ages")[231]. Feuser and his colleagues gathered around 200 iconographic documents in the online *Arachne* object database but they have not published much about iconography[232], with the exception of a recent paper about port iconography on coins[233]. Their investigation is mainly based on the question of which buildings have been depicted in the representations and which functions are shown. They have also focused on the issue as to whether a (dis)continuity existed between Greek, Republican and Roman Imperial ports depictions on coins.

3.2.3. Common topics in port iconography studies

In the scholarly records, we can notice a certain number of repetitive topics that have been the subject of several examinations or reexaminations such as the *Ripa Puteolana* images, the Neronian *sestertii* (ID 048 and ID 056), the lamps with port depictions, the images of the port of Kenchreai and the images of lighthouses:

3.2.3.1. Ripa Puteolana images

The topic of the ancient landscape of Pozzuoli has aroused much interest since the Renaissance[234], namely by Neapolitans scholars[235] like Loffredo (marquis of Trevico in the 17th century)[236], Capaccio[237], Paoli[238], Di Iorio[239] etc. They made some descriptions and we can find some representations of Puteoli's harbour topography as we can see in the following map from the Renaissance Exploration Map Collection of Standford Library (Figure 6) and Natali-Nicole's engraving published by Paoli in 1768[240] (Figure 7). The engraving published by Bellori in 1673[241] after a fresco

[230] Salido Dominguez and Neira Jimenez 2014
[231] http://www.spp-haefen.de/en/projects/abgeschlossene-projekte/images-and-imaginations-of-roman-ports/
[232] http://www.spp-haefen.de/de/die-projekte/bilder-und-vorstellungen-roemischer-hafenanlagen/literatur/
[233] Feuser and Bendschus 2015
[234] Camodeca et al. 1990, p. 120 and 123
[235] Romanelli 1817, p. 92 ; Giustiniani 1804, p. 305
[236] Loffredo and Bulifon 1675
[237] Capaccio 1604
[238] Paoli et al. 1768
[239] Iorio 1830
[240] Paoli et al. 1768
[241] Bellori 1673

(ID 088) from the third century AD, found on the Esquiline Hill in Rome during the seventeenth century and now lost, has been associated, perhaps wrongly with Puteoli's topography by several scholars[242]. As we will see in Chapter 4, this type of image refers to a standard rather than a real port.

Figure 6: Ancient map of Puteoli[243]

Figure 7: Natali-Nicole's Engraving showing the pilae of Puteoli[244].

[242] Golvin 2009 ; Dubois 1907; Picard 1959

[243] Orlandi et al., *Explicatio aliquot locorum quaePuteolis spectantur,*(1602). 39 x 51 cm, Standford Library.

The series of glass flasks depicting the *Ripa Puteolana* has been much written about and revisited many times. The older papers on the topography of Pozzuoli and the glasses were published in 1853 and 1854 by Rossi[245], in the *Bulletino Archeologico Napolitano*. Later, in 1907, Dubois examined the topography of Pozzuoli in the second part of his book entitled "*Pouzzoles antique (Histoire et Topographie)*" [246]. He based his analysis on ancient images as topographical evidence such as glasses (vase of Odemira, the vase of Rome, the vase of Piombino Populonia) as well as frescoes (painting of Stabiae or "Gragnano" and painting from the Esquiline Hill known by Bellori's drawing). In 1954, Garcia y Bellido published a paper about the vase of Ampurias depicting a port landscape[247] that he draws in parallel with the vases studied previously by Dubois. Five years later, Picard published a paper about Pozzuoli and the port landscape[248] in which he adds in his analysis the vase of Prague and proposes new interpretations concerning the reading of the topographical elements depictions on this series of flasks. In 1975, Painter published a paper on "Roman Flasks with Scenes of Baiae and Puteoli"[249] in which he described a catalogue of nine flasks divided into two main groups: Baiae and Puteoli according to the identification of their features. He also analysed the frequency of the topographical elements in each group of glasses:

TABLE A. BAIAE GROUP

Inscription or Picture	*No. 1 Populonia*	*No. 2 Rome*	*No. 3 Ampurias*
STAGNV/STAGNV NERONIS	X	X	X
PALATIV	X	—	—
Pair of buildings joined by bridge	X	X	X
OSTRIARIA	X	X	X
Frame with suspended ropes	X	X	X
SILVA	—	X	—
BAIAE	—	X	X
Water	X	—	—
Mole with high end	X	X	X
Building with triangular pediment	X	—	X
RIPA	X	—	X
Water	X	—	X
PILAE	X	—	X
2 columns with statues	X	—	X
Water	X	—	X
Building with four sea horses on roof	X	—	X
FAROS	—	X	—
Figure holding cup and ears of corn	—	X	—
Two small buildings	—	X	—

TABLE B. PUTEOLI GROUP

Inscription or Picture	*No. 4 Odemira*	*No. 5 Italy*	*No. 6 Ostia*	*No. 7 N. Africa*	*No. 8 Cologne*	*No. 9 York*
STADIV	—	X	—	X	—	—
Stadium	X	X	—	X	—	—
SOLARIV/SOLAR	X	X	—	X	—	—
LARI	—	X	—	—	—	—
Colonnaded building(s)	X	X	—	X	—	—
AMPITHEAT	X	X	—	X	—	—
ORDION PALES	—	X	—	—	—	—
ORTESIANA RIP	—	X	—	—	—	—
Colonnaded building(s)	X	X	—	X	—	—
Amphitheatre	X	X	—	X	—	—
Balustrade	X	X	—	—	—	—
ASCESV DOMNI	—	X	—	—	—	—
Temple	X	X	X	X	—	—
Statue in portico	X	X	X	X	—	—
STRATA	—	X	X	—	—	X
POS FORV	—	X	—	X	—	—
THERMETÀNI	X	—	—	—	—	—
Colonnaded buildings	X	X	—	X	—	—
RIPA	X	—	—	—	—	—
THEATRV	X	X	—	X	—	—
DECATRIA	—	X	X	—	—	—
CESARI	—	X	—	—	—	—
NIMISIA	—	X	—	—	—	—
Theatre/Colonnaded buildings	X	X	X	—	X	—
INPVRIV/INPVR	—	X	—	X	X	—
SACOMA	—	X	—	—	X	—
Colonnaded building(s)	—	X	—	X	X	—
Mole with low end	X	X	—	X	X	—
ISIV	—	X	—	—	—	—
Building with sea gods/antefixes	X	X	—	X	X	—
Water	X	—	—	X	X	—
Columns	X	X	—	X	X	—
PILAE/PILAS	X	X	—	X	—	—
Water	X	—	—	X	X	—
PELAGV	—	X	—	—	—	—
Building with sea horses	X	X	—	X	X	—
PVTIOLI	—	X	—	—	—	—
Water/boat/fish	—	X	—	X	—	—

Figure 8: Tables illustrating the presence of topographical elements in the Baiae group and Puteoli group[250].

[244] Paoli et al. 1768
[245] De Rossi 1853
[246] Dubois 1907
[247] García y Bellido 1954
[248] Picard 1959
[249] Painter 1975
[250] Painter 1975, p. 64-65

During the 1970's, Kolendo published a paper in which he identified oysters and fishponds at Baiae on a glass bottle of the Warsaw National (vase of Rome)[251] and Ostrow published a paper about the topography of Puteoli and Baiae on eight glass flasks[252]. In 1982, Kolendo proposed in a paper a new interpretation of the painting of Stabiae. He reconsidered it as a depiction of Alexandria's harbour and compared it with depictions on lamps and coins. More recently, Tafalla published in 2003 "*Un "Souvenir" de Baiae en Asturica Augusta (Provincia Tarraconense, Hispania)*"[253] and Bejarano Osorio, in 2005, a glass found in a necropolis at Mérida in Spain with a similar decoration than the series of vase with the Puteoli landscape[254]. In 2009, Fuji published a report on four Roman glass fragments from the Gorga collection attributed to the "Puteoli-Baiae Group"[255]. Golvin published, in 2009, a new synthesis about the available iconography concerning Puteoli landscape in order to make a topographical reconstruction[256]. Finally, Gianfrotta published in 2011 a paper revisiting the topography on the vases of Baiae-Puteoli series[257].

The analyses of Ostrow and Gianfrotta are interesting but their reflexion is based on a corpus of nine flasks. In the course of this research, I have recorded fifteen flasks[258] that may belong to this series. It allows us to bring in a new perspective in using this type of artefact (according to their context), the topography of Puteoli and our knowledge on port infrastructures, including their architectural aspect, their location, their function etc.

3.2.3.2. Neronian sestertii

Like Puteoli, Portus has been the subject of antiquarian' interest since the sixteenth century[259]. The overall structure of Portus has been known since the Renaissance by ancient maps (Figure 9 and 10) and by the Italian cartographer Antonio Dante who painted frescoes in the Gallery of geographical maps of the Vatican – one showing the remains of Portus (Figure 11) and another one proposing a reconstruction of the port complex (Figure 12).

[251] Kolendo 1976
[252] Ostrow 1979
[253] Tafalla et al. 2003
[254] Bejarano Osorio 2005
[255] Fujii 2009
[256] Golvin 2009
[257] Gianfrotta 2011
[258] ID 99-100-101-102-103-104-105-107-109-110-111-112-112-114-115
[259] Testaguzza 1970, tav. II, III, p. 42-43-44-45-46-47-48-49

Figure 9: Map of Portus from 1557[260]. Figure 10: Map of Eufrosino della Volpaia from 1547[261].

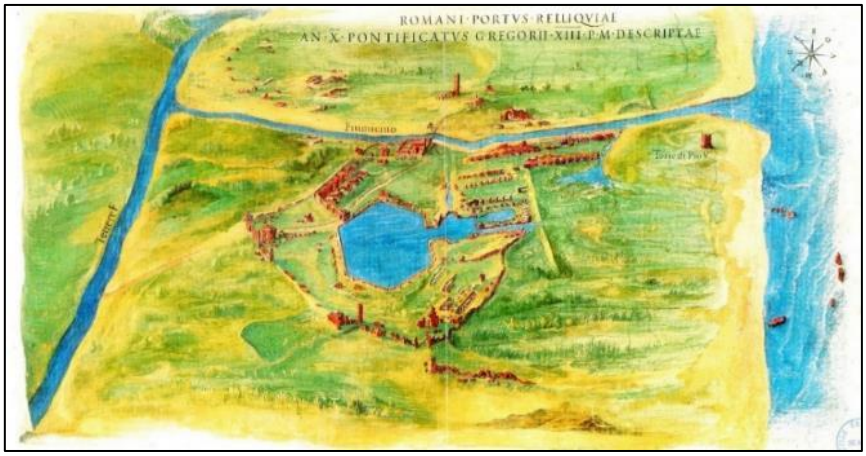

Figure 11: Danti's fresco. The remains of Portus (1582). Gallery of Maps of the Vatican Museum[262].

Figure 12: Danti's fresco. The reconstruction of Portus (1582). Gallery of Maps of the Vatican Museum [263].

[260] Testaguzza 1970, p. 41
[261] Goiran et al. 2011b, fig. 3
[262] Testaguzza 1970, Tav. II
[263] Testaguzza 1970, Tav. III

Neronian sestertii (ID 048 and ID 056) have been the subject of several examinations since the first "excavations" undertaken in the nineteenth century that allowed the publication of the first written descriptions with plans like the following reconstruction of Luigi Canina (1830, 1837, 1856)[264] taking into account the coinage evidence (Figure 13).

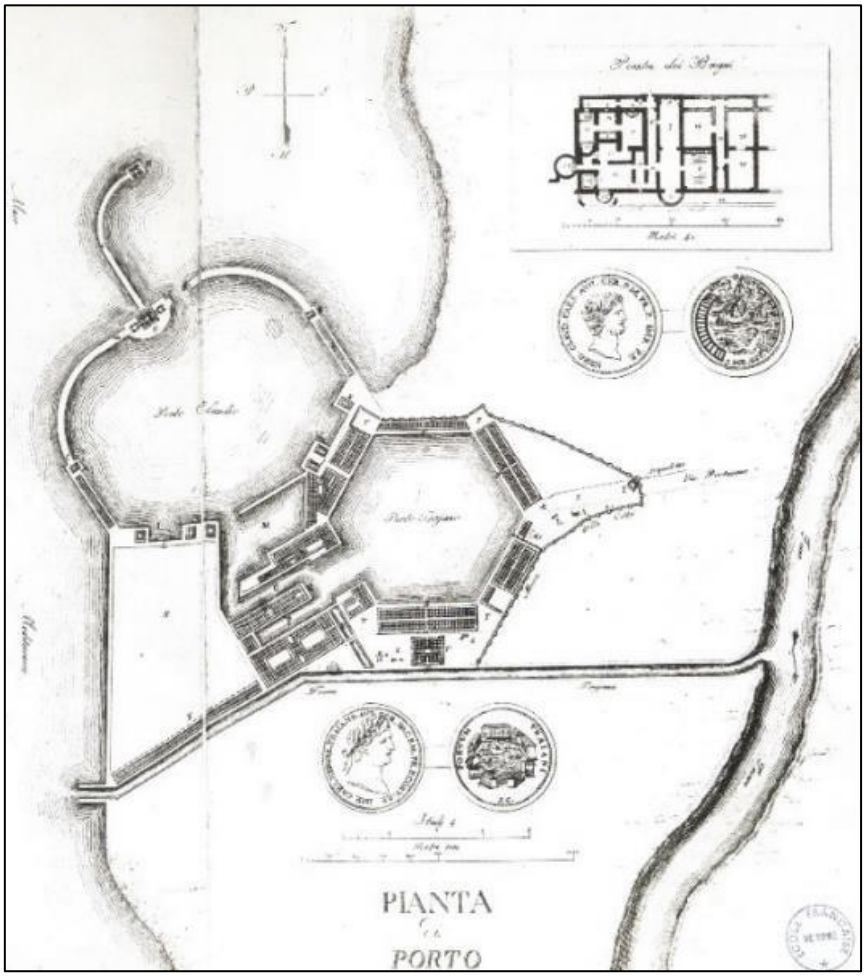

Figure 13: Reconstruction of Portus from 1827, after Luigi Canina.

One of the oldest twentieth century publication on Neronian *sestertii* (ID 048 and ID 056) dates to 1958 with MacDowall's paper about "*The Numismatic Evidence for the Neronia*", published in *The Classical Quarterly*. Also, in 1958, Abaecherli Boyce proposed a study of Roman Imperial ports throughout numismatic evidence in a paper dedicated to the harbour of Pompeiopolis[265]. In this paper, she proposed a first analysis of Nero's *sestertii*, complemented by her archaeological notes about Nero's harbour *Sestertii*[266] published in 1966 in the *American Journal of Archaeology*. In 1970, Testaguzza published a monograph about the ports of Claudius and Trajan in which he dedicated few

[264] Canina 1830
[265] Abaecherli Boyce 1958
[266] Abaecherli Boyce 1966

pages to Nero's *sestertii*[267]. Several scholars studying Roman harbours have referred unavoidably to Nero's *sestertii* such as Meiggs in Roman Ostia[268], Blackman[269] etc. More recently, several iconographic examinations of these coins have been published. In 2013, Weiss wrote a paper about "*The Visual Language of Nero's Harbor Sestertii*"[270] in which she intends to explore the messages these coins could convey. In this paper, she examines the various visual elements and discusses the significance of the messages. In 2014, Cuyler[271] proposed a new approach concerning the *sestertii* of Nero by comparing the coins to the archaeological remains for the layout of the Claudian harbour and analysing the multivalent messages. Finally, in 2015, Feuser and Bendschus proposed an iconographic analysis of Nero's *sestertii* in their paper about ports on coins of the Roman Empire[272].

3.2.3.3. Lamps with port depictions

Lamps with port depictions have often been studied by scholars. However, we can notice a certain misunderstanding related to the identification of the port depicted as all of these lamps have been studied separately. Picard[273] identified these depictions as an Alexandrian landscape. Joly has published the lamps discovered in Sabratha in Libya in 1968[274] and 1974[275]. Hellmann refers to lamps with port depictions in two volumes published in the 1980's[276]. Deneauve also published the lamps of Carthage in 1969[277]. This research aims to put into a new perspective the problematics of these lamps by attempting to do a large-scale study as thirty-four lamps have been collected along this research. Five types have identified (see the section on the types of media in Chapter 4).

3.2.3.4. Images of the port of Kenchreai

The harbour of Kenchreai has been the subject of publications mainly in the 1970's[278] after the excavations conducted by the American School of Classical Studies, under the supervision of Scranton. In 1970, Hohlfelder published a study concerning the port of Kenchreai according to the text of Pausanias (II, 2, 3) that he compared with the archaeological and numismatic evidence[279]. In

[267] Testaguzza 1970, p. 67-70
[268] Meiggs 1973, p. 55, pl. XVIII a
[269] Blackman 1982a, p. 81, fig. B and p. 82
[270] Weiss 2013
[271] Cuyler 2014
[272] Feuser and Bendschus 2015, p. 323, fig. 6
[273] Picard 1959, pl. X, fig. 18-19
[274] Joly 1968
[275] Joly 1974
[276] Hellmann 1985; Hellmann 1987
[277] Deneauve 1969
[278] Hohlfelder 1976; 1976; Adamsheck 1979; Williams 1981
[279] Hohlfelder 1970; 1976

1976, Scranton and Ibrahim published the series of *opus sectile* glass panels depicting maritime landscapes[280] that he compared to the Nilotic landscapes from Hellenistic period.

3.2.3.5. Images of lighthouses

Since the beginning of the twentieth century, several studies have been undertaken concerning the images of lighthouses. Thiersch published in 1909 a monograph about the lighthouse of Alexandria[281] and Stuhlfauth studied in 1938 the lighthouse of Ostia[282]. Since then, the interest regarding this topic have increased and many studies have been written by scholars such as Goodchild about the Helios on the Pharos in 1961[283], Reddé's contribution regarding the depictions of lighthouses published in 1979[284] or Quet's article published in 1984 about Pharus[285]. In 1990, a larger study was published by Martinez Maganto about lighthouses and signaling lights for navigation in antiquity[286]. Bricault, a specialist in Egyptian religion studied the lighthouse of Alexandria throughout the figures of Isis, Faustina and the Annona[287]. More recently, Giardina published a monograph in which he has brought together evidence from historical, iconographic and literary sources from the ancient, medieval and modern periods[288].

3.2.4. Specific topics related to port/marine iconography

Some topics were occasionally subject of special attention and publications like artworks with port depictions found in archaeological excavations or specific topics related to port iconography. For instance, since the end of the nineteenth century, several scholars such as Furtwängler[289] and Winckelmann[290] examined and described gemstones depicting ports. Later, in 1922, Lantier described in *Bulletin de la Société nationale des antiquaires de France*[291] the gemstone in green jasper, found in Tunisia and offered to the Bardo Museum. His analysis compared the gemstone with other known port depictions, such as those on lamps, Nero's *sestertii* and the coin of

[280] Ibrahim et al. 1976
[281] Thiersch 1909
[282] Stuhlfauth 1938
[283] Goodchild 1961
[284] Reddé 1979
[285] Quet 1984
[286] Martínez Maganto 1990
[287] Bricault 2000
[288] Giardina 2010a
[289] Furtwängler 1896, pl. 62, n. 8688
[290] Winckelmann 1970, p. 535 n. 54
[291] Lantier 1922

the city of Caesarea Germanica (in Bythinia). He pointed out as well that very few examples of this type of gemstone were known in the 1920's, except from two in the Berlin Museum. These are known now by Furtwängler's[292] and Winckelmann's[293] catalogues and the Cades' plaster copies from the nineteenth century[294]. The originals were lost during the Second World War. The port depicted on this gemstone has been later interpreted as the port of Carthage by Debergh in 1975[295] and Cintas in 1976[296]. The study of this gemstone has been subject to several misunderstandings regarding the interpretation of the harbour depicted as well as dating. For Cintas, the gem is Punic[297]. However, this kind of port depiction does not exist before the Roman period. More recently, another gemstone, preserved in the Archaeological Museum of Naples, have been published in "*Le Gemme Farnese*", by Gasparri and Pedicini in 2006[298]. Again, we are faced with issues of interpretations as they identified it as the harbour of Ancona but without any credible topographical elements. As in the case of lamps, this research aims to bring a new perspective to the issue of these gemstones through an overall study.

Moreover, several mosaics and paintings found in excavations have been published: the mosaics of Hippo Regius in 1958[299], the mosaic of La-Grange-du-Bief in 1960[300], the mosaics of Ostia in 1961[301], the mosaic of Apamea in 1970[302], the mosaic of Sepphoris in 2002[303], the mosaic of Kelenderis in 2006[304] etc. In term of port depiction, the mosaic of Rimini has been the subject of a new study by Ugolini in 2015[305]. Furthermore, the paintings from the so-called "Maison des Nymphes" at Nabeul[306] have been published by Barbet in 1999. More recently, the glass discovered in the necropolis of Cuma in 1819, has been revised in a recent article published by Cavassa and al. in 2013[307]. In addition, the coins minted to celebrate the construction of the harbour of Patras[308] were subject to a new synthesis by Papageorgiadou in 2015.

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[292] Furtwängler 1896, n° 69005
[293] Winckelmann 1970, p. 535, n° 4
[294] See Beazley database: "In 1829 the Italian engraver Tommaso Cades was commissioned to create gem impressions for the newly founded German Institute in Rome."
[295] Debergh 1975
[296] Cintas et al. 1976, p. 173-178
[297] Cintas et al. 1976, p. 177, note 459
[298] Gasparri and Pedicini 2006, p. 55, fig. 74, p. 142
[299] Marec 1958
[300] Duval and Guey 1960
[301] Becatti 1961
[302] Balty 1970
[303] Weiss and Talgam 2002
[304] Friedman and Zoroglu 2006
[305] Ugolini 2015
[306] Barbet 1999; 2013
[307] Cavassa and al. 2013
[308] Papageorgiadou 2015

3.3. Visualising Roman portscapes through the evidence of images: methodology

In this section, I will describe how the iconographic material has been recorded and will be analysed. Then, I will highlight its potential and limitations and I will demonstrate the relevance of epigraphy. Finally, I will explain how I can link the different kinds of data to elucidate the architectural appearance of the main buildings and aspects of infrastructures characterising Roman portscapes.

3.3.1. The iconographic material recorded

In the course of this research, 268 documents[309] have been collated. As was discussed in the first chapter, they were found on very different types of media[310]. The documents were selected according to different criteria:

- ***Geography:***

The iconographic documents that constitute the corpus cover the whole of the Empire and is not limited to the Mediterranean area[311].

- ***Chronology** :*

Regarding the chronology[312], the data collected date predominately to the Imperial period but I have also included documents from the pre-Roman period and Late Antiquity in order to make comparisons and study the origins and the continuity of iconographic patterns.

- ***The topic of the depiction***

One of the issues of this work was to know how to select the images and how to include or exclude them in the catalogue. The first question was: what is a port? How do we recognise a port in Roman images? The port images posed some graphic problems, because they were complex infrastructures, not easy to summarise in a few elements. It requested graphic codes for summarise them in a universal and immediately comprehensible way. Considering iconographic evidence, we can recognise a Roman port thanks to the repetitive structures needed for commercial activities. It includes a basin where ships are mooring. The entrance is often marked by a lighthouse. The basin is protected by breakwaters (usually on *pilae*) that are used as platforms for the loading and unloading

[309] 264 documents and not 269 because I grouped the paintings of each side of the basin in the "Maison des Nymphes" at Nabeul (ID 133 to 137)
[310] See Chapter 4 (Figure 31)
[311] See the map of the geographical distribution of the iconographic material (Figure 27)
[312] See Chapter 4 (Figure 26)

of ships. In some depictions, freestanding columns, arches and statues stand on it. Porticoes are very present in the portscape. Finally, we find quasi systematically temples dedicated to different protective deities (*e.g.* Neptune, Isis, Fortuna, Priapus, Portus etc.) or to the imperial cult as the "divine" Emperor was considered as a protective deity as well. A port image is actually an accumulation of these emblematic symbols that characterise the Roman port and that allow its identification. I have included the documents that represent the following topics:

- maritime port landscape overviews of the Mediterranean Sea like the Campanian paintings like the one from Stabiae (ID 087) and the series of glasses depicting the bay of Puteoli-Baiae (ID 099, 100, 101, 102, 103, 110, 111);
- some river port depictions like the mosaic of Rastan (ID 020) because it presents interesting standard elements of port depictions like the river figure and Cupids;
- maritime villas like the mosaic of Kassel (ID 178 and 228) because they could have private ports and present interesting elements for my study;
- isolated architectural elements belonging to port like lighthouses, such as the series of coins of Alexandria (ID 032, 034, 035, 211, 212, 214, 216, 217, 220, 221, and 222) and Corinthus (ID 194) or the mosaics of the *Piazzale delle Corporazioni* ID 010, 011 etc.). The symbol of the lighthouse was a shorthand that refer to the port;
- port activities suggesting port infrastructures like weighing scenes such as the mosaic of Sousse (ID 122) or loading or unloading scenes like on the relief of Torlonia collection (ID 148) or the mosaic of Ostia with a transhipment scene (ID 125) etc.

I have excluded the documents whose identification was confused. For example the coin of Megara could either represent a bridge as a pier on *pilae* and the arch could be a triumphal arch in the city as the *Porta Maritima* located in the port of Pegae (one of the port of Megara). This uncertainty led me to exclude this document.

Figure 14: Coin of Megara (Price 1977, p. 220, Fig. 482)

Another example of document that I have excluded is a votive hand mirror (Figure 15) on which Baratta[313] recognised a depiction of the lighthouse of Alexandria. However, it corresponds more to a funeral pyre (Figure 15) than the traditional depiction of a lighthouse.

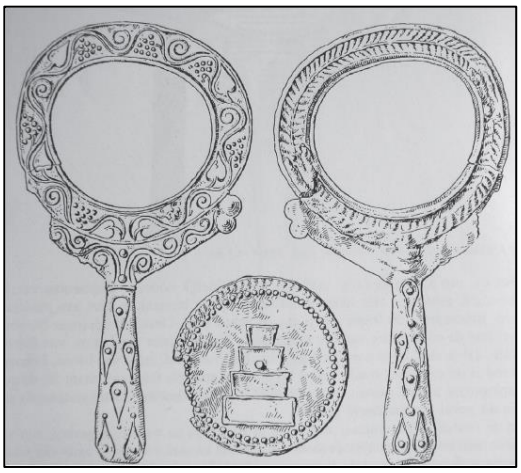


Figure 15: Votive hand mirror of Mainz (Baratta 2012, p. 280, fig. 13). Figure 16: Gold aureus of Marcus Aurelius[314] that depicts a pyre in four tiers, decorated with garlands and statues; quadriga at top.

3.3.2. Method of analysis of iconographic data

The iconographic data analysis of port images, based on the different tools exposed previously, will be partly the subject of Chapter 4. It consists of:

- Studying the origins of port images in order to define what potential model(s) have inspired or influenced Roman port imagery. In others terms, it consists of analysing the degree of the Hellenistic influence;
- Studying the process of diffusion and adoption of maritime and port landscapes in Roman art through a diachronic and geographical approach;
- Studying the language of port images by defining the repertoire of the different motifs characterising the Roman portscape and their evolution until Late Antiquity;
- Defining the stereotyped or idealised motifs;
- Defining the contexts where we find port images in order to analyse their social meanings.

[313] Baratta 2012
[314] http://numismatics.org/collection/1966.62.10

In the iconographic repertoire, most of the figures are deities or come from the fantastic repertoire such as the Cupids. Different types of ships also belonged to main motifs of port iconography. We can recognise a merchant ships by the swan head at the front. I have not included in the following tables the offices because the catalogue counts only one depiction on the so-called relief of the *tabularii* from the Torlonia collection of what could be a *tabularium* or an entrance of a *horrea* next to a ship being unloaded. The administrative function of this structure is identified thanks to the three persons who are taking notes about the cargo on wax tablets.

Figures	
Fishermen	Person who is trying to catch aquatic animals.
Cupid or Eros	God of love, son of Venus. He is commonly represented as a winged, naked, infant boy. In port images, he can be on a boat or riding a dolphin.
River deity	Bearded male figure leaning on a jar from where water flows in a river. He uses to hold a rudder.
Portus deity	Like the river deity, he is a bearded male figure leaning on a jar from where water flows in a river. He holds a rudder. He is associated to a dolphin (see the Nero's *sestertius*).
Priapus	Fertility god. He is usually depicted with an ithyphallic posture.
Neptune	God of the sea. He often appears as a bearded man holding a trident. The dolphin is also one of his attributes. Sometimes we find him driving his sea-horses chariot that refers to the triumph of Neptune (namely in African mosaics).
Dioscuri	Castor and Pollux, sons of Zeus and Leda. They are consistently associated with horses in iconography. They are also often shown wearing felt caps, sometimes with stars above.
Venus	Goddess of love, beauty, fertility etc. She was born of was born of sea-foam. In port depictions, she often appears on a seashell.

Isis	Polymorphic goddess of Egyptian origin. In Roman period, she was associated to the sea and to the Pharos of Alexandria. She is often represented with a peplos floating in the wind. Dependong on her function (Pharia, Pelagia, Fortuna etc.), her attributes are the sistrum, the rudder, rescent headdress and cornucopia etc.
Fortuna/Tyche	Goddess of fortune. She is often depicted with a *gubernaculum* (ship's rudder) and a cornucopia.
Sarapis	Graeco-Egyptian deity. He appaers in iconography as a bearded man and usually wears a *calathos*.
Liber Pater	God of fertility, closely connected with Bacchus. He uses to hold a thyrsus and is often accompanied by a panther.
Annona	Allegorical personification who symbolises the harvest and the grain supply. We recognise her by the ears of wheat and her cornucopia.
Hercules	Hero, son of Zeus and Alcmene. He is usually depicted with a mace and the skin of the Nemean Lion.
Triton	Son of Poseidon and Amphitrite. He is usually represented as a merman. He is often depicted as having a conch shell which he would blow like a trumpet.
Nereids	Sea nymphs who often accompany Neptune.

Architecture	
Portico	Structure consisting of a roof supported by columns. Porticoes are associated to other structures. They are usually in the façade of the *horrea* (buildings used for storage of goods).
Breakwater/jetty	Structure built on posts extending from land over water. It forms a barrier that breaks the force of waves. It can be depicted on a series of arches diving into the sea. It was used as a landing place for ships.
freestanding column	Pillar composed of stone with a capital and a base. A statue is usually found at its top.
Honorific or triumphal arch	Curved masonry construction for spanning an opening. It is usually ornamented by a statuary group on its top.
Temple	Edifice or place dedicated to the worship of a deity (or deities). It usually stands on a podium. Its front present columns that support a triangular pediment.
Lighthouse	Tower composed of several degrees flashing light at its top for the guidance of the ships. The Pharos of Alexandria is recognisable by the presence of Tritons trumpeting and its last floor as a tholos surmounted by a statue.
Navalia	Structure that housed the ships during the winter. They are recognisable in images in the form of arched structures that house a warship characterised by its eye on the bow.
Nilometer	In Alexandrian landscape, it is a graduated pillar serving to indicate the height reached by the Nile during its annual floods.
Trophy	Anything taken in war and preserved as a memento. In port images, trophies stand on the shore as a column with shield and spears on the shaft or as monument composed by ships elements (like rostrum or bow).

3.3.3. Potential and limitations of iconographic data

Whereas images were considered as illustrative, they represent an important source of understanding the past as they directly testify the ancient tastes, forms, beliefs, ways of thinking etc. They provide us with a direct vision of the ancient world through the eye of an artist who had transposed the reality that he perceived. My research consists of transposing this document from the past into a study of material. Images can make an important contribution to the study of the architectural appearance of the main ports of the Mediterranean Sea, as they are the only source of information that shows the third dimension of port architectures that no longer exist archaeologically[315]. The current catalogue, much bigger than one could expect, presents a huge potential for learning more about ports, but also about Roman society and culture more generally.

Nevertheless, "to use the evidence of images safely, let alone effectively, it is necessary to be aware of their weaknesses"[316]. Using iconographic sources is indeed quite limited because of the lack of their reliability and the interpretative issues as they are subjective. Indeed, the image is actually an interpretation of the reality by an 'artist'. The main issue of this work is directly related to the interpretation of these images, as it seems that artists make representations according to artistic conventions rather than recording reality[317]. For instance, the character of the image depends upon the type of media that constrains the artist who must adapt his iconographic language to the media. In effect, as the space on coins for example is relatively small, the artist must use a recognisable symbol referring an idea rather than a realistic representation. The main challenge of this research is to go beyond the limitations of iconographic evidence and define the degree of realism of these images and also to distinguish the archetype from the reality. For these reasons, we cannot rely only on the iconography because of the limits of this type of evidence. That is why it is fundamental to cross reference the iconographic data with others sources of information like epigraphy and archaeology and develop an interdisciplinary approach in order to go beyond the limits of the iconographic evidence and clarify its meanings.

Moreover, among the limitations of the material, we can count the problem of the loss of some original documents that are only known now by copies. For instance, the original of the painting of the Esquiline Hill, dated from the third century, is only known by the engraving of Bartoli (1673) and the drawing of Bellori (1764). We have also the series of gemstones depicting portscapes that were lost during the Second World War and that only known now by the Cades' plaster copies

[315] See Chapter 1
[316] Burke 2001, p. 14-15
[317] De Angelis 2008 ; Hölscher 2004

and the catalogues of Furtwängler[318] and Winckelmann[319] as we have seen before. One of the rare original was found in Italy (ID 158) but its context of discovery is unfortunately unknown. Furthermore, we need to deal with the lack of information concerning the context of discovery of the smallest documents such as the lamps and the gemstones that move and are disseminated. These limitations involve problems of reliability of the dating of this type of material as well as its interpretation. Finally, some lamps are suspected of coming from a counterfeiting workshop of Naples from the nineteenth century (*e.g.* ID 060-061-068-238) so it is difficult to study precisely the variations of the motifs.

3.3.4. The use of epigraphy

As we have seen before[320], several inscriptions commemorate euergetists or benefactors who funded port buildings or repairs. They can provide spatial information and can also confirm the existence of architectural elements known from iconography. They could be also dedicatory, funerary or honorary and were inscribed on various types of supports in the port area:

- **Free-standing columns** (*e.g.* the two columnar pedestals of Caesarea Maritima[321] ; the column of Carthago Nova[322] referring to a joint association of *piscatores* and *propolae* (fishermen and retailers) who erected a column dedicated to Mercury and Lares Augustales in the harbour; the base of a column at Portus[323] mentioning the repair of column VII in the harbour by the Emperor Septimius Severus);
- **Bases of imperial or religious statues** (*e.g.* inscription on the base of statue of Ephesus[324] referring to the port building by C. Licinius Maximus Iulianus ; the base of statue of Patara with an inscribed dedication[325] referring to the construction of the *antipharos* by the governor S. Marcius Priscus ; the inscription on a statue base at Salonae[326] referring to the *praefectura phariaca salonitana*) ;

[318] Furtwängler 1896, pl. 62, n. 8688
[319] Winckelmann 1970, p. 535 n. 54
[320] See chapter 2
[321] Burrel 1993 ; **Column I**: *GLICMar* 15 = *Topoi*, 2000, 536 = *CIIP*-02, 01269 = *AE* 1993, 01619 ; *GLICMar*, 16 = *Topoi*, 2000, 536 = *CIIP*, 02, 1270 = *AE* 1993, 01620 = *AE* 1996, 01560 ; *GLICMar* 00017 = *Topoi*, 2000, 536 = *ZPE*, 174-175, *CIIP* 02, 1271 = *AE* 1993, 01621 = *AE* 2004, +01590 ; **Column II**: *I.Caesarea Maritima* 12 ; *ZPE* 99 (1993) 291, II,1 ; *SEG* 43.1048 ; *GLICMar* 00013 = *Topoi*-2000-536 = *CIIP*-02, 01267 = *AE* 1993, 01623 = *AE* 1998, 01440 ; *GLICMar* 00014 = *Topoi*-2000-537 = *CIIP*-02, 01268 = *AE* 1993, 01624
[322] Ramallo Asensio and Abascal Palazón 1997 ; *CIL* II 5929
[323] *CIL* 14, 113 (p. 481) ; *IPOstie-B*, 320 ; Horster p. 273
[324] *IvE* VII 3066 ; Pont 2010, p. 198 ; Zaccaria 2014, p. 22
[325] *TAM*, II, 36 ; Cavalier 2007, p. 53
[326] *CIL* III, 14712 ; Giardina 2010a, p. 80

- **Port buildings** (*e.g.* the inscriptions inscribed on the *horrea* of Andriake[327] and Patara[328]; the dedication on an honorific arch to Trajan for having restored the harbour of Ancona[329]; dedication on the lighthouse of La Coruña[330] in north-western Spain to the God Mars whose author is an *architectus* (likely the architect who built the lighthouse?);
- **Slabs** (*e.g.* the marble stele of Ephesos referring to the construction of a *teloneion* – toll-office – by an association[331]).

In the course of this research, less than 100 inscriptions have been referenced. I have looked for inscriptions that mention spatial and functional information related to a port. For this, I have made a list of Greek and Latin vocabulary relating to various terms that were used: *limen*, *portus*, *molis*, *pila*, *columna*, *porticus*, *teloneion*, *choma*, *stoa* etc.

3.3.5. Methodology for an integrated approach

Here, I will explain my method of linking the different types of materials to analyse the portscape thanks to the interdisciplinary database made in the *PortusLimen* project:

- PortusLimen database

All images are compiled in the database of the *PortusLimen* project referencing the archaeological data, the ancient sources and the geomorphological data regarding the port studies. Each iconographic document is linked to the digital documents, the harbour systems, the sites and the structures.

[327] Cavalier 2007 ; *TAM*, II, 153 ; *IGR* III 719 ; *IGR* III 720 ; *IGR* III 721
[328] Cavalier 2007 ; *TAM*, II, 143 ; *TAM*, II, 397
[329] *CIL* 09, 05894 (p. 690) = D 00298 = *Euergetismo-Anc*, 00002 = *Horster* p. 300 ; Zaccaria 2009; 2014, p. 18
[330] Giardina 2010, p. 115 ; Arnaud 2014, p. 166 ; Zaccaria 2014, p. 25 ; *CIL* II 2559 = 5639
[331] Zabehlicky 2004; Lytle 2012 ; *IvE* I 20, 1503

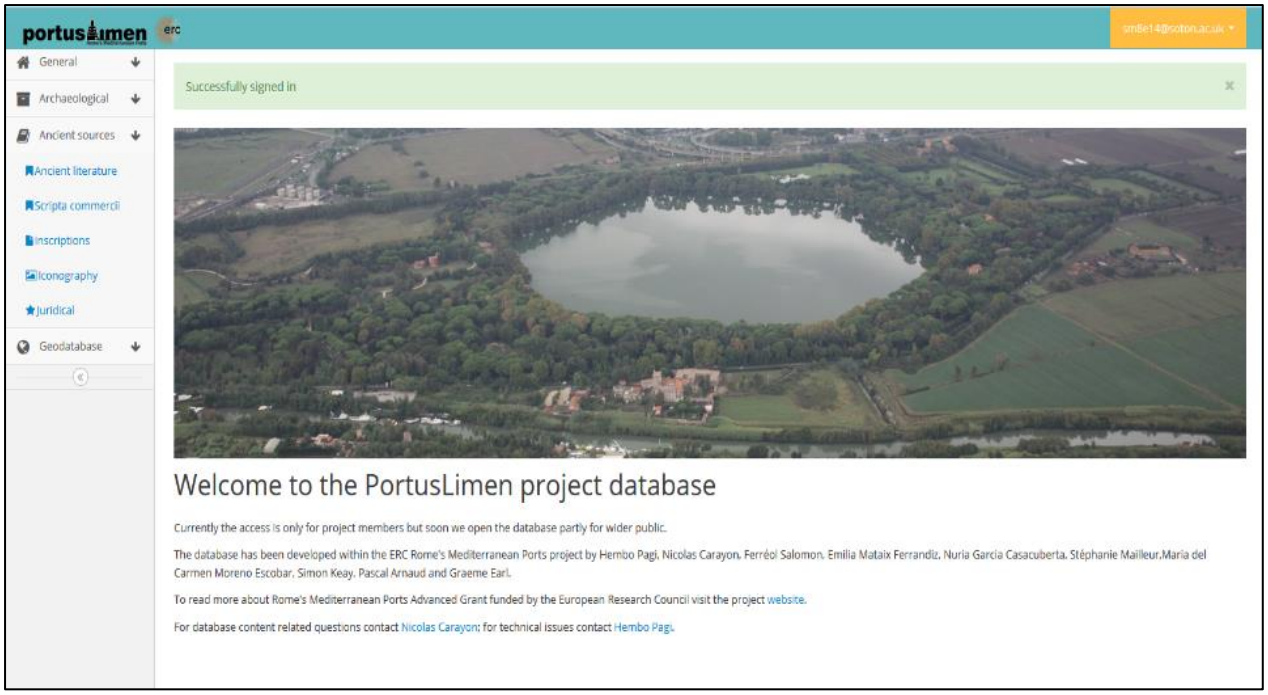


Figure 17: PortusLimen database interface.

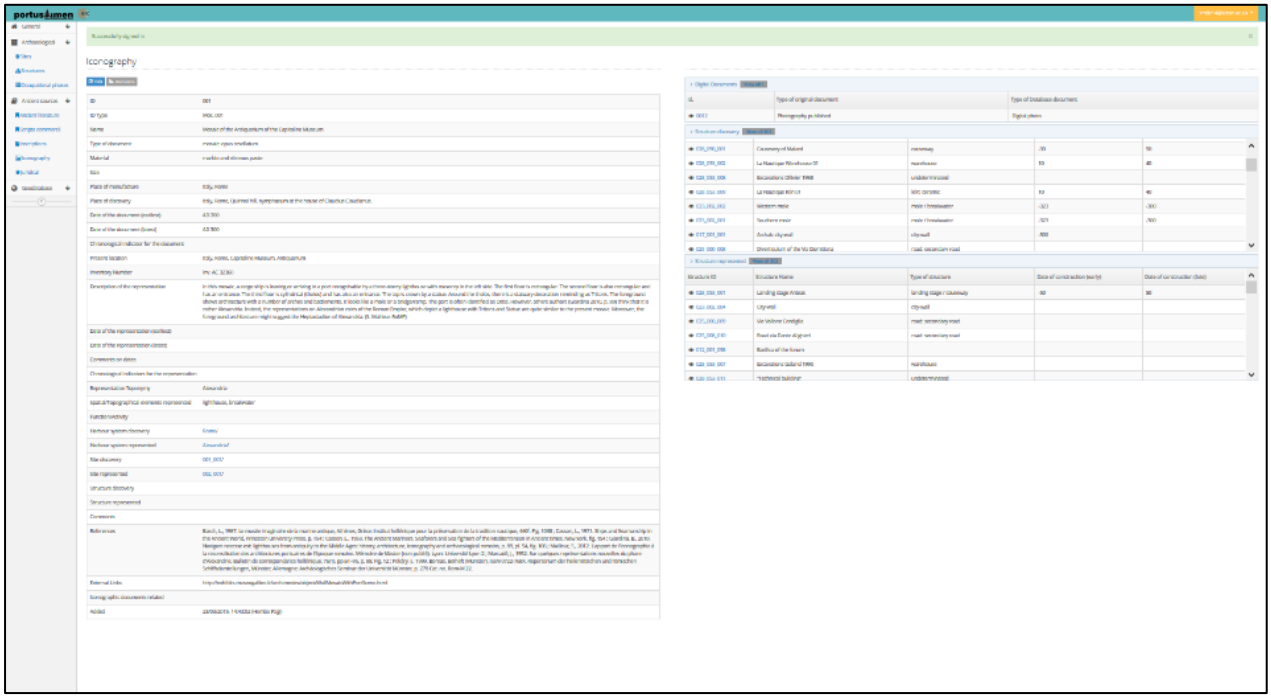


Figure 18: Example of the iconographic database.

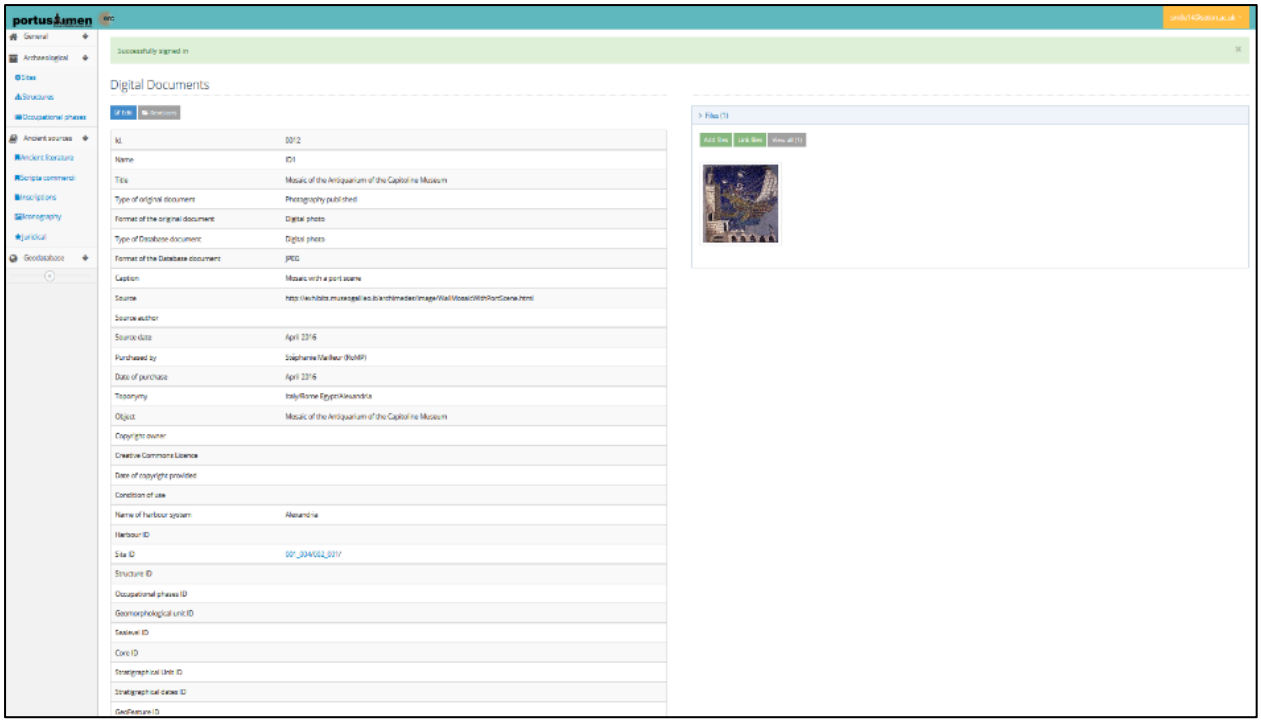


Figure 19: Example of the digital documents database.

The different links allow us to cross-reference the different databases and develop the data integration throughout an interdisciplinary approach that aims to relate the different types of data of the project. This diagram illustrates links between the different databases of the project:

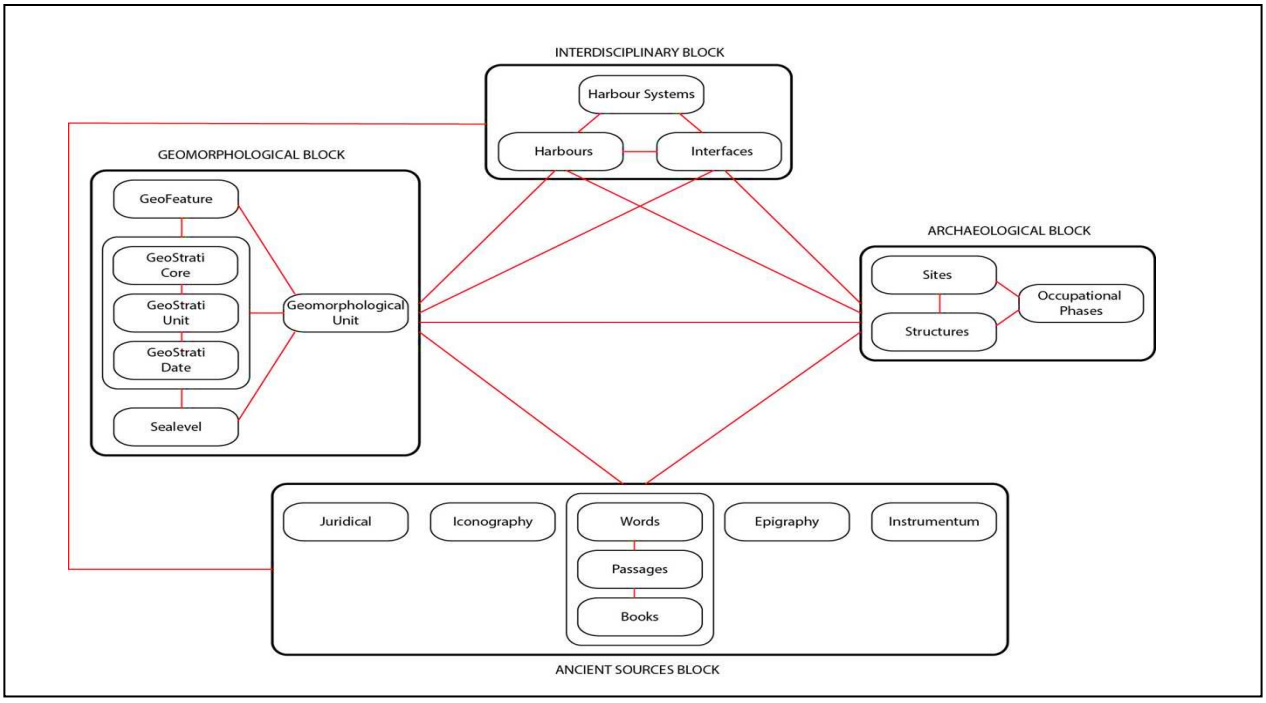


Figure 20: Diagram showing the organisation and the interconnections of the database (N. Carayon).

- Portscape analysis from the perspective of the iconographic and epigraphic evidence

The portscape will be analysed in Chapter 5 through an interdisciplinary approach that integrates the ancient sources (iconography and epigraphy) with the archaeological data[332]. The study of the Roman portscape syntax consists of a dichotomic approach:

- **scaled approach**

The scaled approach consists of studying and categorising port infrastructures separately such as the following:

- **Port facilities and infrastructure** : lighthouse, breakwaters, warehouses, *navalia*, fortifications;
- **Spaces for port administration and controls**: offices (*tabularia*), weighing places (*sacomaria*), custom offices (*teloneia*);
- **Elements of decoration and monumentalisation**: statues, columns, arches, porticoes;
- **Sacred spaces**: temples and sanctuaries.

- **overall approach**

The overall study aims at approaching the port's urban landscape from a holistic perspective. It consists of studying the assemblage of different types of buildings, and the general layout and design of Roman ports. It also aims to explore the relationship between the different elements of infrastructure and buildings and to analyse the symbolic and visual role of the buildings and monuments in the port topography. It also intends to study the relationship between the port society and the port space: how did people make this space? How did they use it? How did they live in it?

3.4. Conclusions

This chapter has discussed the value of studying art as evidence to framing the cultural and social context of the broader Roman Mediterranean. It has also outlined how we can use images as evidence to better understand Roman ports by means of the different general tools of reading and interpretation. We have also defined how to approach Roman art in order to define the syntax of port images and their ways of viewing as well as their social context in order to understand their

[332] See the database links: fig. 17

meanings. It analyses the research conducted into the depictions of ports. Although these studies have contributed to better understand the artworks previously mentioned, nobody was interested in either the function of port images or their meanings. The interest of this research is to study them in a broader perspective as we will examine in the following chapter. My intention is to examine the ways in which the material of iconography can provide information regarding port architectures or arrangements. This research is the first large-scale attempt to assess the documentary value of iconographic evidence for understanding the aspect, the layout and the design of Roman ports (the portscape). This work is the first holistic understanding of ports thanks to the innovative interdisciplinary approach of the *PortusLimen* project and the interconnected database.

Chapter 4

Origins and the process of diffusion and adoption of maritime and port landscapes in Roman art

This chapter describes the origins as well as the process of diffusion and adoption of port and maritime imagery until the Imperial period through a diachronic approach. It raises the question of the Hellenistic influences of Roman port imagery. It also analyses how the pictorial genre of maritime landscape emerged during the Augustan period as well as the process of its diffusion, reception and standardisation in art during the imperial period. Finally, it determines the main characteristic patterns of the portscape through a linguistic approach. It also aims to distinguish the different messages conveyed by these images, according to their contexts (domestic, funeral, political, etc.) as well as the viewers to whom this type of imagery was addressed and the motivations of the sponsors. In other words, it discusses the complex entanglement of people and port images, and highlights various aspects of the Roman visual and material culture. This succinct overview develops the three following working themes:

- Pre-Roman maritime landscape depictions;
- The beginning of Roman port landscapes depictions;
- Ports in Imperial imagery.

4.1. Pre-Roman maritime landscape depictions

There is a significant lack of material in the archaeological record before the Roman period. Port images are very rare in earlier periods. However, a few iconographic examples convey representations of Minoan, Egyptian, Assyrian, Phoenician or Greek port-cities:

4.1.1. Minoans

The oldest port image known comes from Aegean art through a painting (ID 092), dated from 1600-1530 BC and found in 1972 in a house in Thera (Santorin Island). This picture tries to illustrate a formal landscape scene, treated by juxtaposition of natural elements and characters in a

maritime context, but without any representation of the third dimension and reality[333]. On the left part of the painting, ships are leaving a port. They are going to another port located on the right of the painting. They seem to cross the Aegean Sea but we do not have information to identify the port[334]. The port architecture is difficult to analyse as it is disproportionate.

4.1.2. Ancient Egypt

In Egyptian art, port scenes exist but port infrastructure is very rarely depicted. Indeed, the iconography often shows ships but rarely ports. For example, a painting from the 14th century BC, found in the tomb of Kenamon at Thebes (ID 261), depicts a maritime commerce scene with Syrian ships entering an Egyptian port (Thebes?). The scene, divided into two lines, schematically depicts a ship unloading on the quay where there are shops and textile merchants. The idea of the port and its symbols are represented, but we notice a lack of architectural details.

4.1.3. Ancient Near-East

Until the 5th century, the Phoenician navy was mainly known by non-Phoenician sources, especially from Assyria. Indeed, during this period, Assyrian kings conquered the Levantine coastal cities and represented their victories and the scenes of tributes on the wall of their palace. The oldest representations date from the reign of Salamansar III (858-824 BC) who depicted his victories on bronze slab adorning the monumental gates of Balawat (ID 262). One of these slabs, now in the British Museum, shows the transport by ship of the tribute from an island (near to Tyr). We do not have a representation of port architecture but a fortified city, protected by walls[335]. Another port scene is depicted under Sargon II (721-705 BC), on a relief which decorates his palace in his new capital Khorsabad. One of these reliefs, now in the Louvre Museum, represents the transport of Phoenician wood in the Mediterranean Sea (ID 263), used for architecture. Usually, the wood came from Sidon and was transported until a port next to Tyr, from where it was loaded in ships travelling along the Phoenician coast to the Assyrian kingdom[336]. On this relief, two fortified cities, rather than ports, are represented (probably Tyr and Arwad). These types of city depictions also appear on a series of coins of Sidon (ID 119), dated from 400-384 BC: they depict a warship and crenelated tower.

[333] Croisille 2010, p. 23.
[334] Doumas 1988, p.38 ; Farnoux 1996
[335] Fontan et al. 2007
[336] Fontan et al. 2007 ; http://www.louvre.fr/oeuvre-notices/frise-du-transport-du-bois

4.1.4. Ancient Greece

For the Classical period, no port architecture depictions are known. However, some coins seem to evocate ports through symbols on coins such as those from Naulochos (ID 202) (350-340 BC)[337] and Zankle (ID 303) (520-493 BC)[338], depicting a circular basin evocating perhaps a port. Within it, there is a dolphin that was the symbol of Poseidon as well as port cities themselves. In addition, we have the so-called "Arkesilas cup" (ID 093) showing a weighing scene inside of a cup from Laconia[339]. In it, the king Arkesilas is seated on the left. He seems to control the weighing of a good that was identified as the *silphium*[340]. The weighing is made by four individuals using a large tray while two slaves are piling bags in the lower part of the scene (perhaps the ship's hold).

Although harbours played an important role in ancient civilisations, we can notice a certain lack of interest for depicting portscapes during these periods. The few examples presented above only refer to the ideas of ports or maritime cities in a simplistic manner. They are just frames of reference for the scenes, and were not the primary object of the depiction. We can, however observe a change during the Hellenistic period.

4.1.5. The emergence of topographical paintings and the influence of the Alexandrian artists

This period is very important because portscapes depictions seem to take their origins from the Hellenistic period onwards and, as we will see further on, the elements typical of this period were to be reused and adapted in Imperial art. This section seeks to demonstrate that there was a significant change and evolution in art during this period. We can observe that the human figure dominates the art of the Archaic period and Classical antiquity and, traditionally, landscapes appear only in a second position, to contextualise the scenes. The absence of a term to refer to the concept of landscape attests to the Greeks' lack of interest in landscape. Unless there are topographical indications in the Archaic and Classical depictions, we have to wait until the Hellenistic period to see landscapes emerge as an artistic genre. The discoveries of paintings in the royal tombs of Macedonia, like Philip II at Vergina (360-310 BC), have revealed that landscapes were component of the artistic expression during the Hellenistic period[341]. The Campanian paintings of the first century

[337] Head and Poole 1964, p. 202
[338] Abaecherli Boyce 1958, p. 78, pl. 13, fig. 2 ; Lehmann-Hartleben 1923, p. 237
[339] Bresson 2000, p. 85-95 ; Boardman and Diebold 1999, n° 420, p. 187-188
[340] Bresson 2000, p. 85-95 ; Tsetskhladze 2008, p. 210
[341] Fuchs 2010 (December 31), ; Tuck 2014 (December 16), p. 99 ; De Hallie; Tritle

BC illustrates this continuity very well[342]. Before the Hellenistic period, landscape depictions depend upon literature. Landscapes are described in Homeric poems, like infernal spaces and they influenced the Alexandrian art[343].

Following the Hellenistic period, we can observe a certain interest in cartography and geographical places (*topoi*). This is probably due to the development of scientific knowledge, when Alexandria became an important centre of science with its famous academies, museums and libraries[344]. In this period, a scientific foundation of cartography and geography was also formed in Alexandria. In this context, the descriptions of Greek geographers and the works of Eratosthenes (276-194 BC), called "father of geography", had certainly influenced Ptolemaic scholars and artistic depictions. On this point, according to Diodorus Siculus[345], a certain Demetrios of Alexandria[346], living in Rome around 180-150 BC, was called "*Topographos*" as he was a painter of *topoi* (topographical places). Demetrios is the earliest recorded landscape painter but none of his work has survived. He influenced the Alexandrian artists who initiated the depiction of Nilotic scenes on mosaics and paintings from the second century BC. The number of Egyptians in Rome, and Italy in general, increased after 75 BC thanks to the cultural contacts and trade. The wall paintings at Pompeii show the Alexandrian influence and the diffusion of this "Egyptomania" in Italy. The third Pompeian style saw thereby the introduction of Egyptian themes and imagery, including scenes of the Nile as well as Egyptian deities and motifs. Luxury houses in Campania attest a pronounced taste for the style of Ptolemaic Alexandria[347]. For example, the frieze of the *atrium* of the Villa of the Mysteries at Pompeii (c. 80-70 BC) contains, in this respect, Egyptian elements[348]. The iconographic *corpus* recorded in this research illustrates the Alexandrian influence in early landscape depictions whose typical motifs influenced the depictions of portscapes dating to the Imperial period.

Alexandrian artists initiated the depiction of Nilotic scenes in mosaics and paintings. This style is characterised by typical elements of the Nile like hippopotami, crocodiles or lotuses and is inspired by real as well as idealised or fantastic or mythological elements. The most emblematic document in this corpus is the mosaic of Palestrina (ID 030), dated from c. 125-100 BC and depicting a Nilotic scene referring to the annual Nile flood from Ethiopia to Alexandria. It decorated the *nympheum* located in the apse of the sanctuary of Fortuna Primigenia. The mosaic of the *Casa del*

[342] See next section
[343] Cousin 2003
[344] Erskine 1995
[345] Diodorus Siculus, *History* XXXI.xviii.2
[346] McKenzie 2007, p. 112
[347] Wallace-Hadrill 1994, p. 30
[348] Meyboom 1995, p. 219

Menandro in Pompeii (ID 002) also follows this tradition. It shows a Nilotic scene with pygmies in a small boat and structures bordering the sea front in the background.

Another tradition with Egyptian influence is attested in Hellenistic depictions. It concerns the cityscape of Alexandria including the emblematic harbour and especially the famous lighthouse. Several examples in this corpus attest to this fashion. For instance, a glass *pyxis* has been found in the necropolis of Cumae (ID 106)[349]. According to its style and the context, it dates from the Late Hellenistic period[350] and it was probably made in an Alexandrian workshop or an Italian workshop influenced by the Alexandrian style. The scene depicts a maritime landscape with a ship on the right and a breakwater with a lighthouse with a flame burning on the top. In his description, Froehner identified a trident-like shape that may belong to the usual trident of Neptune on the top of the Alexandrian lighthouse[351]. A glass vase from the Hellenistic period was also found in Begram (Afghanistan) (ID 098). It illustrates on one side the sea with three ships. The other side is decorated by the image of the Lighthouse of Alexandria as a massive square tower in masonry in *opus isodomum*. On the top of this tower, there is a cylindrical pedestal on which stands a statuary group with tritons. In the middle, stands a male statue, without beard and naked, that probably represents the image of Ptolemy I Sôter in hero, or Poseidon or Zeus Sôter as stated Quet[352]. From the same period, a lantern in terracotta also depicts the Alexandrian lighthouse (ID 146). Also, a gem depicts the Alexandrian lighthouse, but, this time, with Isis Fortuna (ID 251) holding a rudder in the left hand and a sceptre on the right hand; Fortuna (or Tyché) was a protective deity for sailors as Apuleius mentions in *Metamorphoses* XI, 15 and XI, 25. A sanctuary of Fortuna in a harbour is indeed attested through the mosaic of Palestrina (ID 264), from the Hellenistic period as well, showing a Corinthian votive column with a vase on the top, in a semi-circular enclosure, close to the seaside. On the shaft of the column, there is a trophy composed by a trident and a rudder, which is one of the attributes of Fortuna. This is not surprising because of the context of this mosaic (in a sanctuary of Fortuna). The votive character of this column is confirmed by the presence of the altar and the animal ready for the sacrifice that will be likely undertaken by a priest wearing a toga on the left.

During the Hellenistic period, we can observe a certain influence of the literature, and particularly of the Homeric poems in which we can find landscapes descriptions during the journey of Ulysses in the underworld[353]. These Homeric *Nekyia* scenes have been largely depicted in art since

[349] Cavassa and al. 2013
[350] Cavassa and al. 2013, p. 12
[351] Froehner 1879, p. 99
[352] Piponnier 1983 ; Quet 1984 ; Marcadé 1952, p. 67, fig. 2 ; Price 1977, p. 181, fig. 315 ; Whitehouse 2001a ; Hackin et al. 1954, 10f. Ill. 359-362, fig. 37 ; Goodchild 1961, p. 218 ; Koster and Whitehouse 1989, p. 28, fig. 4
[353] Homer, *Odyssey* X, 505-540 and XI, 1-640

the Archaic period and have been very popular in the Classical age from the fifth century BC[354], like the paintings of Polygnotus described by Pausanias in his *Periegesis*[355]. In the Hellenistic period, Alexandrian art also illustrates underworld landscapes as in a painting on a *loculus* slab[356] from the East of the Shabty necropolis at Alexandria, and dated to the third century BC. The depiction is divided in two superposed registers: on the upper part, there is a landscape and on the lower part, there is a closed space, the underworld. A large bay is depicted, with an aedicule or a gate that seems to mark the limit between the world of the dead and the world of the living. A staircase leads to the sea in which a ship is represented. Mythological figures stand on the shore (Ixion, Sisyphus and perhaps Tityos and Orion, as well as the daughters of Danaus).

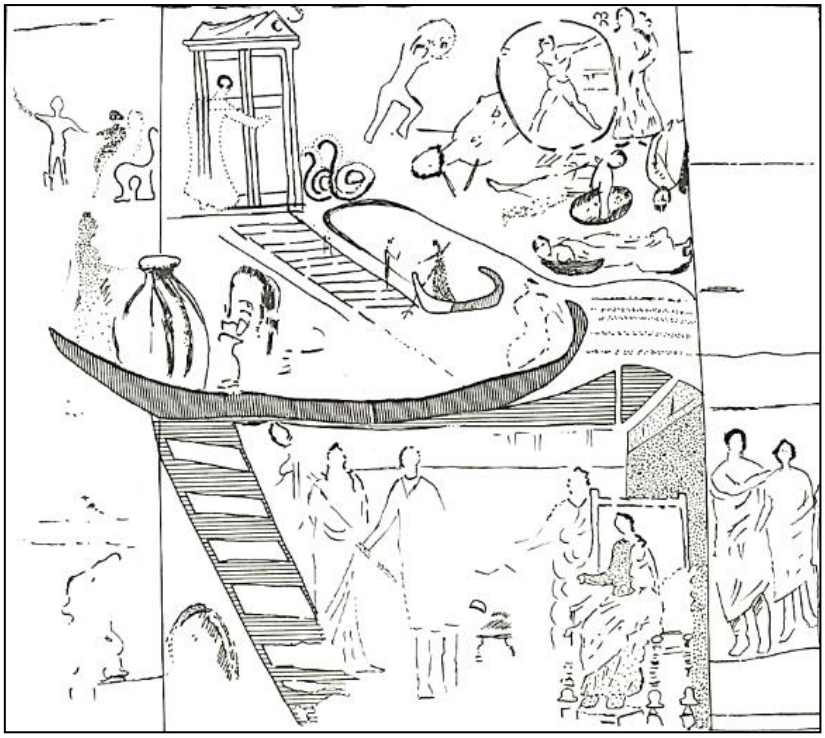


Figure 21: Loculus slab with Nekyia scene[357].

[354] The Odyssean scenes are also popular in the Republican period like in the paintings of the house of the Esquiline: See Reinach 1922, p. 174, fig. 1 and 2
[355] Pausanias, *Periegesis* X, 28, 1-31, 12
[356] Rouveret and Walter 2004, 113-114 ; Rodziewicz 1992
[357] Rodziewicz 1992, p. 332, fig. 1

4.2. The beginnings of the depiction of Roman port landscapes

4.2.1. The *Victoria Navalis* in the Republican Imagery

During the Republican period, Rome affirmed the importance of its navy through its naval victories over enemies and piracy. In this period, the naval forces were largely highlighted. It is in this context that the naval triumph, including trophies and rostral columns, was introduced[358]. The theme of the *Victoria Navalis* is attested iconographically on such as Republican coinage, with illustrations of *navalia* (shipsheds) with the prow of warships inside. For instance, the *denarius* of Lollius Palikanus (ID 047) shows, on the obverse, the head of *Libertas*, as the legend indicates. On the reverse, a convex row of arches is depicted. In each arch, there is the prow of a warship. Above, a bench (*subsellium*) is depicted with the legend PALIKANUS. There was a debate regarding the structure represented, identified as *navalia* for some or rostra in the forum ornamented with ships beaks for others[359]. In addition, the coin of Ancus Marcius (ID 205) represents on the reverse, a warship in a double-arcaded structure. This could refer to the *navalia* of Ostia as the inscription[360] referring to the restoration of the *navalia* of Ostia could attest[361]. The motif of *navalia* has been reused in mosaics like the mosaic of the Vatican museum (ID 023) [362] that represents sixteen bows of ships, framed by columns where there is a continuous frieze and a gabled roof above. In each arch, the bow of a warship is depicted. Inherited from the Republic period[363], this motif also appears on Imperial paintings like the painting of the of the *Casa del Labirinto* in Pompeii (ID 089), as well as mosaics like the mosaic of Nimes (ID 197), the mosaic of Pompeii (ID 198), the mosaic of Lanuvium (ID 021) and the mosaic of La Grange-du-Bief (ID 022). From the Republican period, Sextus Pompey's coins (ID 036) are also inscribed in this *Victoria Navalis* tradition. They depict a cylindrical tower with a statue on the top, holding a trident (Neptune or Sextus Pompey?). This structure was identified as the lighthouse of the port of Messina, in northern Sicily. On each side of the tower, there is a galley with a sceptre and a trident with the Legion Eagle referring to naval victories or trophies.

Finally, in the Republican period, we do not find representations of port landscapes. Nevertheless, as we have seen, some port elements can be found but they mainly refer to military

[358] Livy XVII ; Pliny *NH* XXXIV, 20
[359] Blackman 2013, p. 37 ; Coarelli 1968, p. 27
[360] *CIL* XIV 376
[361] Meiggs, p. 558; Franzot 1999, p. 28; Zaccaria p. 20
[362] Blackman 2013, p. 37 ; Coarelli 1968, p. 28
[363] See the recent publication on the *navalia* motif on the stucco found in the "*Domus aux Bucranes*" in Ostia Antica in Girard and Morard 2016; see also the *navalia* depicted on the mosaic of Poggi D'Oro in Angle et al. 2019

structures like the *navalia*, except for the coin of Panormus in Sicily (ID 038) and the coin of Laodicea ad Mare (ID 149), both showing exceptionally a lighthouse. In this period, the Mediterranean became the *Mare Nostrum* for Romans since they controlled it and made it a safe space that provided wealth. Effectively, after the destruction of Carthage in 146 BC, Rome won power and control over the Mediterranean after having subjugated the Punic and Greek cities. The *Urbs* became then the only great power in the Mediterranean and continued to affirm its maritime power through the naval victories over enemies and piracy. In 70's BC, the general Pompey led wars in Hispania and Middle East. In 67 BC, he get a special *imperium* to eliminate the piracy of the Mediterranean, whose raids disrupted considerably the transport of goods to Rome from Sicily and Egypt, threatening to starve the Italian peninsula. Then, the Octavius' victories at Naulochus in 36 BC and especially at Actium in 31 BC ensured the absolute domination over the Mediterranean, the *Imperium Maris*[364], for three centuries. In this way, the sea is part of the familiar Romans' landscape, who will make it a pictorial genre from the Augustan period onwards. Under the Empire, Romans used to demonstrate their naval forces as the iconography testifies through the representations of *naumachia* (staged naval battle), mainly of the Fourth Style, from Nero to Flavians. For instance, the painting of *the Casa dei Vettii* in Pompeii (ID 091) represents a scene of *naumachia*. Two warships appear in the foreground. Port architectures, with porticoes on structures on *pilae*, are depicted in the background.

4.2.2. The emergence of a pictorial genre under Augustus

The landscape is a form of territory, a space, perceived by an observer from a point of view. It is an interpretation of space, analysed visually, so it is a question of view. The term landscape does not exist in Greek neither in Latin. It actually originated from Renaissance Flemish and Dutch art. It derives from the Dutch term "*landskap*" which referred to a particular way of seeing within a sixteenth century artistic tradition, focusing on situating the observer on an elevated viewpoint in which linear techniques of perspective were seen to create a "realistic" image[365]. It is a distinctive "way of looking" that bears no real reflection of past experiences and is not objective. Its first fruits appeared progressively under the *Trecento* with Giotto and knew a real development at the end of the fifteenth century and the beginning of the sixteenth century with, namely, Joachim Patinir who was called by Albrecht Dürer "*der gute Landschaftmäler*" ("the good landscape painter")[366]. He introduced the taste of landscape into Western painting. He is the first to have given the natural

[364] Pliny *NH* II, 4, 7 ; Reddé 1997
[365] Freedberg and Vries 1996, p. 212, 223, 228
[366] Croisille 2010, p. 11 ; Antrop and Eetvelde 2017, p. 322

environment an important place in his paintings. This tendency to depict landscapes concerns not only the paintings. We find them, for instance, in the woodcut townscapes of the Hartmann Schedel's *Nuremberg Chronicle*[367].

Despite the inexistence of an appropriate term during antiquity, as we have seen previously, the interest in natural and architectural landscape depictions appeared progressively in art from Hellenistic traditions from Alexandria. However, the genesis of the landscape theme appeared really during the Augustan period as it is attested by Vitruvius[368] and Pliny[369] as we have seen in Chapter 3. In the Augustan period, we can find another genre of landscape painting that Rostovtzeff[370] called "sacro-idyllic" to refer to landscapes characterised by idealised natural elements and sacred buildings. In contrast to the maritime landscapes, sacro-idyllic landscapes are composed of fictional elements, far from reality whose typical motifs are stereotyped: rocks or rocky arches, caves, swamp, waterfalls, herds, small temples *in antis* built on a podium (*tempietto*), *heroon*, *tholos*, columns with vase or statues and shields and vegetation (trees etc.). The corpus of sacro-idyllic landscapes in Roman art[371] is very substantial. For instance, the Barberini painting[372], found in the seventeenth century and dating to the period of Augustus, shows a typical sacro-idyllic with typical features. On the left, there is a temple with two columns *in antis*. Its architrave is decorated by two vases. Several goats stand around. On the right, there is a cave. Above, a circular building is depicted. In the background, a rectangular building stands with a statuary group in front of it. This type of building is probably a flat roof temple like the one depicted on the painting from Herculaneum below. Some paintings from Boscotrecase also illustrate sacro-idyllic landscapes[373] with opened sanctuaries with freestanding columns with vase or statue on top and shields on their shafts.

[367] Andrews 1999, p. 25-32 ; Fernandes et al. 2009, p. 35-56
[368] Vitruvius, *De Architectura*, VII, 5, 1-2
[369] Pliny, *Natural History*, XXXV, 16
[370] Rostovtzeff 1911
[371] Leach 1980; Silberberg-Peirce 1980; Silberberg 1981
[372] Lavagne 1993
[373] Kleiner 2016, p. 102 ; Ling 1991, p. 114 ; Boardman et al. 1991, p. 248

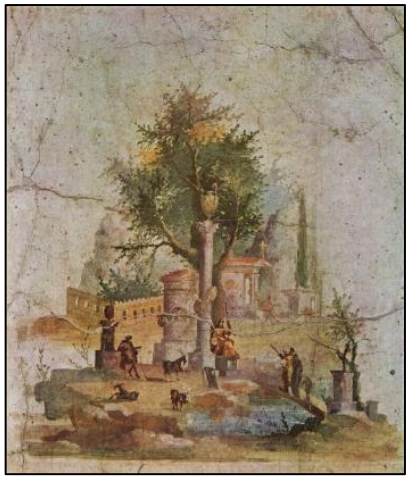


Figure 22: Barberini painting, copy of the original lost by P. Cortona (17th century), Windsor Royal Library[374]*.*

Figure 23: Painting from Boscotrecase [375]

Figure 24: Idyllic landscape painting from Herculaneum[376]*. Figure 25: Sacro-idyllic Landscape from the Imperial Villa at Boscotrecase, c. 20 BC (Metropolitan Museum, New York)*[377]*.*

As we have demonstrated through many examples of wall paintings with landscapes depictions found in some Vesuvian cities, the Romans showed a pronounced taste for the landscape genre. We can indeed observe aesthetic representations of landscape in Roman art, composed of stereotypes (real and idealised). Under Claudius, the landscape genre, in fourth Pompeian style paintings, witnessed a golden age and has persisted until the post-Pompeian period, all along the Empire. In the following section, we will see that this genre of landscape, that owes its origins to Hellenistic paintings as well, has influenced the Imperial port images and we will define the degree of this influence in order to better distinguish the idealised motifs from the real.

[374] Lavagne 1993, fig. 1
[375] Croisille 2010, p. 94, fig. 117
[376] Croisille 2010, p. 122, fig. 162
[377] Croisille 2010, p. 92, fig. 116

4.3. Ports in the Imperial Imagery: historical overview

Ports images seem to start to emerge in the Hellenistic period as we have seen before. There was an initial development during the Republican period. However, the middle of the first century AD is very significant, as it knew a sharp increase in the number of port images - more than eighty documents. The number of port images was still important until the third century (more than sixty) and persisted until the middle of the firth century as we can observe in the following chart:

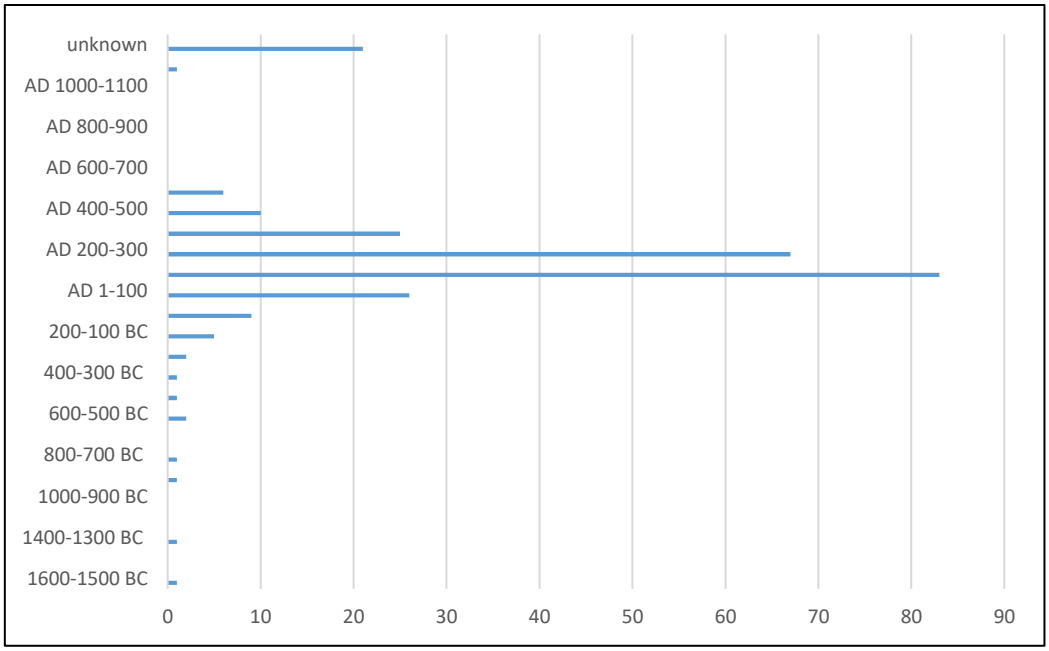


Figure 26: Chart showing the chronological distribution of iconographic corpus.

In other words, we can consider that port landscapes appear "officially" in art during the Imperial period and we can notice a significant change. Why? What has stimulated Roman enthusiasm to represent ports in their artworks? The wide distribution of the port pictures during the Imperial period seems to be connected with the historical context when the control of the *Mare Nostrum* and the connections between Rome and its provinces were ensured through the networks of ports[378]. Consequently, in the Imperial period, ports played a crucial role since they were allowed to maintain an economic and a commercial influence all around the Empire as well as the circulation of persons and goods. Under the Empire, the Mediterranean knew a considerable development of port facilities. Innovations and reflections on marine, port architecture and storage systems have been developed substantially. The establishment of maritime ports (Mediterranean, Red Sea, and

[378] Holt 2018, p. 218

Black Sea) and fluvial ports ensured an important network that covered every provinces of the Roman Empire. Therefore, it ensured a Roman presence and a rapidity of diffusion of goods and army.

Most port building was in the hands of city authorities but there were imperial concerns as they guarantied the economic prosperity of the Empire. They ensured regular supplies of goods to Rome and its provinces[379]. At the end of the Republic and the earliest years of the Empire, Rome saw an exponential growth in its population[380]. The resulting difficulties to supply the city highlighted the logistic shortfalls of the port system established in the Republican period. The port of Ostia had a limited capacity and the port of Puteoli was too far. This implied a strategic and logistical challenge for ensuring a regular annual supply of food in the City. Consequently, it needed to build or upgrade ports infrastructures and establish the *curatores* and the *praefectus annonae* to manage them, as well as public bodies like the *corpora navicularioruм* to organise the transportation of goods to Rome.

The most important construction work is Portus, the new maritime port of Imperial Rome, begun under Claudius and completed under Nero. This major event, commemorated by Nero's *sestertii* (ID 048 and ID 056), provided a solution to the shortages of wheat, frequent in winter. Indeed, throughout the Republic, Rome did not have a port related to its importance. This project was already considered by Julius Caesar and then, by Augustus who tried to create an artificial port in Ostia. However, it was necessary to wait until the reign of Claudius to realise this project. The moles and the lighthouse were built and the port was already in use before Claudius' death. The harbour constructions continued during the first ten years of Nero's reign. Thanks to these constructions, Rome finally had the port corresponding to its needs to the detriment of Puteoli, placed then, under the authority of the *praefectus annonae*. Portus was substantially enlarged under Trajan who built a second basin as it is depicted on the Trajanic coins (ID 050), further back inland, to face the problems encountered with the Claudius' basin (regularly silted by river sediments). Therefore, thanks to Portus, Rome became a real hub of the Mediterranean. The City was related to other key ports to ensure the connectivity and the networks with Rome for the supply like Centumcellae[381] and Ancona that were also restored by Trajan. His successor Hadrian undertook, for instance, works in different ports. He repaired the port of Ephesus[382] and the *pilae* of Puteoli[383]. Septimius Severus enlarged the port of Leptis Magna (quay and eastern pier) and repaired a column

[379] Erdkamp 2005, p. 246-249
[380] Virlouvet 1985; 1995 ; Andreau 2015
[381] Keay 2010, p. 16
[382] *IvE* II 274
[383] *CIL* X, 1640

of Portus, broken by a storm[384]. A series of coins (ID 054-031-151-175) commemorate the renewal of the harbour infrastructures in Patrai (or Patras) during the second and the third century AD by Septimius Severus, Geta and Commodus. This historical context seems to explain why, under the Imperial period, port images have been widely disseminated all around the Empire (Figure 27). We find them in Italy – that represent 116 documents, so almost the half of the corpus – and beyond, like in Germany, with the mosaics of Kassel (ID 178) or Bad Kreuznach (ID 095) or in Slovenia, with the glass of Poetovio (ID 243) depicting the lighthouse of Alexandria. Their location is not necessarily linked with a maritime context. They can be found in hinterlands like the mosaic of La-Grange-du-Bief (ID 022) or the mosaic of Bad Kreuznach (ID 095). The following map shows the geographical distribution of the origins of the iconographic documents from Hellenistic period to Late Antiquity (thirty locations are unknown).

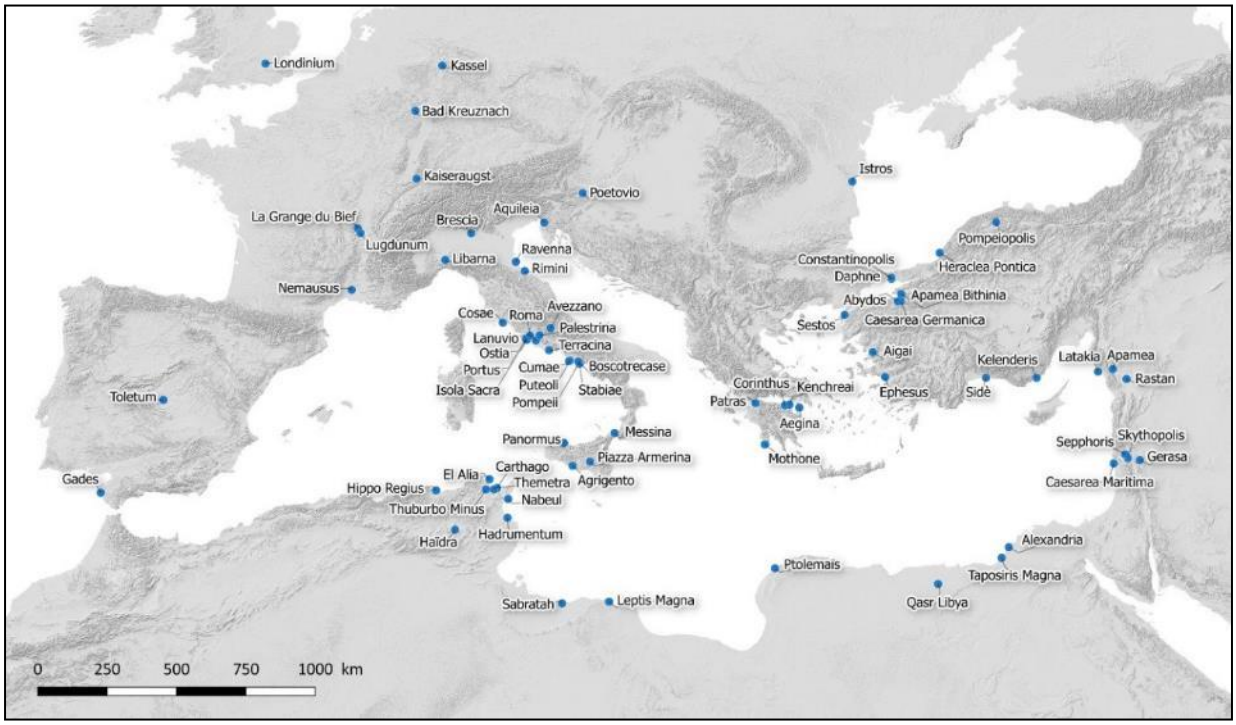


Figure 27: Map showing the geographical distribution of the origins of the iconographic documents, from Hellenistic period to Late Antiquity[385].

[384] *CIL* 14, 00113 (p 481) = *IPOstie-B*, 00320 = Horster p 273

[385] Ancient World Mapping Center, "Carte_Hillshade": http://awmc.unc.edu/awmc/map_data/elevation_data/

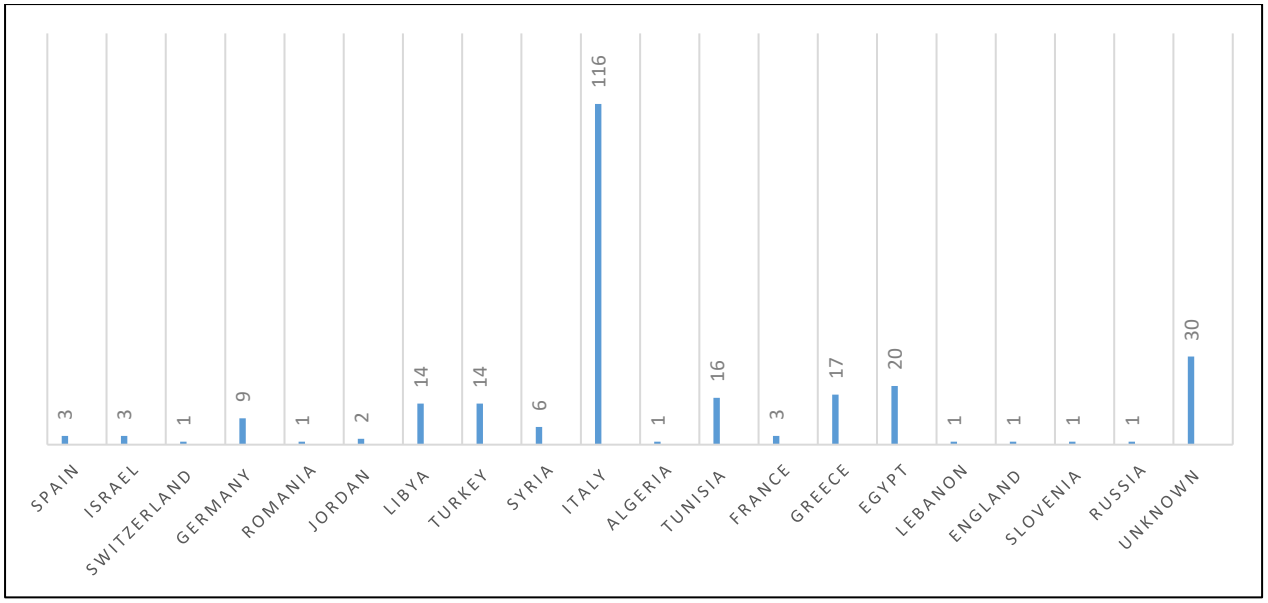


Figure 28: Chart showing the geographical distribution of the iconographic documents according to the countries.

4.4. The language and the cultural meanings of Roman port images

This section attempts to uncover the different layers of meaning[386] of port images. This part of my research aims to explore the 'power'[387] of port images in the Roman society and show that port images conveyed a polysemic message intended to multiple viewers through a series of case-studies. What is the role of port images? To whom is this type of image addressed?

4.4.1. The contexts

A contextual approach will help us to analyse the different messages conveyed by port images. It consists of studying the images in the context of their production or finding. We distinguish different types of contexts in which port images exist:

- Domestic context: decoration of villas (paintings, mosaics etc.);
- Funerary context: necropolis, tombstones, stelae, sarcophagi, tombs etc.;
- Public monuments (like the Trajan's column or the arch of Leptis Magna) and public spaces (like public market);
- Coinage;
- Religious context like in sanctuaries;

[386] For the question of the cultural meanings, see Swift 2017 and Stoner 2019
[387] Term that comes from Zanker 1988

- Commercial context;
- Baths.

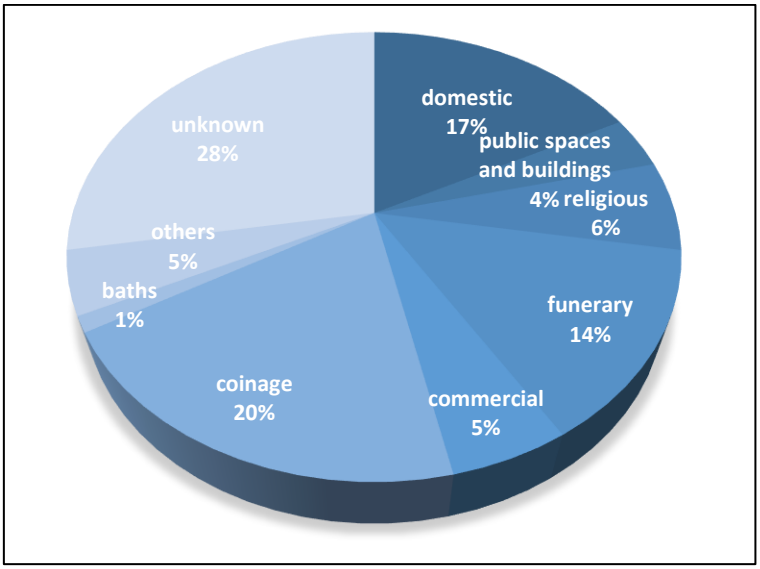


Figure 29: Pie showing the different types of contexts of the iconographic material.

4.4.2. The process of making, transmission and reception of port images

To understand the process of making, transmission and reception of port images, we can reconsider Clarke's model seen before in Chapter 3 and adapt it as the following chart attempts to explain (Figure 30). The process of making images depends upon the patron and his social status – the aim is different if the patron is an Emperor, a magistrate or a merchant - and his motivations – propaganda of the Empire, civic benefaction, decorate a house etc. In the process of transmission, the artist plays an important role. He interprets the patron's wishes, according to his background and his skills, more or less accurately, depending on his ability of copying the standards. The location also influences the process of transmission. The type of depiction is dependent on the context and the type of media that affects the available space to decorate as well as the social role of this image that will be developed a bit further. The final process is the reception of the image by a viewer whose social status, referent and origins have consequences on his/her way of viewing and interpreting the image.

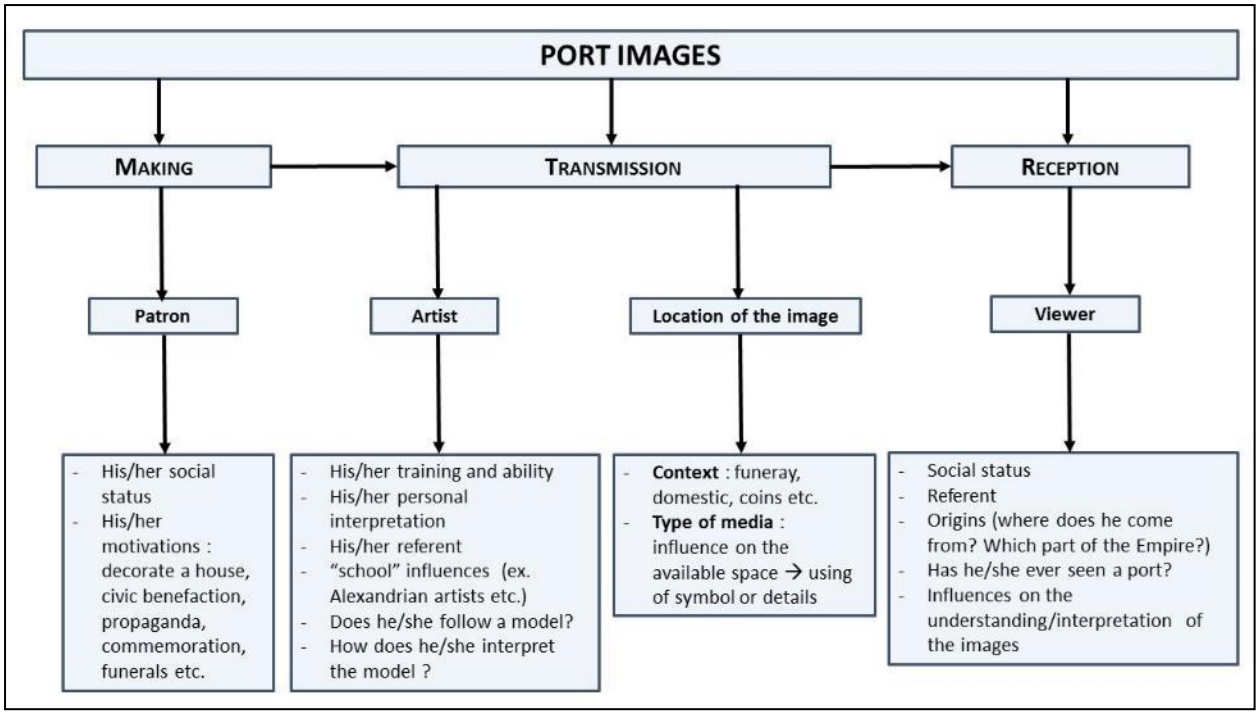


Figure 30: Model showing the process of making, transmission and reception of port images.

4.4.3. The types of media

The question of the copy of the motifs in Roman workshops has been explored by Karivieri[388] through the study of lamp forms and disk motifs that were created in Italy. She underlines that most of the motifs were taken or copied from other works of art such as sculpture or painting and were adapted to another media, sometimes according to their own repertories and sometimes in a simpler version which was easier to reproduce on this media. Manufacturers copied and reappropriated the motifs of popular artworks that were considered as models and they developed then their own forms and they sometimes created a larger or an independent repertory of figurative motifs.

Derived from a popular genre of painting under Augustus, port scenes multiplied and appeared on very different types of media of artworks in the Imperial era as we can see in the following chart (Figure 31). Ports are found on small objects, with the surface to be decorated rather restricted - such as coins, gemstones, lamps, glass flasks - than in a wider field that offer the mosaics, the reliefs and the frescoes. Depending on the type of media, the available surface constrains the artist regarding the spatial organisation of the architectural forms to decorate. Thus, the variations of the representations of port scenes depend on the spatial constraints imposed by the type of

[388] Karivieri 2001

media. These force the artist to adapt his iconographic discourse. In other words, how is the port scene outlined on the various media? Is it realistic or symbolic? How are architectural forms treated?

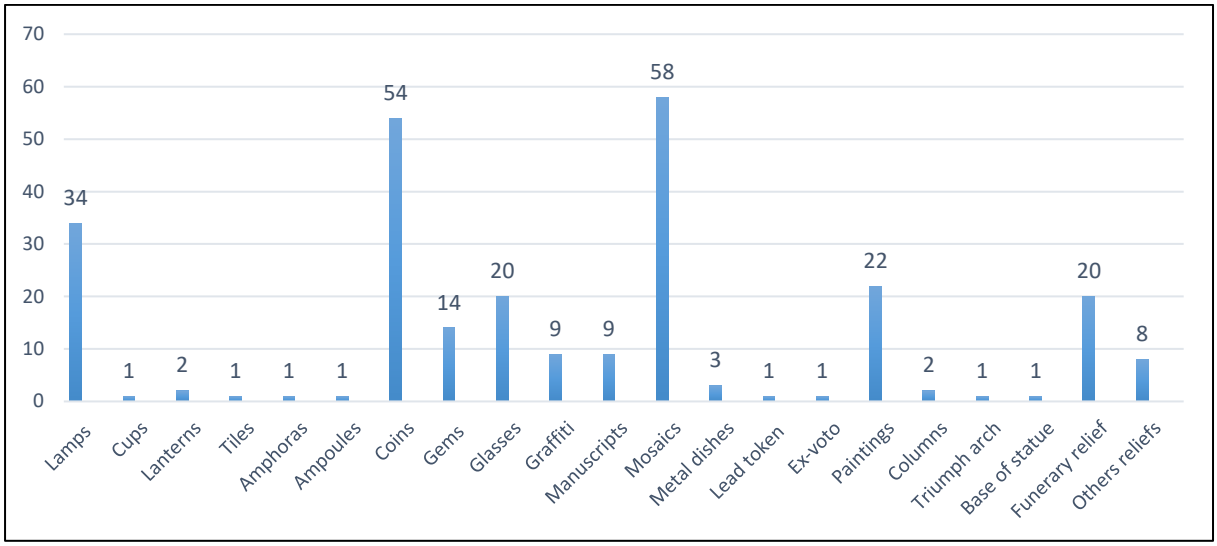


Figure 31: Chart showing the different types of iconographic evidence.

We distinguish two types of media: the **portable artefacts** and the **non-portable artefacts**. By portable artefacts, we understand the media that be easily carried or moved like coins, lamps, gemstones etc. They contribute to broadcast and circulate the motif of port in the Roman world. They can be strategical and used to disseminate an ideological message. The non-portable artefacts concern the media that have a sustainable interest and that are not supposed to move like domestic ornaments (paintings and mosaics) or sculpture etc.

4.4.3.1. The portable artefacts

- The numismatic material

The field available on coins, which is very small and restricted (3 centimetres maximum), pushes the artist to opt for schematic forms. For instance, on the Alexandrian coins (*e.g.* the coins of Antoninus Pius (ID 034) and Commodus (ID 035)), we usually find the symbol of the lighthouse depicted as a three-storey building with Tritons on the corners of the upper part of the first floor. The symbol of Tritons is typical of the lighthouse of Alexandria. The top is an octagonal floor surmounted by a naked statue that stands on a small pedestal and/or holding a spear (usually associated to Neptune?). Sometimes, an entrance on the first floor is accessible by the ramp.

In the public sphere, we can evaluate the importance of ports for Roman cities through their depictions on coinage. The catalogue comprises fifty-four coins including forty-three from the Imperial period, essentially concentrated during the second and the third centuries. Why did cities strike coins with port depictions? What does it mean? Does it reveal the importance of the harbour in the area? Does it reflect political purpose(s)?

The ideological role of the coins is obvious, it comes under "official art" that disseminates the ideas and actions of the political authorities. Most of these coins were minted to commemorate port arrangements. The first example known is attested in Rome, as we have seen before, on Nero's *sestertii* that commemorate the inauguration of the new port of Rome started under Claudius. Two different series of coins were minted, one in Rome and another one in Lugdunum. This coin was minted under Nero in Rome probably to commemorate the construction of the harbour of Rome started under Claudius[389]. The main issue about this coin is about the dating. Why in AD 64? The harbour was already functioning under Claudius[390]. This coin perhaps refers to the completion of the harbour constructions under Nero. In the series of Rome, the obverse portrays the head of Nero with the inscription NERO CLAVD CAESAR AVG GER P M TR P IMP P P. The reverse illustrates a port scene with the inscription: AVGVSTI POR(TVS) OST(IENSIS) S(ENATVS) C(ONSVLTV) meaning "the Ostian port of Augustus, by senatorial decree". Cuyler has identified 15 reverse types[391] so some variations can be observed on the different series of coins regarding the details but we can notice a global homogeneity. The series of Lugdunum is a copy of the Roman one (ID 048). The obverse portrays the head of Nero with the inscription NERO CLAVD CAESAR AVG GER P M TR P IMP P P. The reverse illustrates a port scene with a different inscription than the Rome's workshop: PORT(VS) AVG(VSTI) S(ENATVS) C(ONSVLTV) meaning "the port of Augustus, by senatorial decree". Through this inscription, we understand that the message of the Lyon's coins is different and refers likely to "a celebration of trade and a reminder of Roman hegemony" as pointed out by Cuyler[392]. This series reproduced the ones of Rome's workshop but in a simplified way. They present some variations regarding the details but we can notice a global homogeneity as well as the Rome's one.

Later, the Trajanic coins (ID 050) commemorated the building of the second basin at Portus[393]. They illustrate the hexagonal basin of Portus, built under Trajan. Ships at anchor are depicted into the basin surrounded by several buildings. On each side of the harbour's entrance, a two-storey building with large arched openings is depicted (Great *horrea*?). On the right, stands a

[389] Abaecherli Boyce 1966, p. 66
[390] *CIL*, XIV, 85; Suetonius, *Claudius* XX.1 and 3; Pliny the Elder, *Naturalis Historia* XVI.76.201-2 and IX.5.14-15
[391] Cuyler 2014, p. 127
[392] Cuyler 2014, p. 129
[393] Woytek 2010

two-storey building with colonnades (*horrea*?). Then, two freestanding columns stand on each side of another two-storey colonnaded building (*horrea*?). On the left, there is the façade of a temple-like building (temple of Liber-Pater?), a portico and a building with a semi-circular pediment in three-quarter view.

In the Eastern part of the Empire, in Asia Minor and Greece, nineteen coins have been inventoried. The series of coins of Patras (ID 054-031-151-175) commemorates the renewal of the harbour infrastructures during the second and the third century AD by Septimius Severus, Geta and Commodus. Several coins were also minted in Corinth[394]. Under Commodus, two series of coins depict a lighthouse (ID 193 and 194). Under Antonius Pius, two similar series of coins were struck. They depict both a view of the harbour of Kenchreai (or the Lechaion) suggested by a semi-circular basin surrounded by a portico. On the left extremity, a statue stands in the façade of a distyle temple while on the right, another temple is depicted in a three-quarter view. In the centre of the basin, on one, a statue of Isis Pelagia (ID 049) holding a sail stands, on the other one Neptune is holding a trident and a dolphin (ID 057). In the foreground, three ships are sailing. According to Papageorgiadou[395], Corinth manifests "its pride for its crucial position on maritime routes and owned two ports on Isthmus". Later than the Corinth's coins, in AD 198-211, Mothone strikes her coins[396] with the depiction of its port (ID 059). This series is similar to Corinth with a semi-circular port basin depicted surrounded by a portico. At each extremity, a statue stands in the façade of a square building (temple?). Within the basin, the statue of Tyche/Fortuna holds a rudder on the left and a cornucopia on the right. In the same period, in AD 200-210, Aegina strikes a coin with the depiction of its port (ID 053). The coins of Sidè[397] demonstrates the military power with the representation of plenty *navalia* around the basin. In future research, I will try to demonstrate that port coinage in the eastern part of the Empire seem to attest the prominent position of the harbours as well as their local importance and their crucial role in the network of the sea-routes of the Empire.

In Alexandria, fourteen coins were minted under the Imperial period. They are different from other cities of the Empire as they do not commemorate port buildings[398]. Twelve of them depict the lighthouse that was the emblematic symbol of Alexandria (*e.g.* ID 032-034-035-211-212-

[394] Price 1977, p. 83, fig. 146 ; Ibrahim et al. 1976, p. 60 ; Hohlfelder 1970, p. 328 ; Lehmann-Hartleben 1923, p. 238, pl. 10 ; Abaecherli Boyce 1958, pl. 13, fig. 4 ; Imhoof-Blumer and Gardner 1887, p. 17, pl. D, LX.
[395] Papageorgiadou 2015, p. 114
[396] Price 1977, p. 220, fig. 484.
[397] Leverton Donaldson 1966, p. 341 ; Abaecherli Boyce 1958, pl. 13, fig. 11 ; Lehmann-Hartleben 1923, p. 238, pl. 9 ; Tameanko 1999, p. 87.
[398] Handler 1971, pl. 11, fig. 3 ; Testaguzza 1970, p. 124 ; Thiersch 1909, p. 8, pl. I, 13-16-20 ; Tameanko 1999, p. 62-64, pl. II, fig. 19

214-220 etc.). Another series of Alexandrian coins (ID 210) depicts Isis Euploia[399]. There is no port infrastructure but perhaps a political message throughout the figure of the *Abundantia* or *Annona* that could refer to the importance of maritime commerce that brings economic prosperity in the city.

Few examples of port depictions on coins in other provinces have been inventoried. The coin of Ptolemais (ID 052), for example, shows on its reverse a ship in the middle of a circular basin surrounded by a colonnade. The coins of Caesarea Germanica (ID 055)[400] show a ship sailing in a basin in a crescent shape. At the upper extremity of the basin, a statue of a male figure stands on a base (or column?), holding a *patera*. Like the coin of Pompeiopolis (ID 058)[401], on the opposite, at the lower extremity of the basin, a cubic structure is depicted (altar or lighthouse?). These elements refer to a sacrifice (perhaps of the bull depicted in the foreground?).

The case-study of the Neronian sestertii

Here, we will explore connections between the artistic forms on the numismatic material and the ideological message that could be broadcast by means of the example of Nero's *sestertii* depicting Portus[402]. This aims to demonstrate to what extent, beyond the representation, a port image on a coin can convey an ideological message and serve the Imperial propaganda.

- THE MONUMENTAL STATUE AT THE ENTRANCE

At the entrance of the harbour, a monumental statue on a base (or a reduced version of a column because of the lack of space on the coin?) is depicted. The statue, naked and holding a sceptre or a trident, is usually attributed to Neptune. The "mosaic of the harbour" found in Ostia[403] represents a statue of Neptune holding a trident on his left hand and a dolphin on his right hand. The Torlonia relief (ID 072)[404] shows Neptune in the centre next to the lighthouse. However, the figure in Nero's *sestertii* does not look like the traditional Neptune as he wears a radiate crown that could remind the colossus of Nero that was a bronze statue of 37 meters, located in the vestibule of his *Domus Aurea* and then next to the Coliseum, resembling himself and the Roman sun god, Sol[405].

[399] Abaecherli Boyce 1958, pl. 14, fig. 1-2 ; Poole 1892, p. 139, cat. no. 1172f, pl. XXIV, no. 1173.
[400] Price 1977, p. 40, fig. 57 ; Giardina 2010b, p. 75, fig. 67 ; Abaecherli Boyce 1958, p. 68, note 10, pl. 13, fig. 10 ; Tameanko 1999, p. 87
[401] Abaecherli Boyce 1958 ; Price 1977, p. 220, fig. 483.
[402] Meiggs 1973; Keay et al. 2005
[403] Blázquez Martínez and García-Gelabert Pérez 1991b, p. 114 ; Becatti 1961, p. 26-27, n.45.
[404] Keay and Millett 2005, p. 314 ; Meiggs 1973, pl. XXVIII a, XXVI a et b ; Casson 1971, fig. 193 ; Testaguzza 1970. P. 171, 230 ; Le Gall 1953, p. 254-259 ; Wawrzinek 2014, taf. 142 ; Tuck 2008, p. 328, fig. 1 ; Guglielmotti 1866 ; Toynbee 1973, p. 351.
[405] Shotter 2008, p. 122

He holds a rudder on the globe that is a symbolic gesture of his power over land and sea[406]. In this case, the monumental statue at the entrance was perhaps Nero represented as a god. Is it a myth or reality? Does that mean that Nero would appropriate the Portus symbols in order to serve his own propaganda? Some scholars have hypothesised that it was perhaps the lighthouse (on an island?[407]). The base of the statue seems to stands on a part of the breakwater as arches are visible on certain coins. It could otherwise be a combination of both? Is it a superposition of the symbols because of the space constraints of the coin?

- THE PORTICOES

The left side of the coin represents the southern part of the harbour with monumental colonnaded structures - probably the storage facilities - arranged in a semi-circular shape. This motif will be replicated on other type of media like on the mosaic of Toledo (ID 003) where is depicted an isolated motif of semi-circular portico. Porticoes contributed to the monumentalisation of the urban space and they emphasised the scenography of the maritime facade. We find them systematically in the portscape like in the glass of Prague showing Puteoli or on the coin of Patras[408]. They were in front of the façade of the horrea. Storage facilities symbolise richness of the Empire and the *Abundantia* like, later, on the coins of Antoninus Pius (ID 044) showing a female figure, *Annona* or *Abundantia*, holding a *tessera* and a rudder standing next to a lighthouse. On the left, a *modius* with grain and poppy - symbol of abundance - is depicted next to a ship's bow.

- THE SACRIFICE SCENE

On the upper part, a figure is sacrificing in front of an altar next to a peripteral temple represented in three-quarter view. Sacrifices in harbours are common and they are attested by other documents like the medallion of Commodus (ID 040)[409] depicting a priest with the Emperor making a sacrifice to Jupiter Serapis next to a lighthouse, indicating the entrance of the harbour of Rome. This sacrifice scene probably refers to thanking Serapis for having lead the ships of the *Annona* from Africa to Portus safely and for having avoided a famine like in AD 189. The success of this operation led to the glorification of the emperor and his fleet throughout this coinage. Moreover, sacrificing to the gods is a model of *pietas* which was one of the virtues of the Emperor.

[406] Erskine 2010, p. 72
[407] Cuyler 2014, p. 127
[408] Papageorgiadou 2015
[409] Thiersch 1909 p. 20 ; Grueber 1874, p. 30, 44, pl. XXXV, 3 ; Meiggs 1973, , Pl. XVIII ; Abaecherli Boyce 1958, pl. 14, fig. 8 ; Veitmeyer 2005, p. 18 ; Froehner 1878

Trajan's column reliefs (Scene LXXXVI) show the sacrifice of a bull on an altar on the quay on *pilae* in the harbour of Salona[410] by the Emperor himself.

- THE BREAKWATER ON *PILAE*

The right hand-side of the coin shows the northern breakwater on *pilae*. They are a common pattern in port iconography. They symbolise the knowledge of Roman engineers and the technical prowess to build in the sea thanks to the Pozzolanic mortar – a technique described by Vitruvius[411]. The *pilae* motifs are more than utilitarian structures and they became a major symbol of Roman ports[412]. The semi-circular motif of *pilae* has been copied on every type of media.

- A BASIN FILLED WITH SHIPS

Finally, another interesting detail are the ships. In the basin, between six and eleven ships are depicted (it depends of the reverse type[413]). Most of them have seven ships. A port filled with ships symbolises a port in a good activity reflecting the economic prosperity of the city[414].

- PORTUS FIGURE

At the bottom of the coin, opposite the entrance, a naked deity figure is depicted. He leans on a dolphin and holds a rudder. He was usually identified as the Tiber River but he is represented with a dolphin that refer to the sea so it is likely that it might refer to the personification of the Portus. At the bottom of the series medallion, a similar figure is depicted. The bearded figure is leaning on a dolphin and holds a rudder. On the coins of Pompeiopolis, this figure is seated in the harbour basin. He is also holding a rudder in his right hand and leaning on the left on a dolphin.

To conclude, we have demonstrated that port images can be reflective of the Imperial policy and they can participate in the glorification of the Empire throughout the diffusion of an ideological message. We have understood that they are not simply an image of a real port but they echo a political challenge and an ideological purpose in order to bring out namely the figure of the Emperor such as in the emblematic example of the Nero's *sestertii*.

[410] Dyggve 1928, vol. 1, ch. i, p. 11 sqq
[411] Vitruvius, *De Architectura* V, 12
[412] Felici 2019
[413] Cuyler 2014, p. 127
[414] Cuyler 2014

- The ceramic material

The ceramic material essentially comprises lamps (37). It also counts a perfume vase from Thuburbo Minus (ID 209) and dated from AD 175-200[415] and a series three of terracotta medallions.

Terracotta medallions depicting the Trajanic Harbour (ID 269)

According to Desbats, the vases with moulded appliqué disks of the Rhône Valley were produced in the region of Valence (south of Vienne), from the second quarter of the second century and belonged to the category of clear terra sigillata B[416]. The medallions offer a very rich iconography: they could represent deities, erotic scenes, games, theatrical scenes, Homeric scenes, and some scenes of imperial propaganda[417]. The medallion vases seem to have had the function of souvenir vases or presents on the occasion of celebrations. Although they were not produced in Lyon or Vienne, it is in these two cities that they know their greatest spread. The emergence of this category of ceramics, which contrasts with all other Gallic productions, and despite its high quality remains poorly disseminated. This phenomenon remains unexplained. A series of three terracotta medallions depicting a port scene was found in Cologne and in the excavations of Lyon (place de Trion and place Adolphe Max).

Figure 32: Moulded appliqué disks found in Cologne and in Lyon: place de Trion and place Adolphe Max.

The copy of Cologne mentions explicitly “PORTVS AVGVSTI” that allows to identify with certainty the harbour of Rome. It was wrongly identified as the Claudius’ port by Audin and

[415] Carandini 1970, p. 760
[416] Desbat 2010 ; Audin and Vertet 1972
[417] Desbat 2006

Binsfeld[418]. The depiction three colonnaded segments let us think that it refers to a semi hexagonal basin that reminds us the Trajanic coins. At each extremity of the colonnade stand a pair of freestanding columns that also appear on the Trajanic coins. At the bottom of the medallion, a bearded figure is leaning on a dolphin (that can be seen on the copy from A. Max). He holds an anchor (or a rudder). This figure reminds the one depicted on the Nero's sestertii that was wrongly associated to the personification of the Tiber instead of Portus as the dolphin is not a fluvial animal. Audin and Vertet[419] supposed that it was Neptune. This image of Portus is quite original. Contrary to other depictions of Portus, the artist draws our attention on the elephant quadriga that seems to be the central element of the medallion[420]. Why? What message did this image convey? To what monument did it refer? [421] What meaning this image could have to the people of Lugdunum?

The lamps

Like the coins, the lamps offer a restricted field intended for the decoration (diam.: c. 7-10 centimetres), circular most of the time. The port architecture is likewise treated in a schematised way, the "artist" goes to the essential and is attached to the most visible architectural elements, the most emblematic of the port that are the arches of moles (*pilae*) or the porticoes as on the Carthage lamps. The study of this material is not so easy because we do not know the context of some lamps and others probably come from a Neapolitan counterfeiting workshop from the nineteenth century. The dating of the lamps starts from the second century to the fourth century. The origin of their production is difficult to identify. Due to the concentration of the number of lamps in Tunisia and Libya, we can put forward the hypothesis of an African production. Some of them have circulated and were found in Italy, namely Ostia and Agrigento. On all of them, a port scene decorates the central disk. On some of them, the nozzle is decorated with a ship or a lighthouse. Here, the lighthouse symbol is associated with the media, where the wick of the burning lamp is.

[418] Audin and Binsfeld
[419] Audin and Vertet 1972, p. 258
[420] Ot also appears on the Torlonia relief (ID 072)
[421] I will go back to the question of the elephant quadriga on the arch in Chapter 5 and Chapter 6.

In this corpus, I have identified five types of decoration[422]:

- **Type 1**

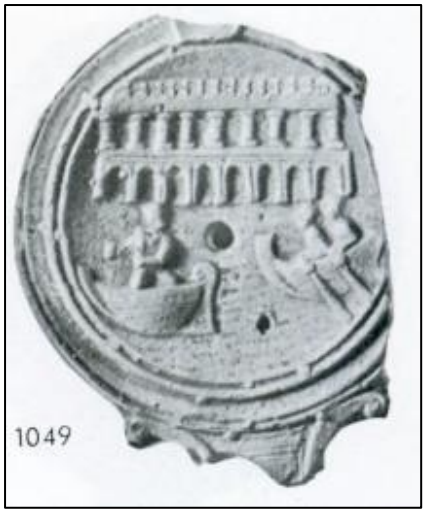
This series that comprises eighteen lamps (ID 060-061-062-063-231-232-233-234-235-236-237-241-242-245-252-253-254-257) is dated from the second to the third century. It shows in the foreground two fishermen. The left one is on the land next to a rocky promontory. The right one is on a small boat. In the background, a square structure with four windows is depicted on the left. To its right, an adjacent portico with four columns is represented, following by an arched structure (honorific arch?). On the right, there is a building with a gabled roof and a big entrance. Behind, another series of buildings can be seen. The first building has a gabled roof. Then, another structure with four windows is represented. To its right stands a rectangular tower-like structure in masonry and represented in three-quarter view. It has windows on the upper floor and a gabled roof. To its right, seems to be a similar structure. On the nozzle of this series, a two-story lighthouse with lantern at the top is depicted. Only two story are depicted perhaps due to the space constraint. It does not correspond to known lighthouses like Portus, Alexandria, Carthage or Leptis Magna.

[422] This grouping will be done in the catalogue in the perspective of the future publication of the thesis.

- **Type 2**

This series comprises ten lamps (ID 066-067-068-069-225-226-230-238-239-240). They date from the third century. In the foreground, an honorific arch stands at the end of a breakwater on *pilae*. Its top is adorned with a marine design of hippocamps. On the breakwater, a man wearing a hat is riding a donkey. In the background, a small building with two columns and a flat roof in frontal view is depicted follow by a building with a colonnade of three columns. To its right, there a building with arches and behind a domed building and three cypresses.

- **Type 3**



This series comprises two lamps (ID 065-244). One comes from Carthage and the other one from Sabratha. They date from the second century. In the foreground, two small boats are depicted. In the background, a breakwater on nine *pilae* can be seen. A portico with nine columns and a tiled roof stands on it. On the nozzle of this series, a lighthouse is represented.

- **Type 4**

This series comprises only one lamp (ID 064). It dates from the second century. The medallion is bordered by a circular breakwater interrupted on the front, with a portico surmounted by a tiled roof. It probably refer to the *horrea*. In the basin, two small boats are depicted. In the open space, at the end of the two extremities of the breakwater stand two structures (in masonry?) difficult to identify. The entrance of theharbour is marked by the lighthouse depicted on the nozzle.

- **Type 5**

This series comprises one lamp (ID 070) dated from the end of the second century. It probably comes from Carthage. It shows a mall boat in the foreground. In the background, a curved breakwater with portico and gabled roof is represented. The two extremities are marked by entrances. Behind, three square high structures stand (perhaps towers?).

- The gemstones

The smallest media where we can find port images are the gemstones (1.5 centimeters). Some of them have been part of the collection of Philipp von Stosch (1691-1757) which was bought in 1764 by King Frederick II of Prussia. He was one of the most famous antiquarian during this time, living in Florence, and his comprehensive gem-collection (more than 4.000 pieces) was one of the greatest at all. Johann Joachim Winckelmann studied it and prepared the first catalogue, published in 1760. Unfortunately, we have no information about contexts or origins at all, but we know that Stosch lived in Italy for a long time. As we have seen earlier, they are only known now by the Cades' plaster copies and the catalogues of Furtwängler[423] and Winckelmann[424] because the original gem-collection that came to Berlin, in the Antikensammlung der Staatlichen Museen zu Berlin, was lost during the Second Word War. Today, we only know rare originals like the gemstone of Carthage[425] and Naples. Although there are some variations (like the shape or the orientation of the ship), they are similar models that have likely belonged to a same series which can be put in relation with the collection of Berlin. Like the lamps, they were undoubtedly the object of a series production (with some identifiable variants) and do not seem to refer to a specific port. They represent a ship in motion at the entrance to the port with the sails rolled up. On the left is a semicircular portico matching the shape of the stone (may be *horrea*?). At the top left is a building overlooking the basin with six columns on the front surmounted by an entablature. On the right, there is a tholos building. In the basin are two ships. On the right, the step structure could correspond to a lighthouse due to its topographic location. Its appearance is however a little doubtful. What was the use of this stone? What was the interest of wearing a ring with a stone bearing a port decoration? Did it belong to a merchant (or a professional in port activities) or did it simply have an aesthetic interest? The hypothesis of using this stone as a seal is not excluded as a lead token represents the lighthouse of Alexandria (ID 033) and another one depicts the harbour entrance of Caesarea Maritima (ID 150) whose dimensions are close (the gemstone size is 1.5 cm and the token is 1.8 cm).

[423] Furtwängler 1896, pl. 62, n. 8688
[424] Winckelmann 1970, p. 535 n. 54
[425] Bartoloni 2018, p. 143

Figure 33: Intaglio of Carthage (Bartoloni 2018, p. 143) and intaglio of Naples (photo : S. Mailleur-Aldbiyat, Archaeological Museum of Naples)

Figure 34: Intaglio of Berlin (Debergh 1975, pl. VIII)

- The glass flasks

Among the most interesting glass material, there is a series of engraved glass flasks, dating from the end of the third century or beginning of the fourth century supporting the portscape of Puteoli-Baiae. This collection of graphic evidence[426] constitutes a documentary treasure on Pozzuoli quite rare. Through these representations showing the arches of the pier surmounted by columns, a temple in front, a triumphal arch (or rather the *Porta Maritima*), we get to better understand some aspects of the architectural configuration of the Roman port namely thanks to the "caption" that furnish interesting topographical information on the monuments of city. They probably were "souvenirs"[427], made in Campania.

Lamps and glasses are objects of the daily life of the Romans. They are found in a context of domestic use mainly but also in funeral context. A part of the lamps and glass vases containing a port depiction comes from the material found in tombs: the lamp of Carthage (ID 064), the glass of Merida (ID 111), a glass cup (ID 168), the vase of Poetovio found in a cremation (ID 243), the lamp of Ostia (ID 067), the vase of Piombino Populonia (ID 099), the vase of Prague (ID 100), the vase of Odemira (ID 102), the vase of Ampurias (ID 103), the glass fragment of a vase of Ostia (ID 104), the vase of Rome (ID 110). They were used for funerary rituals. This research aims to explore the funerary symbolism of ports and bring in a new perspective to the use and functions of these artworks in the funerary practices of Romans. The lamps usually link to the ritual gesture in the funerary ceremonies and the glass flasks were used for perfume for funerals and commemorative ceremonies as we can see in the recent researches conducted in the necropolis of *Porta Nocera* in Pompeii[428]. If we base the current research conducted in *Porta Nocera* by Van Andringa, any connection has been established between the iconography of this type of material and the funerary rituals. They were used as objects and not for their depictions. They were often already used and come from the domestic material. For example, several lamps with port depictions were found in Sabratha both in domestic (ID 236) and funerary contexts. The funerary dimension/symbolism of port in funerary material is not clear and not obvious so it is not relevant to make the hypothesis of a possible connection between funerary symbolism and the port depiction for this type of material.

The last point that I would like to explore is the symbol of central figures drinking in a cup or *skyphos* like in the dish of Celio (ID 108), the vase fragment of Brescia (ID 109), the sarcophagus of Chiaramonti (ID 171), the painting of Saint John of Caelius (ID 180), the sarcophagus of Porta Latina

[426] Gianfrotta 2011, p. 17, fig. 4a ; Picard 1959, fig. 10 ; Golvin 2009, fig. 1 ; Painter 1975, p. 57, fig. 4, p. 58 and p. 63, fig. 12 ; Tran 1983, p. 163-164 ; Janssens 2009, p. 113
[427] Stoner 2019
[428] Lepetz and Van Andringa 2013

(ID 071) or the vase of Astorga (ID 107). Does it refer to the funerary banquet? To mythology like Eros and Psyche, Polyphemus and Galatea[429] or Triton and Nereid? The topic of Nereid and Triton refers to the text of Virgil[430] in the book 1 of the *Aeneid* that says that the Nereid Cymothoe and Triton made their efforts to save the stranded vessels of Aeneas while Neptune calmed the winds. This scene is also found in the decoration of sarcophagi. That confirms the funerary connotation of Triton and Nereids who accompany and protect the deceased on his journey after his life. For ancient Greeks, the sea was, for the mortals, "a place of physical as well as psychological travel"[431] and was perceived as a transition, an interplay between life and death[432].

4.4.3.2. The non-portable artefacts

- Sculpture

The sculpture provides to the artist a wider and easier field for developing more complex subjects. Several Roman reliefs, mostly from Ostia, including sarcophagi, depict maritime scenes (often ships and some port installations in the background) such as the relief of Torlonia (ID 072), the sarcophagus of Phylosyrius (ID 074) or the relief of Isola Sacra (ID 073). Around seventeen funerary reliefs have been inventoried in the catalogue (including twelve sarcophagi) like the sarcophagus of Porta Latina (ID 071), the sarcophagus of Chiaramonti (ID 171) or the sarcophagus of Julius Philosyrius (ID 074). The term *portus* in Latin or *limen* in Greek mean not only "port/harbour" but also "threshold" or "door" that refer to the symbol of the passage between the sea and the land for the sailors and it is the symbol of the passage between life and death for the soul. Ports can also be considered as the passage between the living world and the underworld as we have seen in the *Nekyia* scenes. The funerary dimension of the port seems to be confirmed by the mosaic (ID 157) from the Isola Sacra, the necropolis of Ostia that contains a Greek inscription next to the depiction of a lighthouse. It refers to *pausilypos* (παυσίλυπος) that means "the place where sorrows end"[433].

Another point that I have noticed is the prevalence of the symbol of lighthouses in the iconographic program of sarcophagi like the sarcophagus of the Isola Sacra (ID 073) or the sarcophagus of Karlsruhe (ID 074). This is not surprising as they are the symbol of guidance for sailors and for souls. The objective of this research is to approach the role and symbolism of

[429] Ovid, *Metamorphoses*, XIII, 777-788 and 839 ; Philostratus, II, XVIII ; Theocritus, *Idylles*, XI
[430] Virgil, *Aeneid*, Book 1. 144-152
[431] Beaulieu 2016, p. 167
[432] Beaulieu 2016, see Chapter 6
[433] See Longinus, *De Sublimitate* IX that refers to "*thanatos limen kakon"*

lighthouse for Romans. For example, we will see in Chapter 6 that dedicatory inscriptions refer to the "salvation" of sailors in Thasos and Pharos[434].

- Domestic ornament: frescoes and mosaics

In the Imperial period, port images were vividly widespread in the domestic decoration like paintings and mosaics since the Hellenistic period as we could see with the mosaic of the *Casa del Menandro* in Pompeii (ID 002). Where are they in a house? What do they mean - for the owner(s) and the guest(s)? In other terms, we will look at them in the context of the possible function of the rooms in order to understand how people might have viewed them. As we have already seen, Roman frescoes are rich in maritime and port landscapes. The treatment of port facilities tends to be more realistic than on small objects. The mural paintings of Stabiae, Pompeii and an Esquiline villa in Rome illustrate elements of identifiable architecture.

Mosaics, like frescoes, tend to show different types of port constructions with more precision because the surface to decorate is larger (41 centimetres to 11 meters). A big part of the pictorial material was found in the luxury houses in Campania (twelve paintings from Campania - Pompeii, Stabiae and Boscotrecase - under twenty-two paintings in the corpus), exceptionally well-preserved due to the eruption of Vesuvius in AD 79. They provide us with good examples of the integration of port images in the domestic ornament. For instance, the painting of the *Casa del Ninfeo* in Pompeii (ID 227) shows the entrance of a harbour delimited by a semi-circular breakwater on which a portico stands. A painting of Pompeii (ID 266) depicts a maritime landscape with a tholos - like the painting of Stabiae (ID 084) - in the centre with a domed-roof connected to a bridge - like in the painting of Stabiae (ID 268), the painting of Boscotrecase (ID 090) and the painting of the *Casa della Fontana Piccola* in Pompeii (ID 267). Another painting found in the Villa San Marco in Stabiae (ID 087) shows a port view that many scholars identified as the port of Puteoli[435] because of the similarities with the topography of this port well known throughout the series of the glass flasks depicting the *Ripa Puteolana* (ID 099-100-101-102-103-110-111). Other examples of port landscapes in domestic paintings are attested in the Roman world like the painting of Sabratha (ID 181) from the last Pompeian period[436] or the painting found in the *nymphaeum* of a private house of Rome in the third century (ID 180) – now in the church of S. Giovanni and Paolo on the Caelian Hill in Rome. A

[434] *IG* XII, 8, 683
[435] Picard 1959, Dubois 1907, Golvin 2009
[436] Croisille 2010, p. 135

series of paintings were found in Nabeul. They decorated a basin located in the *atrium* of the Villa of the Nymphs at Nabeul (ID 132 to 137).

The mosaics are generally found in *triclinia* - rooms for guests – or *atria* of villas like the mosaics of Apamea (ID 009), Rimini[437] (ID 121) or Hippo Regius (ID 016). It appears that port images in luxury houses seem to be related to the idea to demonstrate the wealth of the owner in the rooms visible by the guests like *triclinium* or *atrium* that could refer to a code of the banquet where everything is subject to reflection and discussion for the guests[438]. Another interesting aspect that I would like to point out is the link between port images and water rooms in Roman luxury houses. In fact, port images also decorate basins - such as the mosaic of Bad Kreuznach (ID 095) or the mosaic of Toledo (ID 003) – and *nymphaeums* – like the mosaic in the Capitoline museum[439] (ID 001). Finally, few examples were found in *cubicula* (bedrooms) – private rooms – like the painting of Stabiae (ID 087). This seems to be related to a more aesthetic function and linked to the aesthetic of the landscapes and the contemplation of beautiful landscapes[440], a charm and a spectacle that gives the sea as Pliny the Younger says about the coast around Ostia[441] and Cicero about the coasts of Campania, Etruria and Adriatic[442]. The domestic decoration was sometimes not only used as decorative motifs and its topic can be put in relation with the owner's occupation. We only have few examples of known owners: mosaic of Rimini, mosaic of Piazza Armerina and mosaic of Capitoline museum. In the case of the mosaic of Rimini, the owner of this *domus* had to be a "*navicularius*". This mosaic did not only have an embellishment role and may refer to the life of the owner and its merchant activities (perhaps it is his own vessel that is entering in a harbour). The location in the triclinium of the domus should probably be a way for him to show his wealth and remind to his guests from where his wealth come from? At Piazza Armerina, the mosaic is located in the *atrium*. His owner was Lucius Aradius Valerius Proculus, a governor of Sicily between 327 and 331 and consul in 340. He was an important person perhaps also implicated in merchant activities. Concerning the mosaic of the Capitoline museum representing a trading ship entering Alexandria harbour, we can establish a relation with the owner's activities too. The owner of the aristocratic *domus*, on the Quirinal in Rome, was Claudius Claudianus, a Roman senator who also was a wine-growing landowner in Campania and an Alexandrine *navicularius*[443]. His name is known through the inscription on stamped lead fistulas (*CIL* XV, 2, 7450; *NSc* 1901, p. 294-295 and *CIL* XV, 2, 7434) and

[437] Friedman 2006; Ortalli 2007; Ugolini 2015
[438] See Plutarch, *Moralia*
[439] Hesnard 1999
[440] Lafon 1992, p. 117 ; Gros 2001, p. 308
[441] Pliny the Younger, *Corresp*. II, 17, 27
[442] Cicero, *Ad Attic.* XIV, 20, 1
[443] Hesnard 1999

many Campanian wine amphora stamped in his name on several archeological sites like via Gabinia in Rome[444] and the horrea in Saint-Romain-en-Gal (France)[445]. Contrary to the most of port depictions, we can notice a certain realism of this mosaic. The artist seems to known ships (perhaps thanks to the sponsor who was a *navicularius*?) as we can recognise, for instance, the *gubernator*[446].

4.4.4. Port images as a syncretism of artistic habits: between standards and reality

This section seeks to show that port depictions from the Imperial period come from a hybrid genre that owes the features of others genres of landscapes, most of them semiotically Hellenistic in many respects[447], like Odyssey landscapes, Nilotic landscapes, sacro-idyllic landscapes etc. The objective of this section is to identify the symbols - architectures as well as figures - and check from which repertoire it comes from (in order to discern standards from reality). In general, Roman art is subject to a standardisation of forms and we can notice a certain constant repetition and a general absence of innovation. As Roman art is a system of communication[448], to be usable, it is necessary to stereotype the symbols as Hölscher says: "*If this language of imagery was to function as a general means of visual communication, then its routine quality and general absence of "creativity""*[449]. This explains the static character of Roman art and why the visual language corresponds to a standardisation of the visual message. Port images are no exception and they are subject to a standardisation as well as I could notice throughout the catalogue which brings out a certain number of stereotypes and point out a list of features that were supposed to be part of the portscape in the Roman imperial period. Trade in Roman Mediterranean caused not only movement of good and persons but has also contributed to cultural diffusion. The Mediterranean played an important role in cultural development and diffusion of art. In this section, I will explore if port images are fictional or real? It is necessary to know to what extent port images are part of the continuity of the Hellenistic inheritance/tradition and the influence of the sacro-idyllic landscape in the portscape representations. They seem actually to use several features of the pictorial genre like natural elements, mythology, sacro-idyllic landscapes and reality.

[444] Freed 1989
[445] Desbat and Savay-Guerraz 1990
[446] Helmsman or pilot seated at the stern to govern the ship. He gives orders to the rowers and direct the handling of the sails (Virgil, *Aeneid*, X, 218).
[447] Spencer 2010, p. 44
[448] Hölscher 2004
[449] Hölscher 2004, p. 126

- The influence of the Alexandrian landscape

Several documents attest to the popularity of the Alexandrian landscape and particularly the motif of the lighthouse of Alexandria in the Hellenistic world as we have seen previously. We can observe a kind of standardisation of the Alexandrian landscape. This influence, spread everywhere in the Mediterranean Sea, continues until late antiquity. Indeed, the mosaics from Palestine, Syria, North Africa, Gallia, Greece etc., confirm the durability and popularity of the Nilotic landscape until the sixth century AD as it is attested by the mosaic of Sepphoris (ID 004), the mosaic of Skythopolis (ID 224) and the mosaic of Leptis Magna depicting the Nilometer (ID 260).

In addition, the symbol of the Alexandrian lighthouse is broadcast in the Imperial images (especially on coins). We can notice an important diffusion of the standard of the Alexandrian lighthouse like on the engraved glass from Slovenia (ID 243), a gem (ID 190), the vase from Begram in Afghanistan (ID 098) or the mosaic of Pompeii depicting a lighthouse and Palm tree from the first century AD (ID 229). These documents attest the Egyptian influence and show a Roman visual interpretation of Egypt as well as its fascination.

- Portus: a standard model of port images?

In this part, we are studying what could be the influence of the model of Portus. We can notice a certain re-appropriation or reinterpretation of the motifs and this standardisation seems to lead to a distortion and disconnection from the reality for most port images as we can explore in the following examples.

In the painting of Nabeul (side C), in the background, on the peninsula, is a male figure leaning and holding an amphora from which water is flowing. This figure represents the River God – perhaps the Tiber deity. According to Barbet[450], the port depicted on the series of paintings is Carthage. However, the presence of a River God contradicts this hypothesis, as there is no river close to the harbour of Carthage. This probably means that the port depicted refers to an ideal port rather than the Carthage one.

A hexagonal basin surrounded by porticoes is depicted on a mosaic from Kenchreai (ID 027). This representation is far from the reality as the basin in Kenchreai was not hexagonal and we can make the hypothesis of a possible influence of the hexagonal basin of Trajan.

[450] Barbet 2013, p. 136-149

- Sacro-idyllic landscapes features

Some motifs characterising port iconography seem to be far from the reality and to be stem from the sacro-idyllic landscape tradition - characterised usually by natural landscapes with sacred structures, such as temples as in the painting from Boscotrecase (Figure 23). In port images, the presence of open sanctuaries and freestanding columns on the sea front seem to stem from sacro-idyllic landscape tradition as we can observe in the relief with port scene, from the Albani collection in the Capitoline Museum (ID 200).

Several documents attest the presence of a tree associated with a tholos (or pavilion) in the portscape. It seems to be a pictorial motif borrowed from the sacro-idyllic repertoire. This motif can be found, for example, in the following Pompeian painting of the *ekklesiasterion* in the temple of Isis or in the Barberini painting (Figure 22). This motif was reused in the red jasper gemstone (ID 128) and in the mosaic of Kenchreai[451] (ID 025 and ID 027) in which a pavilion or tholos appears behind a tree with circular fruits (perhaps an olive-tree). The mosaic of El Alia (ID 017) shows another type of tree that was interpreted as a sacred fig tree[452], protected by an enclosure like in the mosaic of Bad Kreuznach (ID 095). In the relief of the Albani collection (ID 200), a tree is associated, this time, with a votive pillar with a vase on the top. This motif seems to be a graphic transcription of literary texts. In that respect, Jacob[453] made the link between trees and sacred buildings (like aedicule or tholos) with the ἄλσος (sacred wooded landscape) that is a recurrent element of religious landscape in the *Description of Greece* of Pausanias[454]. It is place of worship that mixes nature (trees and water) and artifices (building, statues, wall and altar).



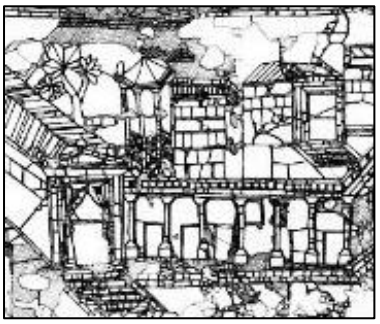


Figure 35: Detail of the tree with a tholos on the gemstone (ID 128) ; Figure 36: Painting in the temple of Isis in Pompeii[455] ; Figure 37: Detail of the panel XVI of the mosaic of Kenchreai

[451] Ibrahim et al. 1976, p. 80-81 ; Lehmann and Bloch 1953, p. 148
[452] Picard 1990
[453] Jacob 1993
[454] Pausanias, *Periegesis*
[455] Croisille 2010, p. 103, fig. 131

Others standard motifs come from the sacro-idyllic iconographic repertoire. For instance, we usually find people fishing, standing, running or crossing a bridge. This motif is common in sacro-idyllic paintings like the painting of the *Casa della Fontana Piccola* (ID 267) in Pompeii (VI, 8, 23-24). Shepherds often accompany these people. We also usually find donkeys and donkey-riders like on the series of the lamps of type 2 (*e.g*. ID 066-067-068 etc.) and the following painting from the Archaeological Museum of Naples. All these motifs constituting an image of everyday life seem to echo to Pliny's text (*Natural History*, XXXV, 116-117) that we have seen before that mentions "various representations of people strolling about, people sailing, people travelling overland to villas on donkey back or in carriages, and in addition people fishing, fowling, hunting, or even gathering the vintage". Vitruvius does not mention these details and talks only of sacred and pastoral element.

Figure 38: Painting from the Archaeological Museum of Naples, inv. 9513 (photo: S. Mailleur); Figure 39: Detail of donkey on a bridge on a lamp (ID 069)

The analysis of these motifs shows that port images have a tendency to be standardised and mainly come from imagination and from a traditional iconographic repertoire that stem from Augustan period. That is why it is difficult to use them as a full reliable source. The main pictorial motifs have been reused in different types of media such as the gemstone from the Late Roman Empire. This document is good example of syncretism of artistic habits that mixes different patterns from reality and sacro-idyllic tradition. The analysis of the symbols of this portscape also proves that we do not have a depiction of a precise port on contrary to scholars. For example, Cintas[456] thought that the gem is Punic and depicts Carthage. However this kind of port depiction did not exist before

[456] Cintas et al. 1976, p. 177, note 459

the Roman period as we have demonstrated before. Concerning the one found in Italy and now in the Archaeological Museum of Naples, Gasparri and Pedicini[457] wrongly identified the port of Ancona.

4.4. Conclusions

Although harbours played an important role in ancient civilisations, we can notice a certain lack of interest for depicting portscapes during pre-Roman periods. The few examples presented previously show only simple forms to refer to ideas of ports or maritime cities. They are just frames for the scenes and not a topic as they were not the purpose of the depiction. We can observe a change during the Hellenistic period. Inspired by the discoveries in geography, Alexandrians have initiated the painting of *topoi*: Nilotic or Alexandrian landscape that was a very popular genre that continued until Late Antiquity (*e.g*. mosaic of Sepphoris (ID 004) and the mosaic of Apamea (ID 009) where an Egyptian temple with a sphinx at its entrance is standing on the shore). During the Republic, we can observe a demonstration of the naval forces throughout the diffusion of the *navalia* motif until the imperial period. Under Augustus, the maritime landscape paintings as a genre have been developed considerably as Pliny and Vitruvius's texts explained. We have demonstrated the influence of the sacro-idyllic theme.

During the Empire, namely after the sestertii of Nero, ports are current on every type of media more or less large and even the smallest like gems. The type of media has influenced the type of depiction and we have seen that the language depends on the surface available to decorate. Their expansion attest to the importance of ports in Roman art and for Roman societies that seems to be connected to the historical context of the first three centuries when Rome, in full apogee, established the connection with its provinces through the networks of ports all around the *Mare Nostrum*. We have demonstrated that port images come from a syncretism of artistic habits at the cross-road between Hellenistic traditions, sacro-idyllic landscape.

Finally, I have defined different layers of meanings of ports images according to their social context. We have seen that the numismatic material can serve as a tool of propaganda of the Empire or cities (like the Corinth or Patras). In the domestic context, we have emphasised the aesthetic function and demonstration of wealth. Finally, in funerary contexts, ports seem to emphasise the symbolism of passage and guidance.

[457] Gasparri and Pedicini 2006, p. 55, fig. 74, p. 142.

To conclude, the visual images of ports demonstrate how architectural features become part of a visual language of ports that gets recycled through time. My reflection considered how particular motifs were selected and then canonised, taking on powerful symbolic meanings. When those motifs were reproduced in successive representations, they effectively become 'stripped-down' in order to communicate the essence of something.

Chapter 5

Analysing Roman port architecture from the perspective of the iconographic and epigraphic evidence

This chapter explores the port architecture from the perspective of the iconographic and epigraphic evidence. In the frame of this thesis, I will only focus on three case studies in order to demonstrate the relevance of the contribution of iconographic and epigraphic sources to the study of port architecture: Case-study 1: weighing control facilities (the *sacomaria*); Case-study 2: the single monuments (freestanding columns, arches and trophies); Case-study 3: cult spaces in Roman portscapes. These components of Roman portscapes are chosen because they have not really been studied before and they remain still unclear. This chapter aims to show how we can integrate iconography and epigraphy to the archaeological data to better understand port architecture and their respective functions. As we have seen in Chapter 2, the architecture of lighthouses and breakwaters have been largely studied and this research will not bring new relevant results. Even though thermal complexes are archaeologically attested, they have been deliberately discarded because their identification in iconography is not obvious. The only hypothetical identification can be perhaps found in the late mosaic of Kelenderis (ID 008).

This chapter will also address the question of the role of politics and society (ethnic groups, corporations, euergetists, etc.) in the making of urban landscapes. Who decides? Who manages? Who controls? Who are the sponsors of port buildings? What does a portscape reflect from a political and social point of view? How do politics and collectivism contribute to the making of portscapes? It also addresses the issue of the materialisation of ideology[458] in the portscape. How did people manage and control the built environment for their own political ends? In other terms, how is a portscape transformed into a political and ideological landscape? It examines how religious worship is embedded within a portscape, thereby emphasising the need to study the visual display of religion and religious identity[459] in portscapes.

[458] DeMarrais et al. 1996
[459] Spencer 2010 ; Raja 2012

5.1. Case-study 1: weighing control facilities (*sacomaria*)

5.1.1. The weighing control in harbours

The movement of goods – grain, oil, wine, legumes etc. – entering or leaving the port was controlled. The measurement of grain was ensured mostly by *mensores* using a cylindrical container called a *modius* (1 *modius* = 8.75 litters) and a *rutellum*[460] to level off the grain surface. This practice is widely documented by ancient sources such as the Isis Geminiana painting (ID 123)[461] or the mosaic of the *aula dei mensores* (ID 124) at Ostia[462]. For other goods, the existence of a public port weighing scales – in its various names: *statera*? *trutina*? *libra*? and maybe also *sacoma*? – or at least a weighing place in the harbour area seems to be attested by epigraphic, iconographic and archaeological sources. Where was the public weighing scale in the port? What was it for? For what types of goods? What does it look like? Two systems of scales are known in the Roman period. The first, mentioned by Vitruvius[463], is the double-shelf scale (named *libra*, *talentum*, *trutina*): it contains a large horizontal arm (*scapus*) and two trays (*lances*). The principle is simple: on one of the trays is the product to be weighed, and on the other the calibrated weight. The second is the balance with arms, commonly called "Roman balance" (*statera*). Vitruvius explains its principle[464]. It consists of a counterweight (an *aequipondium*). It is practical, accurate and easy to handle for retail. In the port, the type of scale used is attested by epigraphic, iconographic and archaeological sources. This type of installation, used for commercial transactions and the tax audit should be near the *emporium* for wholesale trade, or near the *macellum* for retail trade.

A passage of Aelius Aristides[465] indicates that the cargo is subject to weighing using a balance scale – *trutina* – whose use is also confirmed by iconography. For instance, the mosaic of Sousse (ID 122) shows a weighing scene taking place on the beach with a big balance. The goods represented seem to be trunks of wood cut into quarters. In this regard, the wood trade is attested by a mosaic of the *Piazzale delle Corporazioni* at Ostia (ID 152), that depicts two boats on both sides of a lighthouse and an inscription[466] above it that refers to the transporting wood (*navicul*ariorum *lignariorum*). The wood weighing is likewise attested in a port of the Tiber. Indeed, a marble

[460] Cébeillac-Gervasoni 1994
[461] Meiggs 1973, p. 294
[462] Minaud 2004
[463] Vitruvius, X, 1, 6 and X, 13, 2
[464] Vitruvius, X, 3, 4 and X, 3, 7
[465] Aelius Aristides Περὶ ὁμονοίας ταῖς πόλεσιν (42), Jebb p. 537: οὔτε ἡσυχίαν ἄγειν οὔτε κοινόν τι φρονῆσαι δυνάμεθα, (537.) ὥσπερ δὲ ἐν **τρυτάνῃ** φορτίων ἐξαιρεθέντων ἄνω καὶ κάτω κινούμεθα τὴν διὰ κενῆς, οὕτως ἔοικέ τι καὶ τρυφῆς ἐνεῖναι τῷ πράγματι.
[466] *CIL* XIV, 4549, 3

calibrated weight has been found at the river port of Ocriculum, in central Italy[467] (Figure 1). It presents an inscription: “Ocric(uli) po(ndus) lign(arium) hab(et) Aur(elius) Urb() po(ndo) CL” referring to the weigher or weight of the wood.

Figure 1: Inscribed marble weight from Ocriculum river port[468].

In addition, a painting from the *Casa del Larario* in Pompeii (ID 096) represents a weighing scene as well, but in the fluvial context of the river Sarno. In this painting, two characters (*mensores* or *sacomarii*?) are controlling the weight of a good, difficult to identify. In the middle, other characters are transporting the goods to be weighed. The scales represented on the mosaic of Sousse and the painting of the *Casa del Larario* can be compared to other documents. Thus, a large scale with the calibrated weights on the plateau appears on the relief of Capua[469], showing a weighing scene (Figure 2). A relief from the *Porta Maggiore* in Rome[470] (Figure 2) also represents the transformation of grain into flour and weighing, with on the one hand the goods and on the other, the calibrated weights, similar to the examples of Ocriculum. These scales are represented out of a port context but provide more details on these types of machine that should also be used in the port.

Figure 2: Relief of Capua[471]. Figure 3: Relief of Porta Maggiore[472].

[467] Caldelli 1994 ; *AE* 1994, n° 577.
[468] Caldelli 1994, p.120, Fig. 1
[469] Corti 2001, p.146
[470] Corti 2001, p. 162
[471] Corti 2001, p. 146, fig. 78

Other sources reinforce the idea that a weighing place, called the *sacomarium*, had existed in some ports of the Roman Mediterranean, where professionals, the *sacomarii*, were legally in charge of controlling the weight goods during commercial transactions. This control should have been undertaken not only at the place of loading and unloading but also at the entrance and the exit of the warehouses[473]. Latin inscriptions from Puteoli[474], Ostia[475] and Portus[476] testify to the existence of *sacomarii*. In addition, according to the data collected, a *sacomarium* would also have existed in the port of Tarragona[477].

5.1.2. A *sacomarium* in the harbour of Puteoli

An inscription from Puteoli[478], from the first century AD, refers to a certain Stlaccius, a *mensor* who also has the charge of *sacomarius*. In Puteoli, the *sacomarium* seems to be close to the commercial port (the *emporium*), as the flask of Prague depicting the *Ripa Puteolana* shows (Figure 4). The term "SACOMA" or rather “SACOMA(RIVM)” located between the pier and the “INPVRIV(M)” (*emporium*) would correspond to the term *sacoma* known in literature only by Vitruvius[479] to refer to the counterweight, the weight counterbalancing an opposing force. This Latin term seems to come from the Greek term *sekoma* that referred to measuring tables (*sekomata*) used for the measurement of the weight of cereals, salt and liquids in places of commerce like *macella* (or *agora*) and *emporia*[480].

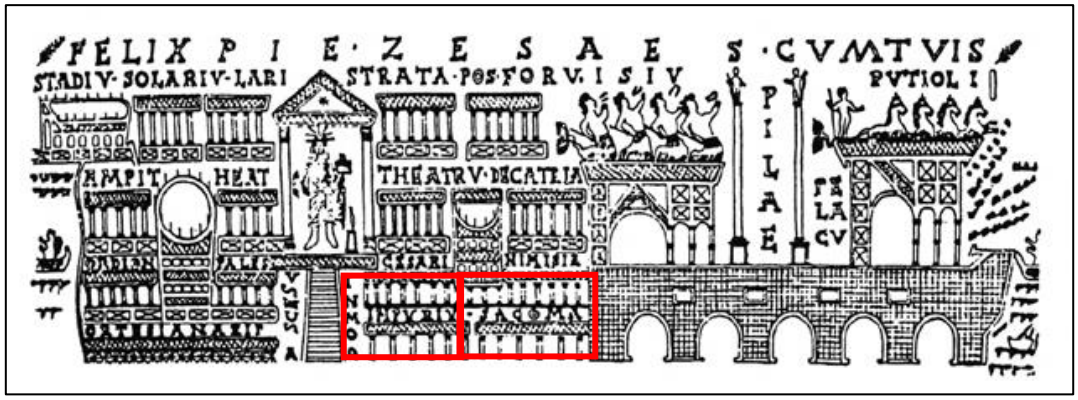


Figure 4: Vase of Prague illustrating the Ripa Puteolana[481].

[472] Corti 2001, p. 162, fig. 94
[473] Tran 2008; Arnaud 2015, p. 129
[474] *CIL* X, n° 1930; *CIL* I, n° 1623 (p. 1013); *ILLRP* 801.
[475] *CIL* XIV, n° 309 (p. 614) and *CIL* XIV, n° 51 (p. 613); *AE* 1987, n° 175.
[476] *CIL* 14, n° 409; *Epigrafia* II, p. 553; *AE* 1999, n° 407.
[477] Rodríguez Martorell and Ruiz de Arbulo Bayona 2016
[478] *CIL* X, n° 1930; *CIL* I, n° 1623 (p. 1013); *ILLRP* 801.
[479] Vitruvius IX, P*raef*. 9 and 8, 8
[480] Chankowski and Karvonis 2012; Geraci 2012; Cioffi 2014 (November 30),
[481] Gianfrotta 2011, p. 17

In the case of Archimedes, although he made many wonderful discoveries of diverse kinds, yet of them all, the following, which I shall relate, seems to have been the result of a boundless ingenuity. Hiero, after gaining the royal power in Syracuse, resolved, as a consequence of his successful exploits, to place in a certain temple a golden crown which he had vowed to the immortal gods. He contracted for its making at a fixed price, and weighed out a precise amount of gold to the contractor. At the appointed time the latter delivered to the king's satisfaction an exquisitely finished piece of handiwork, and it appeared that in weight the crown corresponded precisely to what the gold had weighed.[482]

Vitruvius IX, P*raef*. 9 and 8, 8

5.1.3. A *sacomarium* and *sacomarii* at Portus and Ostia

Carcopino[483] mentions that there was a *sacellum* of *sacomarii*[484] at Ostia, in the (*statio* 61) of the *Piazzale delle Corporazioni*[485] *(sacellum dell'ara dei gemelli, II, VII, 3)*. In fact, a marble altar was found in a shrine in the south-west corner of the *Piazzale delle Corporazioni* in 1881 by Lanciani[486]. It would have served later as a statue base because of the traces of lead and sealing holes. The four corners of the altar are decorated with ram's heads and wreaths. The front has a depiction of the wedding of Mars with Rhea Silvia. On the back there is a scene with two shepherds that watch Romulus and Remus, suckled by the she-wolf along the Tiber (evoked by its personification). On the sides of the altar are *amorini*, hauling the weapons and chariot of Mars. According to the various inscriptions[487], the altar was dedicated on the 1st October of the year 124 AD (under Hadrian)[488] by a certain P. Aelius Syneros (freedman of P. Aelius Trophimus, himself a freedman of Hadrian and a *procurator* of Crete) and his sons Trophimus and Aelianus. The mention of "*decurionum decreto*" indicates the public character of this altar. Another inscription refers to the Genius of the corporation of the weight master (*collegium sacomariorum*)[489] perhaps to the *Annona* (some letters are missing) that might be a reference to the temple (of Annona?) at the centre of the *Piazzale delle Corporazioni*[490]. According to the inscription, the altar was dedicated to Silvanus. Another Ostian inscription also mentions a weights master (L. Calpurnius Chius) associated to Silvanus[491].

[482] Translation in: Vitruvius*: The Ten Books on Architecture. Vitruvius.* Morris Hicky Morgan. Cambridge: Harvard University Press. London: Humphrey Milford. Oxford University Press. 1914.
[483] Carcopino 1929, p. 17, 18, 49
[484] Tran 2008
[485] Steuernagel 2004; Van Haeperen 2019, p. 103, 168; Van Haeperen 2019b
[486] Lanciani 1868, p. 111-115
[487] *CIL* XIV, n° 51 (p. 613); *AE* 1987, n° 175.
[488] Van Haeperen 2019
[489] http://www.ostia-antica.org/regio2/7/7-3.htm
[490] The *stationes* were grouped around a sanctuary of *Annona*.
[491] *CIL* XIV, n° 309 (p. 614).

L. Calpurnius Chius was also president of the guild of the grain measurers (*mensores frumentarii*), perhaps as in the inscription of Puteoli that we have seen before that refers to a *mensor* who was also in charge of a *sacomarius*[492]. We find the same combination in the inscription of Parma[493] that also refers to a *mensor sacomarius*. At Portus, an inscription[494] refers to Cn. Sentius Felix who was the patron of the *sacomarii*. Another interesting inscription, coming from Rome[495], mentions the adjective *machinarius* qualifying the *mensores* of the public grain (*frumenti publici*). This can lead us to believe that instead of using the classic *modius* and *rutellum* to measure wheat, these *mensores* had to use sometimes a *machina* which was probably a scale.

5.1.3. A *sacomarium* in the harbour of Tarraco

Another interesting case has been documented in the harbour of *Tarraco*, where a bronze weight representing a woman's head - *Aequitas*? – was found (Figure 5), published by Ruiz de Arbulo[496]. It was discovered in 1971, near the harbour front. Its weight is 38 kg and it measures 36 cm x 20 cm. The diameter at the base is 15 cm. This weight is an *aequipondium* that belonged to a giant *statera* whose arm had to reach at least 2 meters, a size close to that of the balances represented on the mosaic of Sousse and the painting of the *Casa del Larario* in Pompeii. This scale could lift 1500 kg,[497] and may have been used for weighing heavy material such as metal ingots, stone, wood or even sandbags or other building materials such as pozzolanic sand.

Figure 5: Aequipondium of Tarraco[498].

[492] *CIL* X, n° 1930; *CIL* I, n° 1623 (p. 1013); *ILLRP* 801.
[493] *NEParmense* 00013a = *SupIt*-11-P, 00006 = *AE* 1993, 00715 = *AE* 2004, 00566
[494] *CIL* 14, n° 409; *Epigrafia* II, p. 553; *AE* 1999, n° 407.
[495] *CIL* VI, n° 33883 (p. 3896).
[496] Rodríguez Martorell and Ruiz de Arbulo Bayona 2016
[497] Terrado Ortuño 2018, p. 58-59
[498] Rodríguez Martorell and Ruiz de Arbulo Bayona 2016

In the port of Tarraco, a small inscription engraved on the base of an amphora[499] comparable to a Dressel 20 mentions explicitly: "*Ad sacomarium Tarraconense*"[500]. This seems to refer to the great public port balance of Tarraco. This indicates that amphorae of oil or wine were also subject to a weight control in a *sacomarium*, perhaps for fiscal purposes both at points of departure and arrival[501].

5.1.4. Conclusions

The examination of iconographic and archaeological sources shows some discordances. The example of the Tarragona *aequipondium* confirms the presence of large scales in port contexts as indicated by the iconography, but also raises some questions as regards to the form and the use of these instruments. Indeed, this *aequipondium* does not go in the same direction than iconography, which usually shows scales with trays. Moreover, it seems legitimate to wonder about the fixing system and the operation of this giant *statera*. It is obvious that, by its huge size, it must be quite difficult to handle. This type of scale, of modest size most of the time, was mainly used for the retail trade. The discovery of such scales on merchant ships indicates that the weighing of goods was also carried out aboard ships[502]. I hope that new multidisciplinary data will complete our understanding on weighing instruments in order to integrate them into the reconstruction of Roman portscapes. The question of the type of goods weighed by the *sacomarii* is still unclear due to the lack of evidence. Except the weights found in Ocriculum, we do not have epigraphic information concerning the nature of goods. The discovery of the *aequipondium* in Tarraco let us believe that the *sacomarium* was used for weighing heavy goods. Finally, at this stage, we can say that *sacomaria* may have been places typically in port contexts as the epigraphy that mention *sacomarii* comes mainly from port cities except Parma but we do not know where the *statera* comes originally from. *Sacomarii* must have been weighing controllers specialised in port activities. Rougé[503] affirmed that they were manufacturers of weights. For Tran[504], their task was to verify weights and measures. According to the epigraphy, we could suppose that, in Portus, the *sacomarium* may have been located in the port area and the *sacomarii* must have resided in Ostia.

[499] *IRC* V, n° 138, pl. LXXVII, V, 138; *HEp* 12, n° 390.
[500] Rodríguez Martorell and Ruiz de Arbulo Bayona 2016, p. 178
[501] Rodríguez Martorell and Ruiz de Arbulo Bayona 2016, p. 178
[502] Corti 20011
[503] Rougé 1966, p. 188
[504] Tran 2006, p. 252-253

5.2. Case-study 2: the single monuments in Roman portscapes

During the Imperial period, the erection of columns and arches was a common practice, with the monuments serving a variety of functions, both sacred and civic. They could commemorate or honour people or events as Pliny said in his chapter on the erection of public statues at Rome:

> "*The reason of the statues being raised on columns, was, that the persons represented might be elevated above other mortals; the same thing being signified by the use of arches, a new invention which had its origin among the Greeks*." [505]
>
> Pliny, *Natural History*, XXXIV, 12

In Roman harbours, this type of single monument is well attested by iconography and epigraphy. Most of them decorated the quays and the moles. However, we still do not clearly know what their functions were and what their symbolic importance was in port topography neither their visual power. It seems that these monuments were not simply ornamental. They were structures that had a more complex purpose. They served not only to monumentalise the port space in the manner of porticoes in urban space,[506] but also commemorated and honoured people, events or deities. Beyond their honorific and commemorative functions, the single monuments seem to have had a votive function and to have contributed to materialise religion in Roman portscapes. In this section, I will analyse the different single monuments that were attested in portscapes like the freestanding column monuments, the arches, the trophies and the votive bases with double columns.

5.2.1. The freestanding column monuments

Romans have erected many great columns in Rome and across the Empire. We know about a dozen columns that stood in Rome. Some of them still stand today. Most of them are unfortunately lost but they are known by numismatic evidence (Figure 6). The first column that appeared on coins is *Columna Minucia*[507]. It was also the first honorific column of Rome. It was erected in 439 BC on the

[505] Translation Bostock & Riley 1855-57
[506] Gros 2011 (see the porticoes)
[507] Richardson 1992, p. 96

Comitium. Its construction was financed through a popular subscription to commemorate L. Minucius Augurinus, who was consul in 497 and in 491 BC. During his service, he consecrated the temple of Saturn in the Forum and the Saturnalia festival took place for the first time. Also, he managed to deal with famine that struck Rome in 490 BC. The second famous column of antiquity is *Columna Rostrata Augusti*[508]. It was erected on the Forum in 36 BC by Octavian to commemorate his victory over Sextus Pompey. This column stood between the Rostra and the spring called the Lacus Curtius. This rostral column is part of the *Victoria Navalis* theme that I have mentioned in Chapter 4. It is likely that the entire column was built from melted bronze beaks of enemy's ships. It was possibly gilded, as well as Octavian's statue that was placed on top of it. The third column preserved on coins is the *Columna Antonini Pii* (the column of Antoninus Pius)[509]. It was built by emperors Marcus Aurelius and Lucius Verus in the memory of Faustina and Antoninus Pius. This column stood on Campus Martius not far from the column of Marcus Aurelius[510]. Among the columns that still stand today in Rome is the *Columna Traiana*[511] that was dedicated to Trajan war in Dacia. Trajan decided to monumentalise Rome's victory by literally setting it in stone on a thirty metre-tall victory column.

Figure 6: Columna Minucia on the denarius of C. Augurinus (135 BC) [512]*, Columna Rostrata Augusti on denarius (30-29 BC)*[513]*, Columna Antonini Pii on denarius struck under Marcus Aurelius (AD 162)* [514]*.*

This type of column was also erected in Roman ports that also were, as we have seen in Chapter 1, public spaces according to Vitruvius[515]. We will see that, in Roman portscapes,

[508] Richardson 1992, p. 96-97
[509] Vogel 1973
[510] Coarelli and Patterson 2008; Beckmann 2011
[511] Fröhner and Duvaux 1865; Turcan-Déléani 1958; Galinier 2007
[512] Classical Numismatic Group: https://www.cngcoins.com/Coin.aspx?CoinID=246738
[513] Classical Numismatic Group: https://www.cngcoins.com/Coin.aspx?CoinID=334483
[514] Classical Numismatic Group: https://www.cngcoins.com/Coin.aspx?CoinID=147473
[515] Vitruvius, *De Architectura*, I, 3

freestanding column monuments had commemorative and honorific functions. They also could have a religious purpose and in some cases, they could be used as a referral for mooring.

5.2.1.1. Commemorative and honorific columns

Two columnar pedestals of bluish-grey marble were found in the 1990 excavations at the Promontory Palace at Caesarea Maritima[516]. These monuments provide new information on the existence of columns in harbour and furnish more details and complete iconography about this spatial element characterising the portscape. Indeed, we have some interesting measurements: the column I is 1.43 m. tall, the column II is 1.50 m. The Column II is 0.065 m. wide and the column II is 0.06 m. wide. Each column is 0.51 m. in diameter at the moulded end. Each column has three inscriptions - in Latin, with the exception of one in Greek - providing new information on the city of Caesarea and on the Roman governors of its province of Syria Palaestina; as we have seen before, port is a place of memory and euergetism.

Columns and columnar pedestals inscribed with honorific dedications to emperors, officials and private citizens were common in the Roman world. For instance, at Cyzicus (IMT *Kyz PropKüste* 1915 = AM 9,1884,18 3.Inschr.), a *limenarches* dedicated a column for his new position. In Kreusae (*IG* VII. 1826 = Roesch *Inscr. Thespies* 266), a *limenarches* dedicated a column to the Dioscuri. The column that probably dates from the second century AD was found on the foreshore of the ancient port[517].

5.2.1.2. Religious columns

Neptune at Portus

In Portus, the presence of monumental columns is attested by the so-called “mosaic of the harbour” (ID 011) at Ostia (Figure 7), showing Neptune on the top of a column next to the lighthouse. We have seen in Chapter 4 that a statue (of Nero or Neptune) is depicted on the Neronian *sestertius*. It stands on a short column that was on the mole where the lighthouse should be (Figure 8).

[516] Burrel 1993 ; **Column I**: *GLICMar* 15 = *Topoi*, 2000, 536 = *CIIP*-02, 01269 = *AE* 1993, 01619 ; *GLICMar*, 16 = *Topoi*, 2000, 536 = *CIIP*, 02, 1270 = *AE* 1993, 01620 = *AE* 1996, 01560 ; *GLICMar* 00017 = *Topoi*, 2000, 536 = *ZPE*, 174-175, *CIIP* 02, 1271 = *AE* 1993, 01621 = *AE* 2004, +01590 ; **Column II**: *I.Caesarea Maritima* 12 ; *ZPE* 99 (1993) 291, II,1 ; *SEG* 43.1048 ; *GLICMar* 00013 = *Topoi*-2000-536 = *CIIP*-02, 01267 = *AE* 1993, 01623 = *AE* 1998, 01440 ; *GLICMar* 00014 = *Topoi*-2000-537 = *CIIP*-02, 01268 = *AE* 1993, 01624

[517] Arnaud 2015, p. 120

On the Torlonia relief (ID 072), the statue of Neptune also stands next to the lighthouse. Other statues are represented on this relief. On the left, there is a female figure holding a wreath and a horn of plenty (the personification of *Annona*, *Abundantia* or Tyché?). On the right of the lighthouse, a male figure - the Genius (protective deity) of the harbour - is represented. On the right-hand corner, Liber Pater-Bacchus stands with a panther. We can suppose that these statues were actually on the top of columns in the harbour.

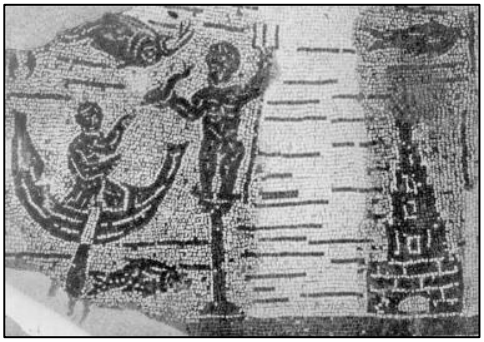


Figure 7: The so-called "mosaic of the harbour"[518]. Figure 8: Nero's sestertii.

Isis Pelagia in Puteoli

Columns and arches are largely documented by paintings such as that representing Stabiae (ID 087) or the painting from the Esquiline Hill (ID 088). As we have seen, the series of glass flasks depicting the facade of Baiae-Puteoli show systematically pairs of columns on the *pilae*. They are associated with arches. The Prague flask shows an interesting detail: the position of the arm of the statue atop the right column reminds us of Isis Pharia holding an inflated sail like in Alexandrian coins (Figure 12) or the Delian lamp (Figure 10). This hypothesis can be confirmed by two elements underlined by Gianfrotta[519]:

- the first is the word ISIV(M) inscribed on the vase (Figure 9). It refers to the existence of an *Iseum*/*Iseion* in the harbour of Puteoli;
- the second is a marble statue found next to the jetty in the 1970's (Figure 10) that could be like the statue represented on the vase. If we compare it with the lamps of Delos[520] and the coins of Alexandria, we can see that the statue could represent Isis Pelagia due to the folds of her dress and the position of her arm.

[518] Becatti 1961, p. 26-27, n.45.
[519] Gianfrotta 1998, p. 167-169
[520] Bruneau 1961

Figure 9: Vase of Prague[521].

Figure 10: Isis statue found in Pozzuoli[522]. Figure 11: Lamp of Delos[523]. Figure 12: Alexandrian coin with Isis[524].

Isis Orgia in Kenchreai

The presence of columns in the harbour of Kenchreai is attested by an inscribed column (Figure 13) from the Imperial period found in the debris covering the later church on the southern part of the mole, and which may have been belonged to a possible sanctuary[525]. The inscription, in Greek, mentioning ΟΡΓΙΑ is a dedication to Isis Orgia[526]. It was probably associated in some way with the *Iseion* located in the southern limit of the port, as iconography shows us. This column could have

[521] Gianfrotta 2011, p. 17
[522] Gianfrotta 1998, p. 168, fig. 14
[523] Bruneau 1961, p. 436
[524] See the several examples of Isis Pelagia in Bricault 2006
[525] Scranton et al. 1978, p. 73
[526] *SEG* 51354 ; Bricault 2005, p. 35

been votive and erected in the sanctuary area dedicated to Isis. The *opus sectile* panel XVI (ID 025) and the coins of Corinth (ID 049 057) show a temple on either side of the jetty as Pausanias says[527]:

> "*In Cenchreae are a temple and a stone statue of Aphrodite, after it on the mole running into the sea a bronze image of Poseidon, and at the other end of the harbour sanctuaries of Asclepius and of Isis.*" [528]
>
> Pausanias II, 2, 3

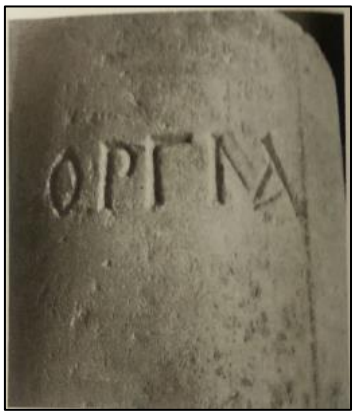


Figure 13: inscribed column mentioning ORGIA[529].

Columns with Priapos in harbours

Other port deities are depicted on columns, such as Priapos. The paintings from Nabeul (ID 132 to 137) - sides A and H - show the statue of an ithyphallic Priapos[530] surmounting a column at the entrance of the port. The following painting from the museum of Naples (Figure 20) depicts a statue of Priapos on the shore. The cult of Priapos in ports is widely confirmed by epigraphy as well as several epigrams from the Palatine Anthology[531] referring to Priapos as a λιμενίτας: the "harbour's god", "harbour's guardian". Archaeological evidence attests to the cult in port contexts[532]. For example, a statue of this deity was found in the sea off the Ile Saint-Honorat next to Cannes[533], in France. The location of this statue seems to correspond the location of the mooring area that reminds one of the statue in the painting of Neapolis mentioned earlier.

[527] Isis in the harbour of Kenchreai will be discussed in the next case study on religion in portscapes
[528] Translation by Jones, Ormerod. Loeb Classical Library 1926.
[529] Scranton et al. 1978, pl. XXXVIII C
[530] Barbet 2014
[531] *Palatine Anthology* 6.89, 10.1, 10.2, 10.49, 10.14-16 etc.; Waltz 1946 ; Prêteux 2005
[532] Priapos will be discussed in the next case study on religion in portscapes
[533] Benoit 1948, p. 215, fig. 10 ; Formigé 1947, p. 146

Carthago Nova

There is also evidence for the presence of votive columns in the harbour of Carthago Nova. An inscription (*CIL* II, 3408), from the second century AD, was found in the seventeenth century (but lost now unfortunately). Apparently, it was inscribed on a column found in the port area of Carthago Nova[534]. The text concerns the erection of a column (the column itself?) to the Genius in the harbour, recalling the Genius depicted on the Torlonia relief (ID 072) which can be interpreted as a deity protecting Portus.

Another inscribed column (*CIL* II 5929), in travertine, of first century AD date, was also found in the port area. The inscription refers to a joint association of *piscatores* and *propolae* (fishermen and retailers)[535] who had erected a column dedicated to Mercury and the *Lares Augustales* in the harbour.

5.2.1.3. Columns as referral for mooring

In port context, single pillars were fixed since the Greeks in harbours for mooring ships as is depicted in the *Tabula Iliaca* dated from the first century AD (ID 182) showing a pillar and the ship on which Aeneas embarked freeing Troy that illustrates the passage of Homer in his *Odyssey*:

> *"So he spoke, and tied the cable of a dark-prowed ship to a great pillar and flung it round the dome, stretching it on high that none might reach the ground with her feet."*[536]
>
> Homer, *Odyssey* XXII.465

Figure 14: Tabula Iliaca showing the pillar for mooring (Reinach 1912, p 286).

[534] Abascal Palazón 1997, p. 153-159

[535] This association is also know at Ephesus though an inscription from AD 54-59 (*IvE* I 20, 1503). See Lytle 2012 about the custom house built by an association of fishermen and fishmongers.

[536] Translation: Murray 1919.

The presence of columns at Portus is also attested by an inscription on the base of a column found in 1794 on a quay on the south side of the Trajanic basin[537] (Figure 15). It refers to the repair by the "divine" Emperor Septimius Severus of the column VII[538] broken by the force of a storm in 196 AD. The famous Trajanic POTRVM TRAIANI sestertii (Figure 15) represent columns on the quay, spaced around the hexagonal basin. The same pair of columns is also depicted on the moulded appliqué disks that represent the hexagonal basin of Trajan at Portus[539]standing on the quay. Shorter numbered columns with Latin numerals (Figure 15) were also found spaced around the basin of Trajan in Portus[540]. This suggests perhaps a subdivision of the basin into numbered sectors for mooring[541]. A number was perhaps attributed to sailors at the entrance of the harbour in order to regulate the maritime traffic, and may have corresponded to matching Latin numerals inscribed on the *horrea* (?). This hypothesis can be confirmed by the side C of the painting from Nabeul (Figure 18) that shows a column standing next to a mooring station, which might could be taken as confirmation of the functional character of these monuments. The same may be true of the two columns found in the port of Brundisium; these marked the end of the *Via Appia* and may also have acted as point of reference for navigators approaching the port.

Another interesting document is the Papyrus Bingen 77[542]. It is a register of merchant ships arriving in the Roman harbour of Alexandria from various ports of the Mediterranean: Ostia, Laodicea (Syria), Sidè (Southern Turkey), and Crete. Most of the boats were associated with Greek gods or allegories[543]. Most scholars thought that it was the name of the basins but we can make the hypothesis that it was the name of the statues of deities on columns assigned to the different ethnic groups or sailors[544].

[537] *CIL* 14, 00113 (p 481) = *IPOstie*-B, 00320 = Horster p 273

[538] We have however to bear in mind that the inscription can be understood in two different ways (see Thylander 1952, p. 387 and Horster 2001, p. 273-274): "*vii"* can refer to "column 7" or "*vii tempestatis*" that means "broken by the force of the storm".

[539] Desbat 2010

[540] Carcopino 1929, p. 51

[541] About the hypothesis of the using of the columns for mooring: see Carcopino 1929, p. 19

[542] De Smet et al. 2000

[543] http://www.papyri.info/hgv/78045

[544] The prows of the ships could also bear inscriptions or representations of deities. See Bricault 2006, p. 22


Figure 15: Base of column found in Portus[545].Figure 16: Numbered column of Portus[546]. Figure 17: Trajanic coin[547].

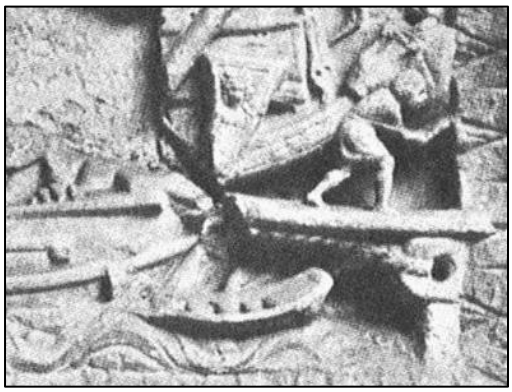



Figure 18: Painting of Nabeul[548]. Figure 19: Detail of Torlonia relief[549].


Figure 20: mooring stone on a painting of the museum of Naples. Figure 21: Moorings found in Portus[550].

[545] Epigraphik-Datenbank Clauss / Slaby
[546] Testaguzza 1970, p. 171
[547] Leverton Donaldson 1966, p. 133
[548] Barbet 2013, p. 140, fig. 193-194
[549] Keay and Millett 2005, p. 314, fig. 9.7.
[550] Testaguzza 1970, p. 170

5.2.2. The arches

The origins of honorary and triumphal arches are not yet completely resolved, as Gros points out in his latest edition of Roman architecture[551]. Since the research conducted by Nilsson, some scholars support the hypothesis of a Hellenistic origin where these arches appeared in the form of "votive bases with double column" and of which examples would be attested to Delphi and Delos[552]. For him, these monuments are "*tall and narrow pedestals, composed of a rectangular base, on which two ionic columns are posed joined by an entablature, with a cornice which is used as support for statues. It is like a piece detached from a colonnade or an ionic peristyle, with an entablature*"[553]. They had a religious purpose and were found in sacred areas, as we can observe in many Campanian wall-paintings depicting sacro-idyllic landscapes. This motif has been reused then in port iconography[554] like in the mosaic currently in Santa Maria in Trastevere in Rome (ID 015) and the mosaic of El Alia (ID 017).

The term *fornix* referred to an arched structure in a building. The use of the term *arcus* became widespread after the end of the Republican period to designate a single arch, without necessarily being associated with a structure[555]. The first *fornices* appeared in Rome towards the end of the third and the beginning of the second century BC, stimulated by the emergence of the *imperatores* and the influence of the Hellenistic monarchies. The *Porta Triumphalis* in Rome[556], located near the sacred area of Sant' Omobono and built in the fourth century BC, arises from this impulse. Arches had different functions, depending on the time and the context. Originally, it had rather a ritual utility, linked to the sacred. The Romans began to attribute triumphal and commemorative functions at the end of the third and the beginning of the second century BC. This new appropriation of power and honour over Republican practices must be highlighted and shown publicly. These honorary and triumphal arches were also used most of the time to mark the passage. This is the case of the *Porta Triumphalis* of Rome, one bay marking the entrance and the other the exit from the city.

In Roman ports, arches materialised this idea of passage. They marked the beginning and end of journeys and the passage between the land and the sea through the *Porta Maritima* (the Sea Gate). Arches abound in the artistic representations of Roman ports. For instance, an arch is depicted at the end of a mole in the mosaic of Santa Maria in Trastevere (ID 015).

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[551] Gros 2011, p. 56
[552] Nilsson 1925
[553] Nilsson 1925
[554] See Chapter 4 about the origins of port images and the influence of the sacro-idyllic landscapes
[555] Gros 2011
[556] Sobocinski 2009

On the Torlonia relief (ID 072), an arch stands next to the lighthouse. It is surmounted by a figure in a chariot drawn by elephants' quadriga. We also find this arch with the elephants' quadriga on the terracotta disks[557] that depict the Trajanic harbour. The question of the arch with elephants depicted in the portscape of Portus is not elucidated yet. Several hypotheses were suggested. It could refer to the Indian triumph of Dionysos[558] that was a symbol used by emperors under Augustus, symbolising the dominance over the east[559]. For Meiggs[560], it is the triumphal chariot of an emperor: Domitian. He identified a scepter with a human head, in the object held by the driver of the chariot, like the one that appears on Domitian coins struck for his second consulate, in AD 73. He also suggests that the quadriga must have surmounted a high arch on the right mole of the harbour and that perhaps another symmetrical arch rose on the left mole. To justify this hypothesis, Meiggs underlines the presence of two arches with elephant's quadriga on the sarcophagus of the Porta Latina, preserved in the Vatican (ID 071). In addition, Domitian would be the first emperor to have erected an arch in Rome surmounted by elephants' quadriga. This arch is known by numismatic evidence and is mentioned in Martial's Epigrams:

> "*The great merits of the spot are attested by the other monuments with which it has been honoured; a sacred arch is there erected in memory of our triumphs over subdued nations. Here two chariots 2 number many an elephant yoked to them; the prince himself cast in gold, guides alone the mighty team*." [561]
>
> Martial, *Epigrams*, VIII, LXV

The mosaic of Hippo Regius (ID 016) shows also a triumphal monument topped by a statuary group in which we do not hesitate to recognise Neptune on a chariot drawn by four horses. This motif is common in port iconography, and refers to Neptune's triumph. On the sarcophagus of Phylosyrius (ID 074) is depicted an arched structure in masonry with four pillars that could be an honorific arch. Two statues of trumpeting tritons on the top. The series of flasks representing the maritime facades of *Baiae-Puteoli* show arches that stand on top of the mole on *pilae*. A statuary group is systematically represented on the top (Tritons or Neptune's chariot). An arch with a chariot

[557] Desbat 2010
[558] See Chapter 6
[559] Tuck 2008, p. 332 ; Meiggs 1973, p. 158
[560] Meiggs 1973, p. 158
[561] Translation in Bohn's Classical Library (1897)

of Neptune is also represented on the coin of Gallienus struck in Parium (Turkey)[562]. According to Fähndrich[563], the arch likely stood in the port of Parium but his interpretation is probably based on the identification of the statues with Neptune, Tritons and Dolphins.

One of the best preserved of the arches in a port context still stands at Ancona. It marked the point from which Trajan left Italy for his Dacian campaigns in AD 101-102 and 105-106. The arch is sited as the terminal monument of the mole from which the fleet departed when heading for the Dalmatian coast. It intends to monumentalise the point of his *profectio* (ceremonial departure of the emperor)[564]. Along the top of the arch was a set of three statues as we can see in the scene LXXIX of the Trajan column. The inscription (*CIL* IX, 5894) shows that it was dedicated in AD 115 and bore statues of Trajan, Plotina and Diva Marciana but it is more likely that it was the statues of deities (Mercury, Neptune and Portunus? Or Castor and Pollux?)[565]. In Zara (or Zadar in the Roman province of Dalmatia), an arch still stands in the port area. It bears an inscription[566] that commemorates the erection of this arch in the *emporium* by a certain Melia Anniana, in honour of her husband[567].

During the recent construction of the Naples subway in the fortifications dating from Byzantine times in Piazza G. Bovio near the port of Neapolis, a dozen sculptural fragments in Luna marble have been excavated. They were reused in the walls of a tower. Among these fragments, three belonged to an arch[568]. From the Severan period that must have stood in the portscape of Neapolis[569]. The iconographic programme of this arch is also interesting as it presents a trophy on one side and a port scene on the other side from which only a fragment of a merchant ship remains. The scene was interpreted as the mooring of a merchant ship because of the *aplustre* depicting a swan's head (Figure 22).

[562] Price 1977, p. 118; https://arachne.dainst.org/entity/3647505
[563] Fähndrich 2005, p. 55
[564] Galinier 2007
[565] Turcan-Déléani 1958
[566] *CIL* III 9987 = 2922 = *ILS* 5598 (Zara: I-II sec. d.C.)
[567] Zaccaria 2009, p. 227 ; Zaccaria 2014 p. 21, 24
[568] These arch fragments were shown in an exhibition at the Coliseum in Rome that I have visited in July 2019.
[569] Baldassarre et al. 2010 ; Molinari and Gelichi 2018, p. 193

Figure 22: Arch found in piazza G. Bovio (Naples), Soprintendenza Archeologia Belle Arti e Paesaggio per il Comune di Napoli (S. Mailleur, exhibition in the Coliseum, July 2019).

5.2.3. The trophies

The question of the columns with trophies in harbours deserves also our attention. Of Hellenistic origin, trophies stand traditionally in the landscape of sanctuaries. They were dedicated to Victory deities like in the mosaic of Palestrina (ID 264) depicting a votive column in a semi-circular enclosure, close to the sea side and an altar. On the shaft of the column, there is a trophy composed of a trident and a rudder, which is one of the attributes of Fortuna.

Roman iconography shows some examples of trophies in portscapes. For instance, the panel of Farnesina Villa of Agrippa in Rome[570] (Figure 23) - that decorated the *ambulacrum* G - represents the battle of Naulochus - a maritime victory of Agrippa - and a trophy commemorating his victory on the quay like the one erected in the harbour of Miletus by Augustus to commemorate his victory at the battle of Actium in 31 BC[571]. In the Imperial period, the paintings of Nabeul show trophies on columns (ID 133 and 136). Were they real or did they came from the fantasy of the sacro-idyllic

[570] Spencer 2010, p. 150-151
[571] Duval 1962, p. 106 ; Gilbert 1957

repertoire[572]? Are they just inspired by Hellenistic and Augustan tradition? In this case, it is difficult to assess the degree of realism as any archaeological data attest their presence in harbours.

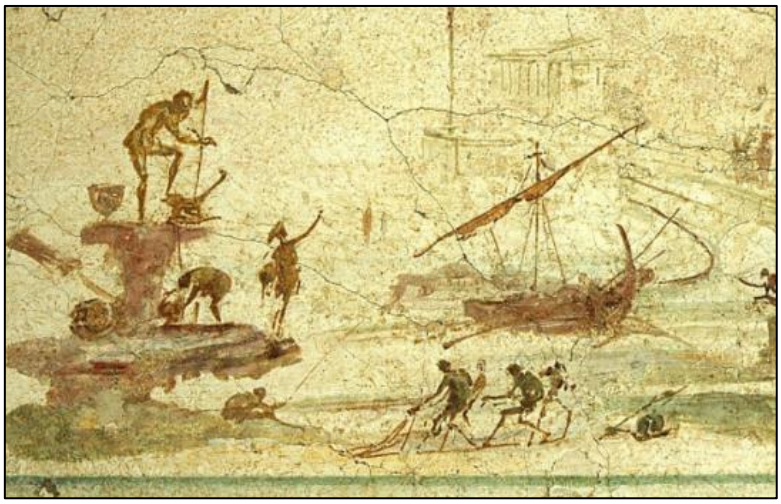


Figure 23: Panel villa Farnesina showing a trophy on the shore[573].

5.2.4. Conclusions

This series of examples suggests that several actors (officials and individuals) participated in the making of portscapes (the Emperor, associations and governors etc.). We have seen that the column monuments that stood in ports had complex meanings, being polysemic and having multivalent functions. They could be commemorative or honorific like those from Caesarea Maritima. Some of them supported statues of various deities that materialised religion in the portscape like in Puteoli, Kenchreai and Carthago Nova. In addition, we have seen that columns could also be functional structures that served as points of reference for ships seeking to moor in a harbour, as best exemplified by the numbered columns of Portus. As for the arches, they also had multiple functions. They were erected in portscapes to commemorate or honour an individual, as with the arch of Zara. In some cases, as at Ancona, it marked the passage from the sea to land, acting as a *Porta Maritima* that was also the point of the *profectio* of the Emperor Trajan.

Finally, we can notice a significant similarity in the architectural syntax between the columns and arches on *pilae* with the arches and columns on Roman bridges (Figure 24). The two arches at the extremities of the Flavian bridge of Saint-Chamas in the South of France, and the pair of columns

[572] See Chapter 4
[573] Baldassarre et al. 2006, p. 147

at the extremities of the bridge on the Euphrates River[574] are good examples. At the origin, these columns were surmounted by the statues of Septimius Severus, Julia Domna, Caracalla and Geta[575]. A coin of Asia Minor (Figure 28) depicts an arch that stands on a bridge on *pilae*[576]. The striking similarity with the architectural syntax of the mole led me to insert this document by mistake in the catalogue at the beginning of the thesis.

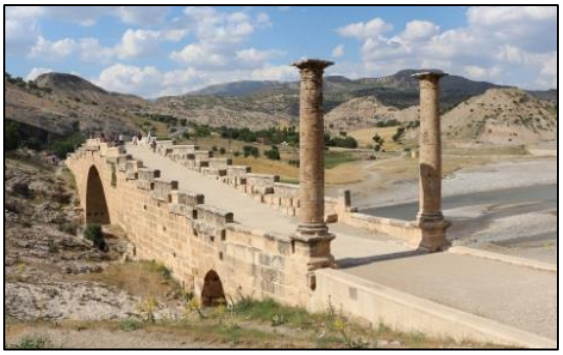


Figure 24: Flavian bridge with arches in Saint-Chamas (South of France)[577]. Figure 25: Bridge with columns on the Euphrates (Turkey)[578].

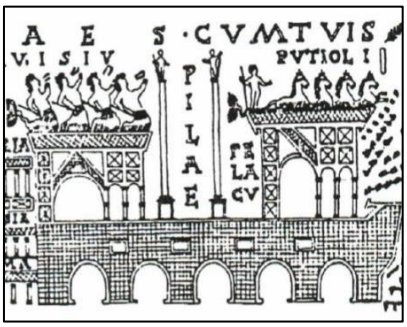


Figure 26: Detail of the vase of Prague. Figure 27: Detail of the painting of Stabiae[579]. Figure 28: Coin of Asia Minor with an arch on a bridge on pilae[580].

[574] *CIL*, III. 6709-6711 ; *ILS*, 5899
[575] Wagner 1985; Galliazzo 1994, p. 390-394 ; Bru 2019, p. 189-190
[576] López Monteagudo 1994, pl. 12, fig. 3
[577] Picture of P. Arnaud
[578] Wikipedia Creative Commons
[579] Picture of S. Mailleur
[580] López Monteagudo 1994, pl. 12, fig. 3

5.3. Case study 3: cultic spaces in Roman port contexts

5.3.1. Preliminary remarks on beliefs and sacred places in maritime contexts

Since early ages, when sailors starting to cross the Mediterranean for trading or settling in more fertile lands, they were concerned by the dangers and the uncertainties of the sea[581]. To protect them, ancient seafarer communities – like the Canaanites, Phoenicians, Greeks and Romans – invoked divine assistance. They developed maritime religious beliefs and worshipped several protective deities on land or on board ships at sea to guarantee good fortune and a safe journey. Much evidence attests to maritime rituals among the ancient Levantine, Greek and Roman civilisations. Several artefacts with sacred significance (like portable altars, libation vessels, votive figurines, magic stones etc.) were found in the excavations of shipwrecks that prove that ceremonies may have been performed aboard ships. For instance, votive figurines and musical instruments[582] were found in the material remains on the Late Bronze Age Uluburun shipwreck[583] discovered off the Turkish coast. Votive figurines were also found in the Tyre shipwreck[584] dating between the sixth and the fourth century B.C.

On board ships, religious ceremonies may have taken place on the prow or close to the stern that was considered as a sacral place[585], as it appears in the Torlonia relief (ID 072) that shows a sacrifice scene that is being operating on the board of a ship close to the stern. On land, religious rituals took place in temples or sanctuaries. They were important in harbours as they provided seafarers with meeting places around their deities and allowed them to pray before travelling and to thank the gods after safely landing. Ceremonies could also be performed in open sanctuaries like that represented on the wall paintings found at Nabeul in Tunisia (ID 133-134-135-136-137) or focusing upon a votive column (see Chapter 5 - Case study 1). Sacrifices could also be made upon simple altars in the port area as we can see on the scene LXXX of Trajan's Column, in which the Emperor is sacrificing a bull on an altar on the quay in the harbour identified as Ravenna (ID 082). Different types of monuments could also be erected in honour of a deity for having protected sailors, like the example attested in an epigram from Colle Maiorana in Latium[586] dating to between AD 150 and 250. This text is inscribed on a quadrangular pillar to Heracles Monoikos, praising the god as the saviour of shipwrecked sailors during a voyage along the Mediterranean coast to central

[581] Textual evidence describe sailor's fear of travel by sea like Homer, *Odyssey*, 1. 234-43 and Hesiod, *Opera et Dies*, 685-93
[582] Wachsmann 2009, p. 306. Musical instruments were used for sacrifice ceremonies namely to calm animals.
[583] Brody 2018, p. 100
[584] Noureddine and Seco Alvarez 2010
[585] Virgil, *Aeneid* III 527-32
[586] *AE* 1997, 278 = *SEG* 47, 1517

Italy. The ship seems to have been sailing somewhere near Portus Herculis Monoeci (Monaco) when a storm fell upon it, and the crew found shelter, so a thanksgiving monument was set up to Heracles[587].

Beyond their protective character, deities were also honoured by merchants in harbours and port cities in order to guarantee trust in commercial transactions. Gods were essential to ensure the proper functioning of the port. They are documented by the abundant dedications of merchants and magistrates in honour of a patron or protective deity that confirms the importance of religious practices within the harbour. The iconographic evidence attests to the omnipresence of religious places and cultic practices in Roman portscapes through the depictions of religious symbols like temples, open sanctuaries, sacrifice scenes, statues of deities etc.

In this case study, I will analyse how religion is embedded within Roman portscapes. In other words, I will study the visual display of religious activities and religious identities in the maritime cultural landscape. I will see the extent to which religion conditioned portscapes. For this, I will argue that the choice of the topographical position of sanctuaries was of importance to the layout of portscapes. As we can imagine, many deities were worshiped in Roman ports. There were private and public cults and both ancestral and foreign deities were worshipped in harbours by individuals and officials. In the iconographic corpus, I identified the following deities:

Deity	Number of occurrences	Locations
Neptune	19	Pompeiopolis – Patras? – Corinth – Puteoli – Portus - Alexandria
Isis (Pharia, Pelagia, Fortuna-Tyché)	13	Alexandria – Kenchreai – Delos – Palestrina – Puteoli etc.
Serapis	7	Portus – Puteoli – Ephesus?
Venus	4	Kenchreai – Rome
Liber Pater	2	Portus
Hercules	1	Rimini
Dioscuri	1	Rome
Priapus	3	Naples – Nabeul
Portus	2	Portus
Genius	1	Portus

Figure 40: Table showing the number of occurrences of the deities in the iconographic corpus and their locations.

[587] Kajava 1997; 2009, p. 38-39; 2014

As we can expect, all the deities depicted in portscapes have marine attributions. All of them protect mariners and their ships or merchants. Neptune dominates in port images. He is often depicted with symbols of military victories or trophies similar to those in the wallpainting from the Villa Farnesina in Rome (fig.). It is very usual to find him at the entrance of harbours like on the coins of Corinth (ID 057), the Torlonia relief (ID 072) or the mosaic of Ostia (ID 011). His cult in port contexts is well attested by the many dedications that could not be studied in the available time of this research. For instance, three marble altars, now in the *Musei Capitolini* in Rome[588], were dedicated to Neptune (*CIL* X 6642), Tranquilitas (*CIL* X 6643) and the Winds (*CIL* X 6644). They were found in the harbour of Anzio. They may have been votive offerings from sailors. A relief from Ostia (Figure 41), now in the *Musei Capitolini*, attests also the cult of Neptune. It shows a sacrifice to the statue of Neptune next to a statue of Hercules standing in a Corinthian temple (scene in a harbour or in the *forum boarium*?). The statue of Neptune holding a trident and associated to a ship prow with a dolphin reminds us the Neptune of Lateran (Figure 42) found in Portus and is now in the *Museo Gregoriano Profano* in the Vatican.

Figure 41: Relief with sacrifice scene in front of a statue of Neptune[589]. Figure 42: Neptune of Lateran[590].

Isis - under her several forms or epithets (Pharia, Pelagia, Orgia etc.) and sometimes associated to Fortuna-Tyche - and Serapis are also important in port iconography. We will come back to them further in a later part of this chapter. Curiously, Venus is not very present in port images despite her marine attributes and the fact that we know that she was worshiped in harbours like in Kenchreai according to Pausanias (II, 2-3). Liber Pater appears in the documentation of Portus like on

[588] http://www.museicapitolini.net/urn?urn=urn:collectio:0001:scu:01957
[589] Brandizzi Vittucci 2000, fig. 54
[590] Brandizzi Vittucci 2000, fig. 55

the Torlonia relief (ID 072). The personification of Portus appears on the Nero's sestertii (ID 048-056) and on the coins of the harbour of Pompeiopolis (ID 058) as we have seen in Chapter 4. As we have pointed out in the previous case study, the Genius is depicted on the Torlonia relief (ID 072) and the epigraphy of Carthago Nova (*CIL* II, 3408)[591] confirms that fishermen honoured him. In iconography or epigraphy, we can notice the inexistence of Portunus despite he was considered as a harbour god and a protector genius of commercial navigation. He is not attested outside of Rome. Perhaps he was confused with the Genius in the Imperial period. Hercules, as a patron of merchants, is not very present in port scenes except for the Rimini mosaic (ID 121), despite the fact that other sources attest his cult in harbour contexts, like the relief from Ostia mentioned above or the epigram dedicated to Heracles Monoikos[592]. The Dioscuri were also considered as protective deities by people living close to or on the sea. They appear on an equestrian statue on an honorific arch at the end of the jetty, on the mosaic of Santa Maria in Trastevere (ID 015). It is also possible that they were on the top of freestanding columns in the harbour of Puteoli according to the series of the glasses depicting Puteoli-Baiae (ID 099-100-101-102-103-109-111). We have seen in the previous case study that Priapus was also honoured in harbours. We find him on the shores in the depictions of maritime landscapes as a *limenitas* (guardian, protector of the shores and sea-merchants) - if we remember the epigrams of the *Palatine Anthology* (6.89, 10.1, 10.2, 10.49, 10.14-16…)[593] - like in the paintings of Nabeul (ID 132-137). He was worshiped by sailors and fishermen, and his statues and altars stood on the coast and in ports. Fishes and fishing tools like nets were offered to him as we can see on the relief of Gallipoli[594] (in Thracian Chersonese), now in the museum of Smyrna (n° inv. 377), where a statue of Priapus stands next to an altar on which there is a fish ready to be sacrificed. This depiction is accompanied by a dedication by an association of fishermen (*IGR*, I, 817)[595] from the Imperial period. It refers to the τελωναρχήσαντες (*teloniarius*) that was the manager of a *teloneion* (toll-office) or taxes on the fish trade. Archaeological material also attests to his cult in a harbour context. A bronze statuette of Priapus surmounting a column with Aphrodite removing her sandal was found in the harbour of Caesarea Maritima[596] during the underwater excavations in 1987 conducted by the University of Haifa. His cult is also attested on the board of ships that archaeology confirms again. For instance, a terracotta phallus was found in the shipwreck from the beginning of the first century, found during the excavations of the Pisa-San Rossore station in Pisa[597].

[591] Abascal Palazón 1997, p. 153-159
[592] Kajava 1997
[593] Waltz 1946; Prêteux 2005
[594] Robert and Robert 1950
[595] Robert and Robert 1950; Purcell 1995, p. 146-147; Prêteux 2005; Lytle 2006, p. 82-98 ; http://www.limc-france.fr/objet/10965
[596] Gersht 2001
[597] Neilson 2002

Furthermore, a wooden figurine was found in the shipwreck Planier A discovered close to Marseille[598] and three statuettes were also discovered during clearing works of a tower of the urban enclosure of Belo: a small marble Priapus and two others in terracotta [599]. This material shows that the image of Priapus was bring on ships as apotropaic object.

This succinct overview on the deities found in port images is obviously not exhaustive and is not very revealing of what really occurred in Roman harbours. As it is not possible to study all the deities honoured in harbours in the frame of this thesis, for this study, we will only focus on a series of examples of certain Isiac sanctuaries in the context of Roman ports or port-cities such as Belo Claudia, Sabratha, Emporiae, Puteoli, Kenchreai, Delos, Cumae, Pompeii, Portus and Ostia[600]. My choice was directed towards Isis since after Neptune (Figure 40), she is one of the deities the most represented in iconography although only a few her epiclesis are typically maritime (namely *euploia* and *pelagia*). Through these archaeological examples (when archaeology can tell us something), we will also check where temples were located in Roman harbours, how they help to structure the portscape and if it corresponds to the information known by images.

5.3.2. Case Studies: Sanctuaries of Isis in port contexts

5.3.2.1. Introduction on Isis: origins, mythology and cults

Isis was, originally, the personification of the royal throne. She was the mother of Horus in the Heliopolitan cosmogony and the sister-wife of Osiris. The mother goddess also became the goddess of the dead, protective and regenerative. During the first millennium BC, Isis took importance thanks, in particular, to her powerful maternal role[601]. Since the time of the Pharaohs, Isis was associated with water in Egypt but she gained her specifically marine attributions in the third century BC, as Bricault[602] underlined. Rather than the Egyptians, it was the Phoenicians of Byblos, or even the Greeks of Naucratis, who may have indirectly played a role in the acceptance of Isis as a sea goddess. Under the Ptolemies, the cult of Isis knew an impulse and was diffused out of Egypt. The cult of Isis and Osiris was combined with the Ptolemaic propaganda at the beginning of the third century BC. Arsinoe II (316-270 BC) - queen of Egypt, daughter of Ptolemy I Soter and wife of her

[598] L'Hour 1984; Parker 1992
[599] Bourgeois 1973
[600] Not all Isiac sanctuaries in port context can be approached in the frame of this research, as it is a huge topic. Only relevant examples of sanctuaries in port cities quite documented by archaeology have been chosen.
[601] Bricault 2007
[602] Bricault 2006, p. 21-22-27

brother Ptolemy II – was associated to Isis. It seems that it was from this association[603] with Arsinoe II, promoter of the Ptolemaic thalassocracy, that Isis became the mistress of the sea that Bricault called "*Dame des flots*"[604]. The first document directly associating Isis with the sea is related to the Ptolemies. It comes from Nymphaion[605], in Crimea where a fresco was discovered in a chapel of Aphrodite located near the port. It depicts several drawings of ships and inscriptions related to the sea written in Greek. The name ΙΣΙΣ appears on one of the ships[606]. Later, we find evidence of this functional marine identity between Isis and Aphrodite (Aphrodite *Euploia*). A dedication of Delos (ID 2132) from the second half of the second century BC, expresses the recognition of a certain Andromachos, son of Phanomachos undoubtedly at the end of a happy maritime voyage.

This theological evolution is reflected in images of Isis. Since the Ptolemaic period, her appearance changed, she left her long and narrow tunic to wear a chiton and himation. Her head remained surmounted of her ancient pharaonic attributes that we call *basileion*: the horns of Hathor enclosing the solar disc surmounted by two high feathers as we can see on the gemstone from Alexandria (ID 251). Furthermore, the image of Isis with a swollen sail appeared. However, this attribute does not always allow it to be identified with certainty due to the absence of her specifically symbols such as the *sistrum* and the *basileion*. A series of documents, combining maritime and grain supply aspects, seem to put Isis in touch with the Annona. In some representations related to the Alexandrian fleet, Isis holds a cornucopia and/or a rudder that assimilates her to Fortuna-Tyché like on the coins of Antoninus Pius (ID 210) from AD 154-155. The female figure that stands between two ships is holding a grain and a rudder that could refer to Annona or Isis Fortuna or Tyché.

Isis became a protective deity not only for Egyptians. The cult of Isis as well as those of Serapis and other oriental deities penetrated the Greeks and Romans through the agency of Alexandrian and eastern (Nabateans and Syrians) merchants established in port cities like Delos and Puteoli. Many dedications, sculptures of Isis and Serapis and isiac cultic material were found all around the Mediterranean basin. It attests to the importance and the significant dissemination of their cult in the Roman Empire since this period. If we refer to Vitruvius[607], in his Chapter seven concerning the sites for public buildings, the temples of Isis and Serapis should have been built in the *emporium* of the city. That means that, when it was possible, the sanctuary of Isis may have been close to the sea. The closeness of the temples of Isis to the sea was namely linked to the religious

[603] Bricault 2006, p. 22-36
[604] Bricault 2006
[605] Bricault 2006, p. 22
[606] See Bricault 2006, p. 22-26 for the different interpretations about the identification of this ship.
[607] Vitruvius, *De Architectura*, I, 7.1

festival of *navigium Isidis* that happened every year in March the navigation. Apuleius[608] gave a detailed description, in the Book XI of his *Metamorphoses*, of the *Navigium Isidis* at Kenchreai. During this event, Isis left her temple, accompanied by her priests, her servants, the initiates and the faithful. Her statue was taken to the beach where a boat, dedicated to the goddess, loaded with offerings and ex-votos, goes to sea as we can see in the following paintings (**Erreur ! Source du renvoi introuvable.**Figure 43). On the occasion of this festival, after having launched the ship into the water, people returned to the temple where they wished the prosperity of the Emperor, the Empire and the Roman people, as well as for the protection of mariners. The rest of the day was punctuated with games and processions[609].

Other rituals and ceremonies were played out in the sanctuaries of Isis[610]. They are known through the paintings of Pompeii[611] that show isiac priests who are performing the daily morning and evening rituals as it is described by Apuleius[612]. Purification rituals also took place in the isiac temples[613]. It was made with the "Nile water"[614]. The isiac cult was also a mystery cult and initiatory rituals took place in the sanctuaries. The rites included initiatory tests, taking place outside the public in secret, which lead to a birth to a new life. Finally, due to her healing attributions that we will study later, incubation was also practiced in the isiac sanctuaries.

Figure 43: Navigium Isidis in a painting from Ostia. Vatican Museum.

[608] Apuleius, *Metamorphoses,* book XI
[609] Witt 1997, see chapter XIII on the procession to the ship
[610] Dardaine 2008, p. 214-215
[611] Italie. Soprintendenza per i beni archeologici di Napoli e Caserta 1992
[612] Metarmophoses, XI, XX
[613] Dunand 1973a, p. 197
[614] See Wild 1981 for the question of the importance of water in the cultic worship of Isis and Serapis

5.3.2.2. The interest of this research

The goddess Isis has always intrigued scholars. She inspired many artists, like Lully[615] and freemasons by her mystery cults and initiatory rites[616]. Isis herself is a huge topic. Much has been written about her and the aim of this research does not consist in repeating what it has already been said. Most of the historical publications have focused on her depictions, her ceremonies[617], the epigraphic material or the artefacts related to her cult[618]. In the 1980's, Wild[619] tried to explore the known sanctuaries dedicated to Isis and Serapis from the Roman period but the study is brief and not exhaustive. Moreover, it needs to be updated by new archaeological discoveries.

Despite the great interest in Isis and the awareness that she was a primordial deity for mariners, attention has been rarely paid to her sanctuaries in port or maritime contexts. Issues related to their topographical position in portscapes, as well as their functions or the relationships to other deities has not been approached, except in the monograph on the sanctuary of Isis at the port of Belo[620] in southern Baetica. Except the sanctuaries of Baelo Claudia and Pompeii, the architectural study of the temples of Isis in the Roman world has not very progressed. The purpose of this case study is to attempt to understand the organisation of these sanctuaries and their link with port activities and port communities. Through the analysis of examples from a selection of sites, I will try to situate the sanctuaries of Isis in their Mediterranean port context and answer the following questions:

1. Did the Isiac sanctuaries in harbours follow a model? What was/were their function(s) in harbours?
2. What was the relationship between the cultic monuments and the broader port? How did they fit into the urban planning of the portscape?
3. What assessment can we make about the link between architecture, liturgy and maritime activities and port communities?

[615] Quinault, P. 1785. *Isis*, tragédie; musique de Lully. Paris, France: Bureau de la "Petite Bibliothèque des Théatres." *Isis* is a lyric tragedy in five acts by Philippe Quinault, music by Jean-Baptiste Lully, represented for the first time in Saint-Germain-en-Laye on January 5, 1677.
[616] Ebeling et al. 2018
[617] Beaurin 2013
[618] Tran 1964; Tran Tam Tinh 1972; Dunand 1973a; 1973b; Bricault 2000; Dunand 2000; Bricault and Leclant 2005; Bricault 2006; 2010a
[619] Wild 1984
[620] Dardaine 2008

5.3.2.3. Italy

5.3.2.3.1. Puteoli

Puteoli seems to have played an important role in the insertion of the cult of Isis and Serapis in Italy. The penetration of Eastern cults was linked to the commercial history of this city of the second century BC like Delos. Puteoli had indeed the second place in the pan-Mediterranean commerce in this period[621]. Lucilius called Puteoli "*Delum minorem*" (the "little Delos") [622]. After her destruction by pirates in 69 BC, Delos lost her first position and her importance[623]. This event allowed to Puteoli to develop and to become the main *emporium* of the Mediterranean until the construction of Portus in the first century AD. In this period, before the port of Claudius was built, it was mainly by Puteoli that the Egyptian wheat as well as luxury goods and papyrus came[624]. Egyptian and Syrian merchants who established trading posts, both commercial and religious establishments[625], brought their gods with them. Settled in Puteoli, foreign merchants congregated around their national gods. Foreign deities were also imported by Italian *negotiatores* who travelled to Egypt and the East[626].

Although the cult of Isis and Serapis is well attested at Puteoli on account of the discoveries of statues of Isis and Serapis, as well as Isiac material of the first century BC[627], their sanctuaries have not yet been found. The examination of four glass flasks of the Puteoli-Baiae series, dated to the third and the fourth century AD, may partially shed light on this question. On the flasks from Merida (ID 111) and at Prague (ID 100), Odemira (ID 102) and the Pilkington Museum (ID 101), the depiction of a front view of a distyle temple draws our attention. A similar statue of a male deity wearing a radiate crown stands at the entrance of the temple, next to a burning altar. He is holding a cornucopia in his left hand and a sacrificial bowl in his right hand for making libations on the altar next to him. On the Prague flask, a monumental staircase is associated to the inscription "ASCESV DOMNI"— that is *ascensus domini*: "the steps of the lord"[628]. This deity may be Serapis[629] as we know that he was a Sun god and was associated to Helios[630]. He is known under this form by other

[621] Tran Tam Tinh 1972
[622] Lucilius, *Sat.* Fragm. III, 89
[623] Dubois 1902b
[624] Cicero, in *Pro Rabirio* 14, evokes the goods that arrive in Puteoli
[625] Dubois 1902b, p. 42
[626] Martzavou 2010
[627] Dubois 1902b
[628] Popkin 2018
[629] Golvin 2009, p. 166 ; Ostrow 1979, p. 270 ; Dubois 1902b
[630] See the dedicatory inscriptions to Sarapis-Helios in Grandjean 1975, p. 58

documents such as on the coins of Dionysopolis[631] and Odessos[632]. A lamp that depicts a radiate figure was found in the room P3 of the sanctuary of Belo[633] that reminds the figures depicted on the series of vases.

The cult to Serapis is attested in Puteoli at least since the second century by the *lex parieti*[634]. This law, dated from 105 BC, mentions the construction and the repair of the walls in front of the temple by the magistrates. It consisted in opening a large door in the wall that was flanked by two *antae* (quadrangular pillar or pilaster, in the external arrangement of the Greek and Roman temples that ended the sidewalls of a sanctuary). According to the *lex parieti*, these *antae* faced the sea and were covered by a roof. These structures are perhaps represented in the flask of Merida (ID 111). It shows two pillars linked by a roof below the stairs conducting to a temple (of Serapis?).

Figure 44: Antae on the vase of Odemira.

[631] Howgego et al. 2007, p. 111
[632] Tran Tam Tinh 1972, p. 16; Howgego et al. 2007, p. 111
[633] Dardaine 2008, p. 51, fig. 2
[634] *CIL* 10, 01781 (p 1009) = *CIL* 10, 01793 = *CIL* 01, 00698 (p 839, 936)

On a ship-shaped lamp[635] found at Puteoli, Serapis carries a rudder and he is associated to Isis and the Dioscuri on horses[636]. Dioscuri were often associated to Isis and Serapis as they were also deities who protected sailors. A Delian inscription (*CIG* 2302) attests that this association already existed among Greeks since the second century BC. On the Odemira flask, the pediment of the temple contains interesting ornamental motifs: a disk with plumes and two horns that could likely refer to Isiac symbols[637]. On the vase of Prague, a star is depicted in the centre of the pediment. The star was one of the attribute of Serapis and Isis[638]. On the Odemira flask, on the top of the pair of freestanding columns, male figures wear a spear accompanied by two stars (Dioscuri?). They stand next to another temple located at the end of the jetty. Its pediment has the same motifs than the temple with the radiate deity that let us suppose that it could be an Egyptian temple, perhaps the *isaeum* mentioned in the Prague flask: ISIV(M). The inscription is located at the same place, at the end of the jetty, next to the theatre. On the Merida flask, on the right, the term DIVM (that refers to a deity) is mentioned next to a structure that seems to be a tetrastyla temple on a three-quarter view. It stands on a podium and has a triangular pediment but any symbol helps us to identify it as a temple of Isis. It is located next to the term ENPORIVM. Is it the same temple than on the flask of Odemira? Since the glass flasks probably represent a view of the maritime façade of Puteoli as seen from the sea and the position of the two amphitheatres is known[639], it is possible that the temple to Serapis was somewhere in the quarter of the amphitheatre, theatre and close to the jetty[640].

[635] Picard 1962 ; Kater-Sibbes 1973, p. 96, n 523
[636] Dubois 1902, p. 53-54
[637] Tran Tam Tinh 1972
[638] Veymiers 2012
[639] Zevi 1993
[640] See the synthesis

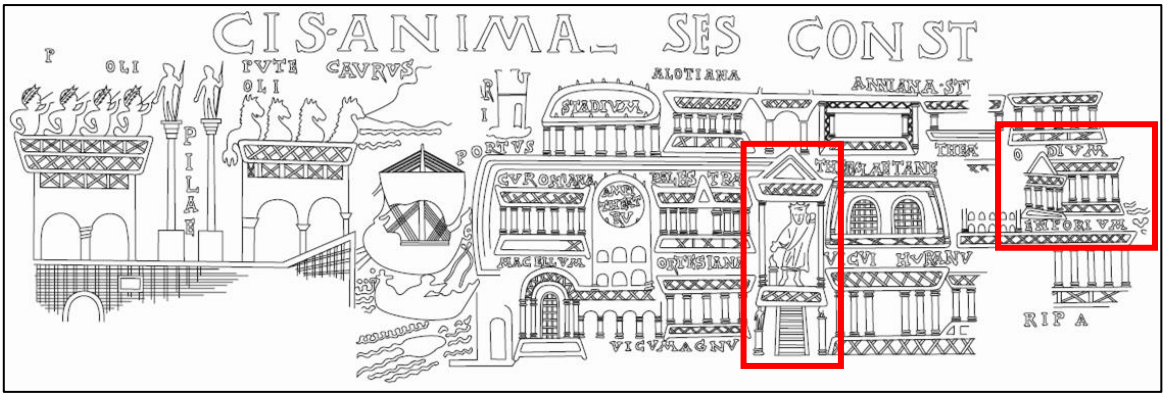


Figure 45: Vase of Merida (ID 111)

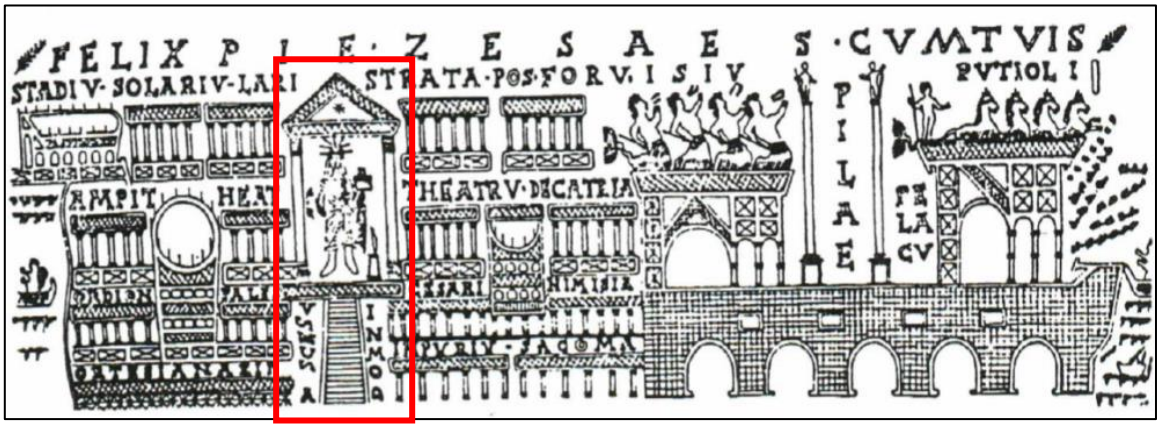


Figure 46: Vase of Prague (ID 100)

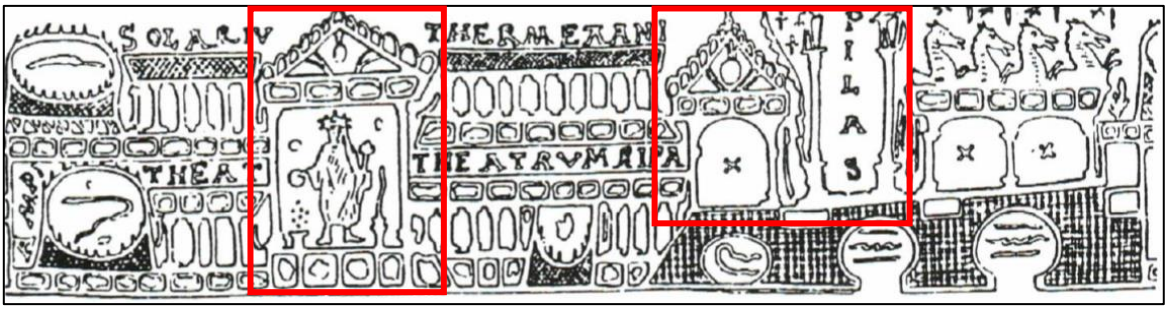


Figure 47: Vase of Odemira (ID 102)

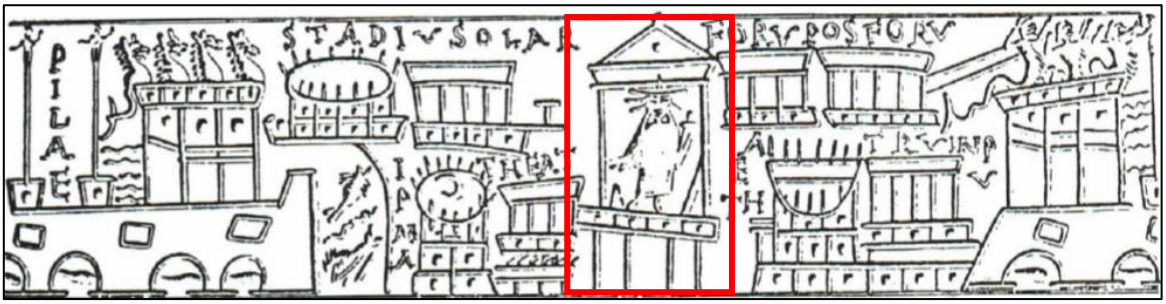


Figure 48: Vase of the Pilkington Museum (ID 101)

Figure 49: Map of Puteoli (after Camodeca and Sirago 1980).

5.3.2.3.2. Pompeii

Pompeii was a port city but its harbour has not been identified with certainty[641]. It has been located for a long time at the *Porta Marina* due to the presence of *navalia* and mooring stones[642] that must have actually corresponded to the military port. As for the commercial port, it must have been at *Porta di Stabia* (to the south), at Moregine, to the mouth of the Sarno as it was attested by the literary sources[643] that indicate that a lagoon port existed at Pompeii. The discovery of Sulpicii archive found at nearby Moregine[644] comes to reinforce that an *emporium* had to be located there.

[641] Flohr and Wilson 2017, p. 13
[642] Curti 2005
[643] Strabo V 4, 8; Liv. IX 38, 2; Plin. *N.H.* III 62; Stat. *Silv*. I 2.265; Flor. I 11, 6 ; Columelle *De re rustica* X 135
[644] Flohr and Wilson 2017, p. 116

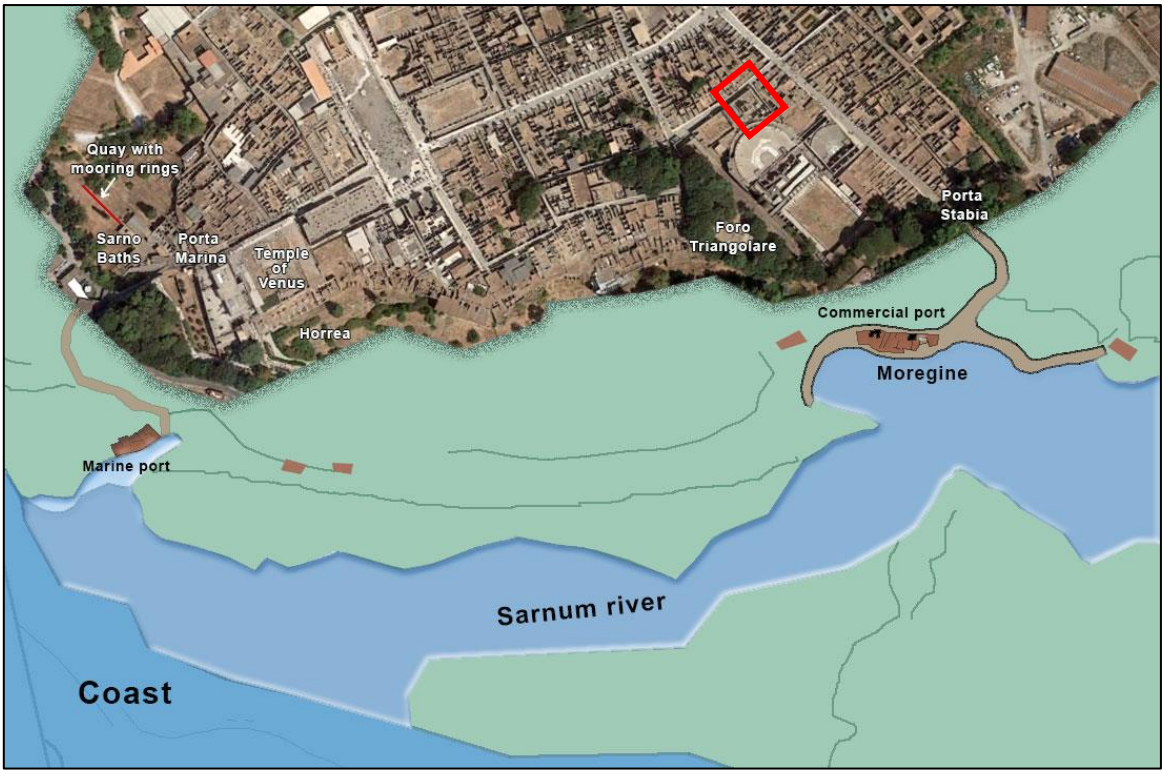


Figure 50: Hypothesis of the location of the commercial port of Pompeii close to the Porta di Stabia[645].

The Pompeian temple to Isis with its ornament and liturgical material[646] is one of the best examples of an Isiac cult building from the Roman world due to its exceptional preservation. A primitive temple of Isis was built in the second century BC, contemporary with the *Serapaeum* of Puteoli. An inscription (*CIL* X, 846) set above the entrance to the temple tells us that it was restored after an earthquake in 62 AD through a private benefaction by Numerius Popidius Cesinus.

The temple of Isis had a particular location in Pompeii. It was located in an intermediate position as it stands next to the triangular forum and the temple of Asklepios, behind the theatre and near the *Porta di Stabia*, so near the sea (about 200 meters from the gate so about three minutes' walk). This location should have allowed easy access to it by travellers arriving by boat, perhaps from the supposed commercial port of Pompeii at Moregine. The temple of Isis was easily accessible via *Via Stabiana* (*cardo maximus*) through a side entrance of the northeast corner. Located within the city walls, the temple of Isis was under the responsibility of the decurions and city

[645] https://www.romanports.org/en/articles/ports-in-focus/625-the-port-of-pompeii.html

[646] The isiac material has been published in the catalogue of the exhibition at the Museum of Naples in 1992 that showed the archaeological discoveries of Pompeii from the eighteenth century. See: Museo archeologico nazionale di Napoli. Italy. Soprintendenza archeologica per le province di Napoli e Caserta. 1992. *Alla ricerca di Iside: analisi, studi e restauri dell'Iseo pompeiano nel Museo di Napoli*. Ed. Stefano De Caro. Roma, Italie: ARTI.

magistrates of Pompeii that participated in the urban making decisions[647]. It came under the public sphere.

The sanctuary is quite small in size (31.06 x 23.56 m). Its shape must have adapted to the constraints of the theatre that was already built. It was divided into a large courtyard lined with porticoes on four sides with a central courtyard (Figure 51). The walls of the portico were decorated with frescoes representing in detail an isiac procession. The temple, almost square shape (7.30 x 6.14 m), is located at the centre of a closed space, hidden from the public view by high walls that allowed a more intimate meeting of initiates. It stands on a podium and is accessible by a central staircase of seven steps on the south side of the *cella*. It contains a *pronaos* of four columns in front. The *cella* is wider than deep. The eastern façade is flanked by two niches that should lodge statues. In the courtyard, there were annex spaces, necessary for the isiac worship: a *purgatorium* with the access to a water point, an altar and a base of statues of Harpocrates and Anubis. At the southeast corner of the courtyard, there was a set of four rooms. They probably served as a place for priests and for cooking. On the west side of the portico, there are two rooms: an *Ekklesiasterion* (meeting place, banquet of priests and faithful. This space was open on the porch gallery) and a *Sacrarium* (for initiatory ceremonies).

Figure 51: Sanctuary of Isis at Pompeii today (S. Mailleur, May 2014).

[647] Foss and Dobbins 2009 (June 2), p. 184

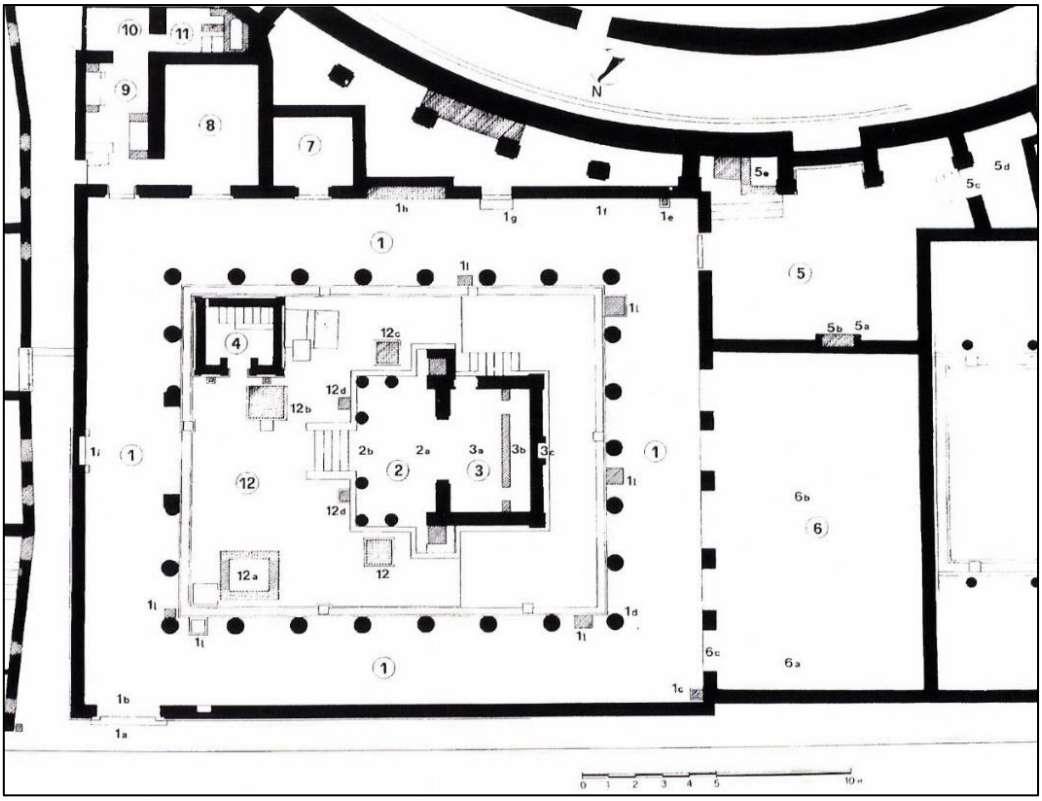


Figure 52: Sanctuary of Isis at Pompeii (Dardaine 2008, p. 187, fig. 93)

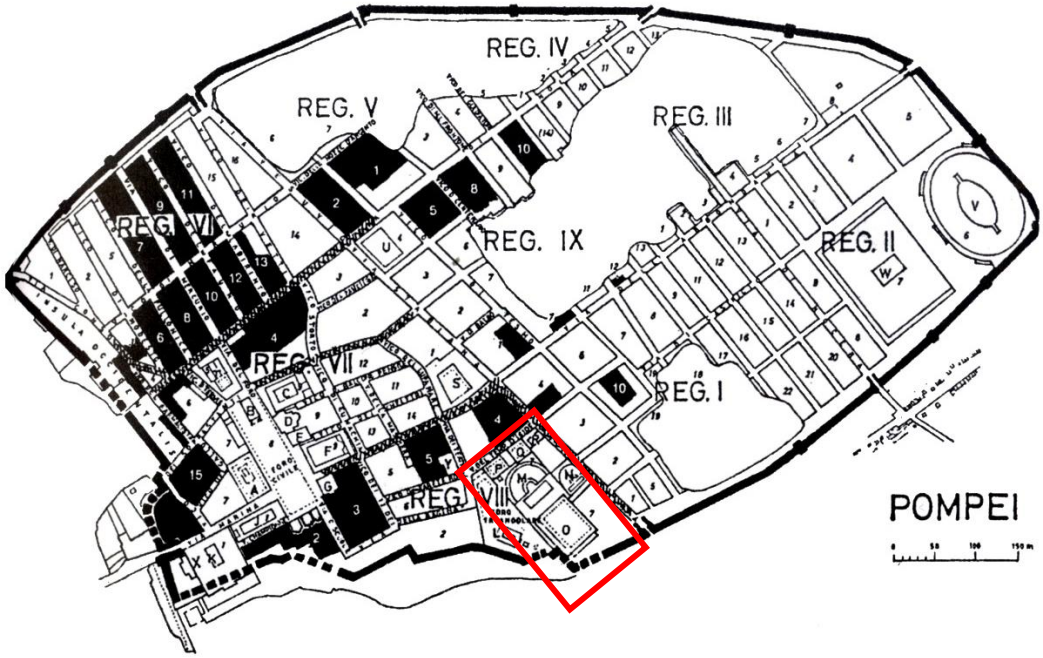


Figure 53: Map showing the location of the sanctuary in the city (Zanker 1998, p. 33, fig. 2)

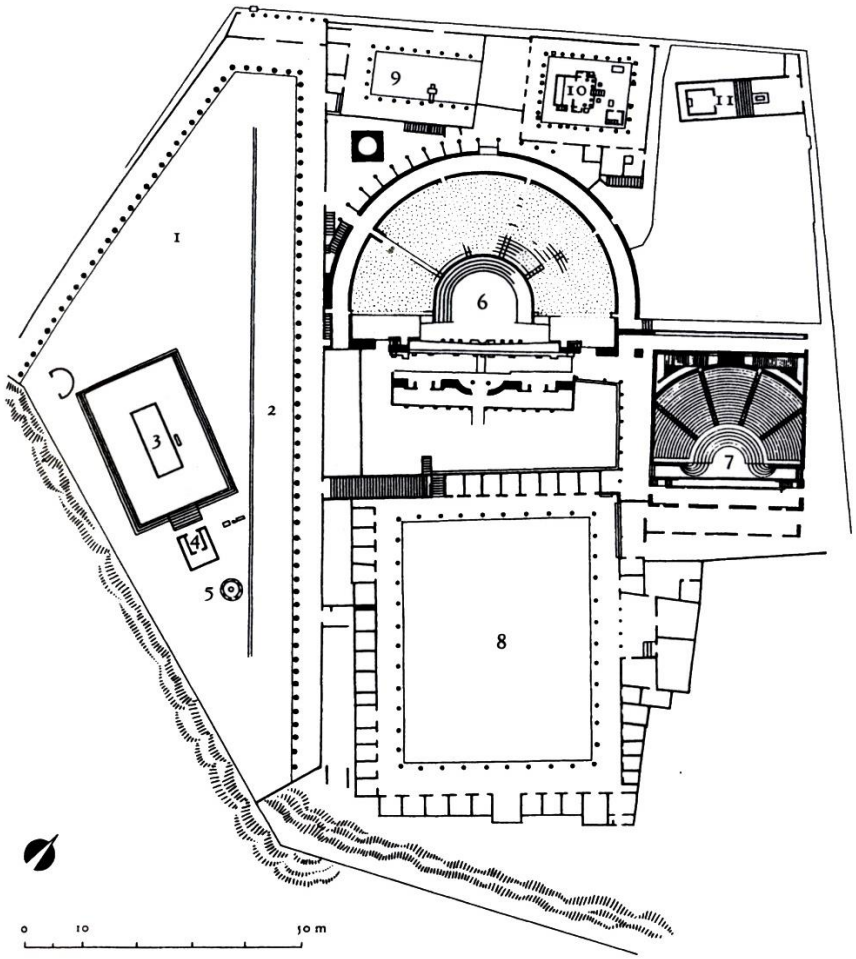


Figure 54: Plan showing the insertion of the temple of Isis in the theatre quarter (Zanker 1998, p. 33, fig. 2).

5.3.2.3.3. Cumae

In 1992, a sanctuary of Isis has been discovered, close to the maritime villas, in the seaside. According to Paget[648], the sanctuary was located in the hypothetical access channel of the harbour (Figure 55). However, the prospections undertaken by Keay[649] and his team has not revealed the location of the harbour that is still problematic until today. There is still debate about the precise position of the harbour at Cumae so it is difficult to study precisely the relationship with the port. The sanctuary was constructed in late Republic times, enlarged, and refurbished under Domitian. It was razed after AD 307. The attribution of this structure to Isis is confirmed by the discovery of isiac material nearby the structure. A small basalt sculpture of a headless priest holding a miniature shrine of Osiris was found. It is inscribed as dedication of the priest Naophoros. Another headless

[648] Paget 1968
[649] Keay 2012, p. 52, note 104

basalt statuette, that depicts a standing Isis, was discovered in the same sector. A sphinx was also found in the sanctuary and a statuette of Isis Fortuna was excavated from the necropolis.

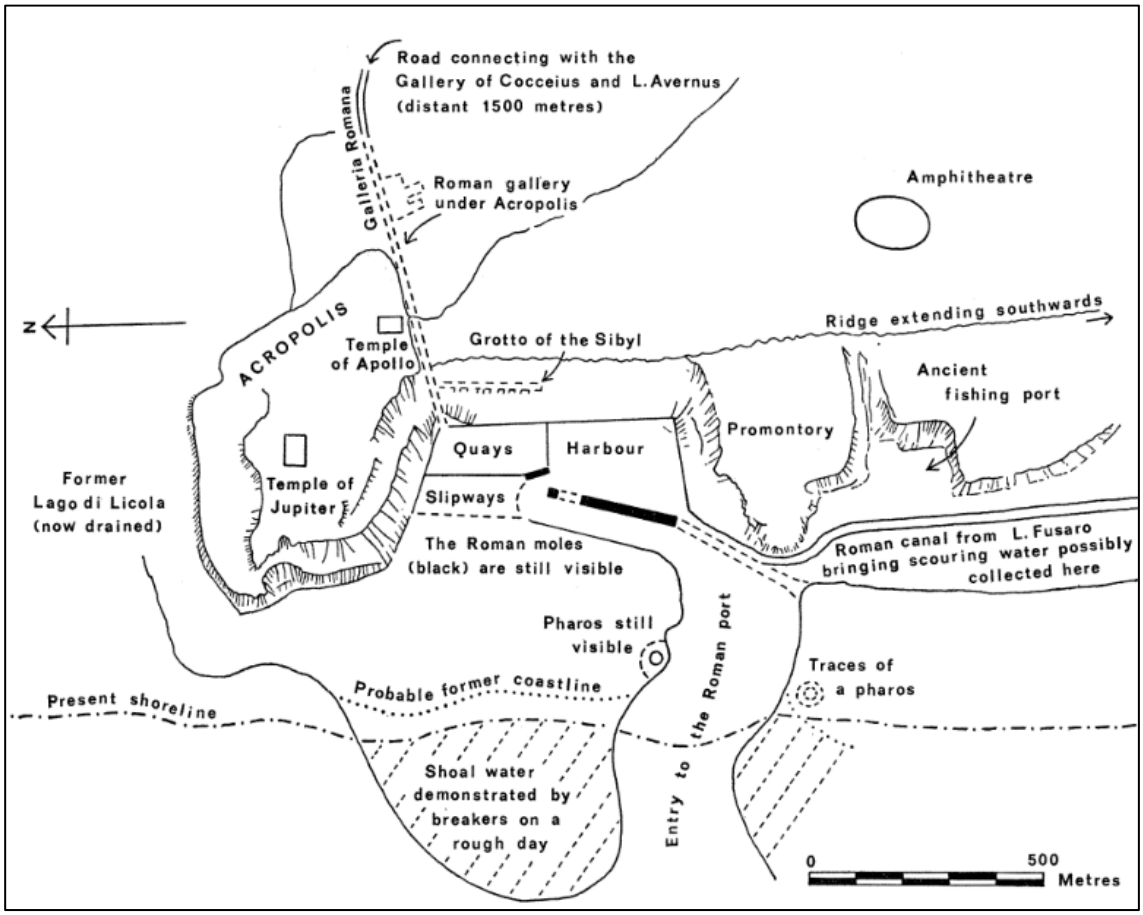


Figure 55: Map of the possible harbour under Agrippa (Paget 1968, fig. 7).

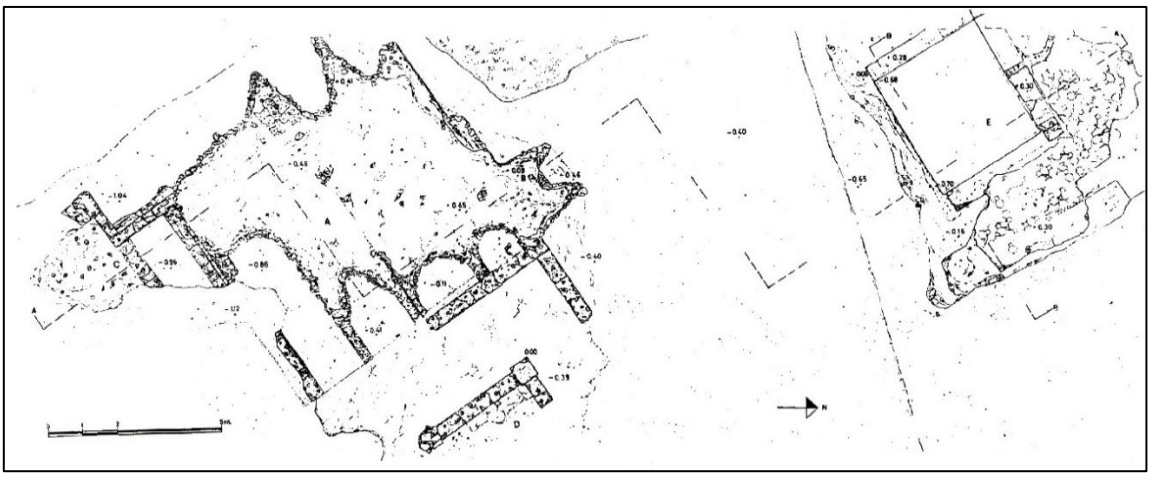


Figure 56: Plan of the sanctuary of Isis in Cuma (Caputo 1996, p. 175)

5.3.2.3.2. Portus and Ostia

A good synthesis has recently been published by Van Haeperen[650] in the sixth volume of the series of fascicles *Fana, templa, delubra* (FTD) that study the places of worship of ancient Italy. This volume, focused on Portus and Ostia, present an up to date state of the research on the Isiac cults by inventorying all published sources related to the precise place of cults.

As we have seen in the evidence from Puteoli, people from overseas bring with them their ancestral religious practices[651]. A similar phenomenon occurred in Ostia and Portus where Egyptian deities were well established due to the connections between the Alexandrian fleet and Portus-Ostia[652]. Isis and Serapis were publicly honored[653] in their own temple. Whether in Ostia or Portus, Isis and Serapis must have played an important role as they were considered as the patrons of the navigation and supply of cereals from Egypt as it is shown by the series of medallions (ID 040) struck in 190 AD under Commodus. They represent a scene of sacrifice in front of the lighthouse of Portus. Serapis is sailing at the end of a big merchant ship. The sacrifice scene refers probably to a sacrifice to Serapis to thank him for having lead safely the ships of the *Annona* from Africa to Portus. Serapis is also depicted on a sarcophagus (ID 073), from the second century, found in the Isola Sacra necropolis. It illustrates a ship approaching to a lighthouse with Serapis wearing a *calathos* and holding a rudder in his left hand and a bull with his right hand, ready for a sacrifice.

Ostia

At Ostia, there is much evidence for isiac worship[654]. Isiac material was found in 1860-1864 like a fragment of a basalt statuette representing a kneeling *pastophoros*, bearing an image of Isis, and a pilaster with a bas-relief decorated with palm tree and lotus leaf that could belong to a temple of Isis[655]. Epigraphic material refers to Isis. Several inscriptions, dating from the second and third century AD, refer to the priests of Isis *Ostiensis* (*CIL* XIV, 429; *CIL* XIV, 4672; *CIL* XIV, 352). The denomination *Ostiensis*, attached to the priestly title, ensures that it was a public worship[656]. A fragmentary inscription on a travertine slab (*CIL* XIV, 4291) was also found in 1892 in the north of the *regio* I. It refers to an authorisation by one or several magistrates to build *tabernae* that could have belonged to the sanctuary of Isis. This discovery let us supposed that the *iseum* could have been

[650] Van Haeperen 2019a
[651] Terpstra 2013, p. 122
[652] Keay 2010
[653] Van Haeperen 2019c; 2019d; 2019e
[654] Van Haeperen 2019f
[655] Paschetto 1912, p. 402-403
[656] Meiggs 1973, p. 368-369; Steuernagel 2004, p. 92; Van Haeperen 2019e (August 2),

located near the left bank of the Tiber[657]. Furthermore, a small marble altar (*CIL* XIV, 21) to Isis was found on the bank of the Tiber, behind the Capitolium. Despite that attests the isiac cult in Ostia, the location of the *iseum* could not be determined with certainty as geophysical surveys conducted between 1996 and 2001 did not validate this hypothesis.

Portus

The place of worship of Isis in Portus, the so-called *Isaeum*, is atypical. It does not look like the other traditional isiac sanctuaries. Excavations conducted in 1975-1977 brought to light several structures organised around a trapezoidal courtyard with a portico. They revealed a large bath complex in the north while the southern complex was associated to Isis. Its identification as an *Isaeum*[658] comes from the discovery of a marble architrave found in 1959 on the south side of the Fossa Traiana on the northern edge of the Isola Sacra near the ancient coastline[659], along with other architectural fragments that may have belonged to the same construction. The inscription on the architrave (*AE* 1968, 86) records the restoration of a temple to Isis in AD 376-7 by the emperors Valentinian, Valens and Gratian. Associated with this architectural complex was a second century AD basanite statue portraying a female figure, wrapped in drapery which was found in Fossa Traiana. She resembles the Isis *Pelagia*[660]. She was accompanied by another statue of the snake *Agathodaimon*[661]. For Van Haeperen[662], this architectural complex was may have formed part of the seat of a *collegium* or association related to either the temple of Isis, which would have been in the immediate vicinity, or to the worship of this deity (without a direct topographical link with the temple). Two other inscriptions (*CIL* XIV, 18 and 19), dating from the late second or third century, were also found at Portus, although their findspots are not known. Both inscriptions mention a *megarum* that must have been an underground initiation room[663], while one of them records its restoration by a priest of Isis and by the other *Isiaci*. In the third century, this same *magarum* was enlarged by Calventia Severina and Aurelia Severa that suggests that this place must have had a certain importance.

[657] Paschetto 1912, p. 401-402 ; Floriani Squarciapino 1962, p. 27-28
[658] Bricault 2006 ; Steuernagel 2009 ; Chastagnol 1969 ; Lauro 1993
[659] Van Haeperen 2019g ; Keay 2010 ; Meiggs 1973, p. 593
[660] Van Haeperen 2019g
[661] Isis and Serapis are often associated to the snake *Agathodaimon* like in Ampurias and on a Delian relief found in the *Sarapeion* C.
[662] Van Haeperen 2019g
[663] Beaurin 2013, p. 275-276

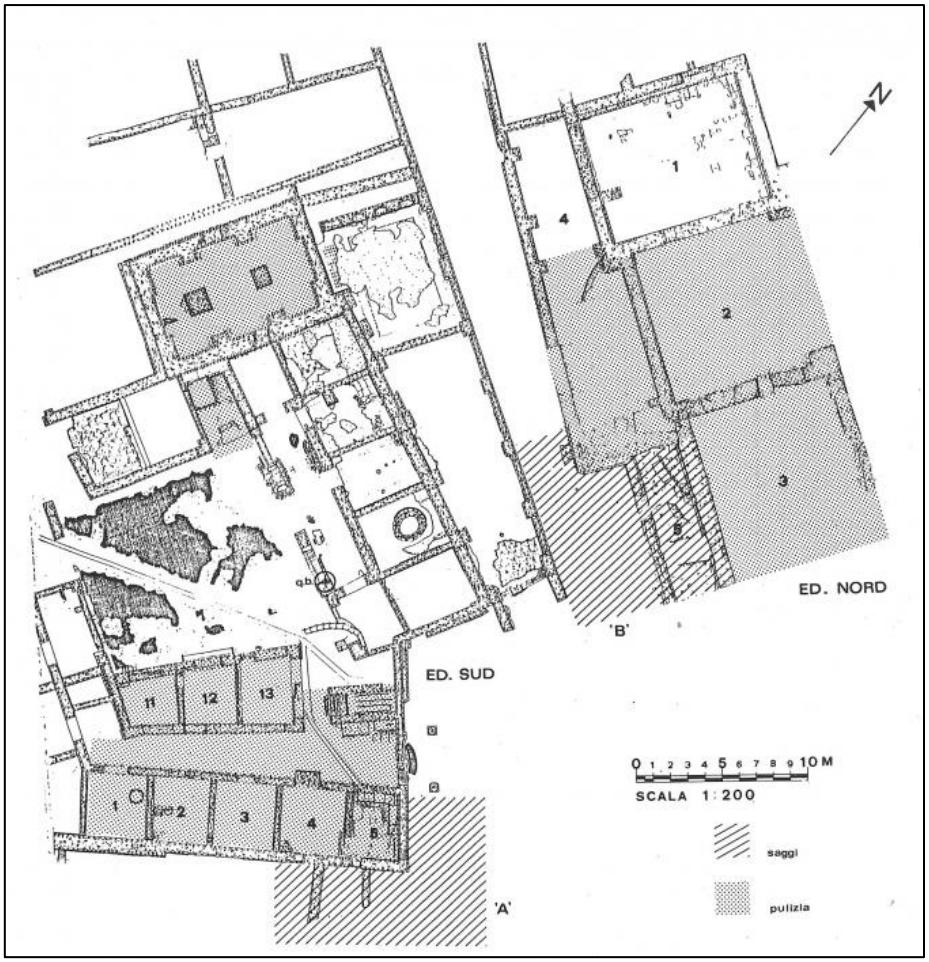


Figure 57: Plan of the associative building dedicated to the worship of Isis (Lauro 1993, p. 171, fig. 6)

5.5.2.4. Greece

5.3.2.4.1. Delos

In the Hellenistic period, Delos became a busy commercial port, and many foreigners, Italians, Egyptians and Orientals, settled there, bringing with them their gods, like in Puteoli. The Alexandrian community was very present and influential in Delos and their cults would have grown in importance. The Isiac cults settled in Delos from the third century BC[664] until the first century. It is in Delos that there is the richest documentation concerning the Isiac cults in Greece[665]. After the sack of Mithridates (88 BC) and pirates (69 BC), the island was gradually abandoned, which led to an economic decline. Religious life was also impacted. In Delos, we count no less than three *Sarapieia* at the beginning of the second century BC. Two of them were private while the *sarapieion* C was a

[664] Roussel 1915
[665] Martzavou 2010

public sanctuary in which there was the *iseion*. The *sarapieion* C was the official sanctuary of Alexandrian deities in Delos and played a primordial role in the first religious contact of the Romans with Isis[666]. Delos played an important role in the distribution of the Isiac cult in the Mediterranean.

The *Sarapieia* of Delos were excavated mainly between 1909 and 1911. The numerous inscriptions discovered were published by Roussel[667]. Later, Bruneau[668] published the *dromos* of the temple C of the *sarapieion* C. Finally, the study of the *sarapeia* are being reexamined since 1990's and were published more recently by Siard[669]. The *sarapieion* C (Figure 58) was a large architectural complex mixing Egyptian traditions (presence of a *dromos* borded by sphinx) and Greek style (the temple and the statue of Isis are typically Greek). Standing on the "terrace of the foreign gods", the sanctuary had a dominant position in the city, easily accessible from the harbour. We do not know when the first *iseion* was built but we know that around 220 BC, an *iseion* already existed and that the *sarapieion* C was already functioning in 215 BC[670]. We also know that the Athenian people dedicated a monumental statue of Isis[671] in 128-27 BC that was in the *cella* of the Doric temple H[672]. Located at the southern end of the esplanade and led by the alley D lined with sphinx and masonry altars, the building C is raised identification problems. Vallois and Bruneau considered that it was a temple (Isis for Bruneau[673]). They dated it at the beginning of the second century BC after the inventories of offerings (ID 1416 and 1417), written in 157-6 and 156-5, and dressed by Athenian administrators. These texts mentioned several constructions in the sector of the *dromos* (identified in the alley D): a temple of Isis and a *metroon*. It is hard to know where the *iseion* and *metroon* mentioned by the textual sources were located. However, Siard's mission revealed the hydraulic character of building C that she identified as a *hydreion* (ID 2617-2618-2619-2620). The presence of several medical ex-votos[674] suggests that incubation was performed in the *sarapieion* C. The sarapieion of Delos must have had a healing function.

[666] Beaurin 2013, p. 28
[667] Roussel 1915
[668] Bruneau 1980
[669] Siard 2003; 2007; 2009
[670] Dunand 1973b, p. 83-115
[671] The dedication was inscribed on marble slabs. See *BCH* VI p. 334 and *BCH* p. 130, note 1
[672] Roussel 1915, p. 61-65 and 134
[673] Bruneau 1980, p. 171-172
[674] For example, votive eyes (*ID* 1417)

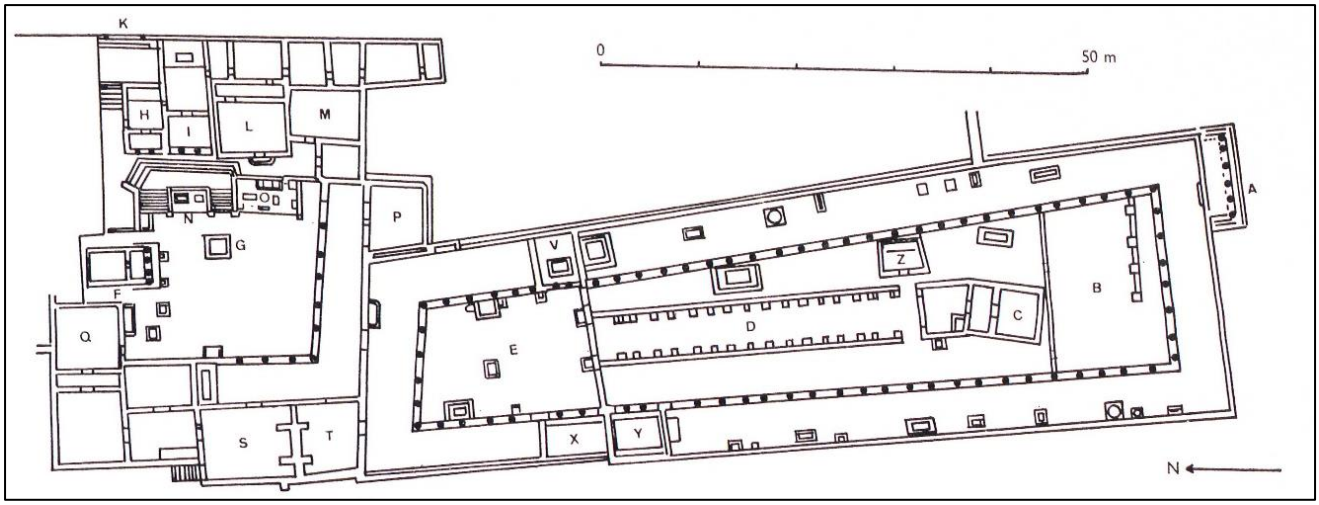
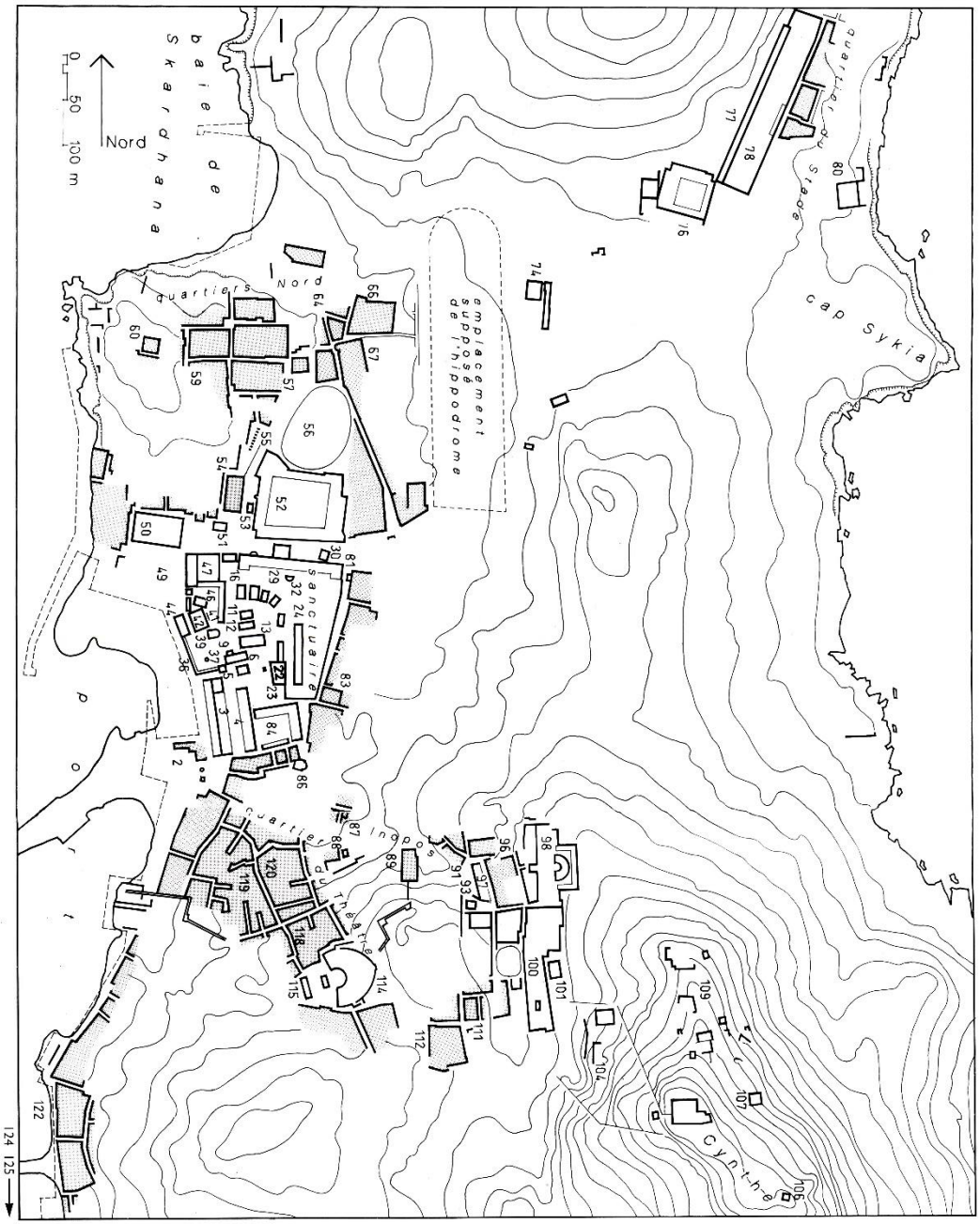


Figure 58: Sarapieion C at Delos (Dunand 1973b, p. 88)

Figure 59: Temple of Isis at Delos now (S. Mailleur, May 2012)



Plan de situation des monuments

Pour chaque édifice mentionné dans cet ouvrage on a conservé le numéro qui lui a été attribué dans le *Guide de Délos*, École française d'Athènes, Sites et monuments I (3e éd. 1983). Dessin N. Bresch.

1 Port
2 Agora des Compétaliastes (ou des Hermaïstes)
3 Portique de Philippe V de Macédoine
4 Portique sud
5 Propylées
6 Oikos des Naxiens
9 Colosse des Naxiens
11 Temple d'Apollon dit «Pômos Naos»
12 Temple d'Apollon dit «Temple des Athéniens»
13 Temple d'Apollon dit «Grand Temple»
16 Trésor 5
22 Prytanée
23 Autel de Zeus Poleus
24 «Monument des Taureaux»
29 Portique d'Antigone Gonatas
30 Fontaine Minoé
32 Thékè des Vierges
36 Hyperboréennes
Stoa des Naxiens
37 Palmier de Nicias
39 «Monument à abside», sans doute le Kératôn abritant l'autel de cornes.
41 Tombeau des Vierges Hyperboréennes
42 Sans doute le Pythion, temple dédié à l'Apollon de Delphes
44 Monument aux hexagones
46 Artémision
47 Ekklésiasterion
49 Agora de Théophrastos
50 Salle hypostyle
51 Dôdékathéon, sanctuaire des Douze dieux
52 Agora des Italiens
53 Létoon, temple de Léto
54 Monument de granit
55 Terrasse des Lions
56 Lac sacré
57 Établissement des Posidoniastes de Bérytos (Beyrouth)
59 Îlots d'habitation du Quartier nord
60 Maison de la colline
64 Maison du lac
66 Palestre de granit
67 Palestre du lac
74 Archégésion, sanctuaire de l'Archégète
76 Gymnase
77 Xyste
78 Stade
80 Synagogue
81 Chapelle de Dionysos
83 Maison de Kerdon
84 Agora des Déliens ou Agora tétragone
86 Basilique de Saint-Cyriaque
87 Maison aux Stucs
88 Aphrodision
89 Maison de l'Hermès
91 Sarapiéion A
93 Samothrakéion
96 Sarapiéion B
97 Réservoir inférieur de l'Inopos
98 Sanctuaire des dieux syriens
100 Sarapiéion C
101 Héraïon
104 Antre du Cynthe, sanctuaire d'Héraclès
106 Sanctuaire de Zeus Hypsistos
107 Sanctuaire des dieux d'Ascalon
109 Treize sanctuaires septentrionaux du Cynthe
111 Maison des dauphins
112 Maison des masques
114 Théâtre
115 Citerne du théâtre
118 Maison du trident
119 Maison de Cléopatre et Dioscouridès
120 Maison du Dionysos
122 Magasin à la baignoire
Hors plan, au sud, près de la baie de Fourni:
124 Maison de Fourni
125 Asclépiéion

Figure 60: Map of Delos (Farnoux et al. 1996, p. 18-19)

5.3.2.4.2. Kenchreai

Situated at a natural crossroads between the eastern provinces and Italy, between the Peloponnese and central Greece, Roman Kenchreai, one of the two harbours of Corinth in the Isthmus, was a major node of trade, travel, and communication. Our knowledge of the isiac presence at Corinth and its two harbours of Kenchreai and Lechaion is very fragmented. The question of the presence and the location of the sanctuary of Isis in Kenchreai has been quite discussed and has been the subject of several interpretations.

A sanctuary of Isis in Kenchreai is mentioned in the literary sources like in the *Metamorphoses* of Apuleius[675], written in the second century. The final episode of the novel *The Golden Ass*, is located at Kenchreai, where the hero Lucius attends to the religious festival *Navigium Isidis*[676] and recovered his human form[677]. After that, he started his initiation in the temple of Isis. His text shows that he knows the region of Corinth, as well as the cult of Isis, which he describes with a certain realism[678]. However, the allusions to the isiac sanctuary are too vague to help us to better understand its appearance and location[679]. We face the same problem in the description of Kenchreai in the *Periegesis* of Pausanias (II, 2-3)[680], also written in the second century, in which he attests the presence of a sanctuary of Isis with a sanctuary of Asclepius.

Although the literary sources provide some interesting details, it is better to remain cautious with respect to the veracity of the texts and check other type of sources. Isis types are very popular in the coinage of Greece[681] during the second and the third century. It seems to reflect that Isis she must have played a central role in the religious life of Kenchreai. The series of coins of Corinth (ID 049 and 057) depicts a harbour in a semi-circular arrangement suggested by a long quay bordered by a colonnade. Two temples are represented at each extremity of the colonnade. On the left, there is a distyle temple represented frontally. A statue of a god stands at the entrance of this temple. On the right, the temple is shown in a three-quarters view. In the middle of the harbour stands a monumental statue of Neptune (ID 057) or Isis Pelagia (ID 049). This series of coins highlights the main protective deities of the city and the port, involved in maritime activities. They attest the popularity of the isiac cult in Greece and namely at Corinth in the second and the third century[682].

[675] Apuleius, *Metamorphoses* Book XI chap. VIII-XVI
[676] Veyne 1965, p. 248 ; Gasparini and Veymiers 2018, p. 47
[677] Apuleius, *Metamorphoses* Book XI chap. VIII-XVI
[678] Scranton et al. 1978, p. 72 ; Dardaine 2008, p. 166
[679] Veymiers 2014
[680] Hohlfelder 1970
[681] Bricault and Veymiers 2005
[682] Bricault and Veymiers 2005

Isiac activity is also attested by epigraphy and literary sources in this period. On the coin series of Neptune (ID 057), we can notice an interesting element on the left of the coin: a palm tree flanks the temple. Does it evoke Egypt? Is it a topographical indication of the location of an Egyptian temple? The palm tree is one of the components of the sanctuaries of Isis as evidenced by the paintings of Herculaneum (Figure 61). The excavations in Belo also revealed traces of date palm. Fragments of charred palms were found towards the altar of the annex room P3[683]. The fruits of the date palms of Hispania were not edible but were used as offerings to the gods, as Pliny (*N.H.* XIII, 9) indicated. The excavations showed that the priests of Belo burned dates during the ceremonies of Isis.

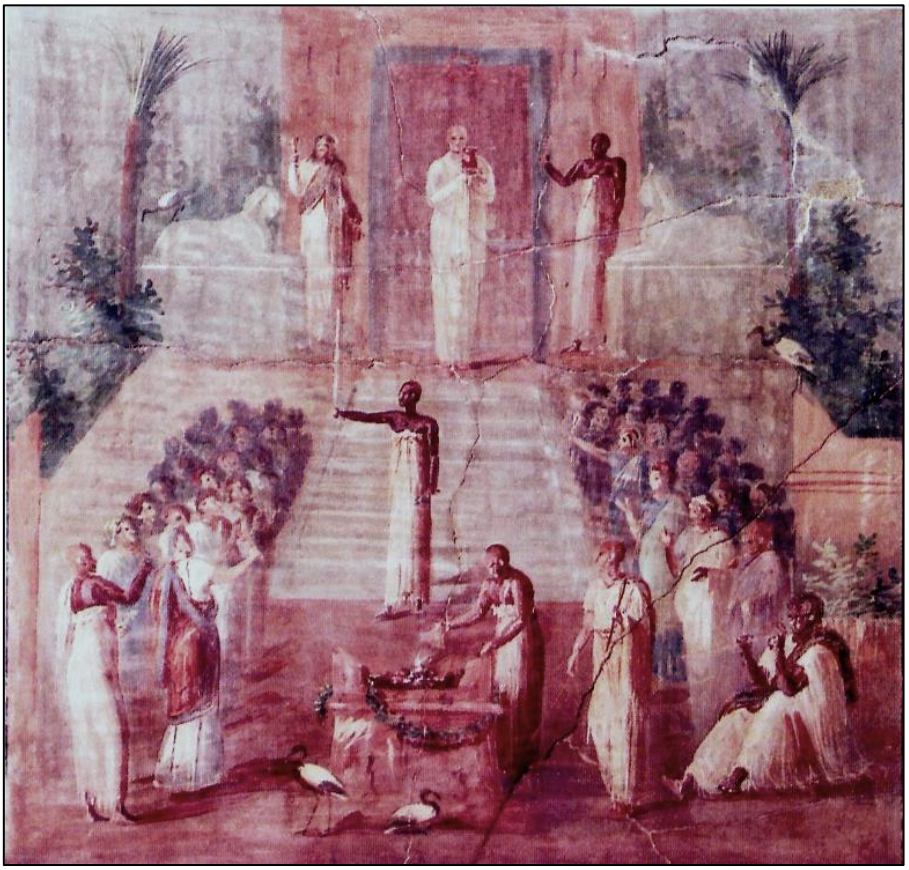


Figure 61: Painting of Herculaneum depicting an Isiac ceremony (Dardaine 2008, p. 170)

The excavations undertaken in 1962-1969 by the University of Chicago and Indiana University and the American School of Classical Studies at Athens uncovered dense public, commercial, and religious structures and artefacts at the harbour's north and south moles. The southwest end of the harbour was analysed in the Chapter V entitled *The harborside sanctuaries* of

[683] Dardaine 2008, p. 223, 224, 225 and 230

the monograph published by Scranton et al. in 1978[684]. It presents a complicated series of buildings difficult to interpret. According to Scranton, it would be the sanctuary of Isis, described by Pausanias. For him, at its foundation dating from around 100 AD, the sanctuary consisted of a *dromos* arranged at the beginning of the mole, bordering *horrea*, leads to a hall to go down in an unroofed courtyard before an apse covered by mosaic floors with a fountain centred in the apse. A door gave access to a room serving as a podium for a prostyle and distyle temple, open to the sea, whose entrance was marked by a pylon. The rectangular area connected to the fountain has been identified as the temple of Isis. This complex was destroyed because of an earthquake that struck Kenchreai in c. 365 AD[685]. *Horrea* were identified in the southern mole. If Scranton was right, the *isaeum* was located close to the commercial activities like in Pompeii, Belo and perhaps Puteoli.

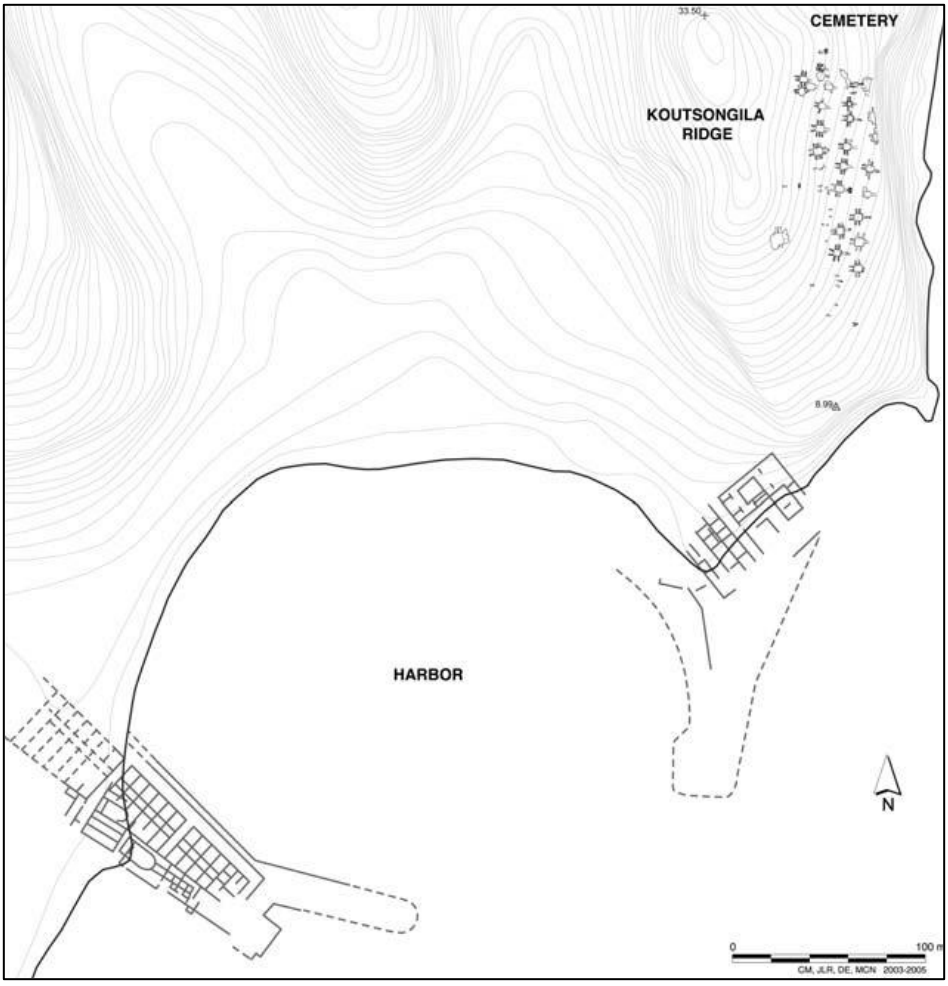


Figure 62: Plan of the excavations of Kenchreai (Rife 2011, p. 394)

[684] Scranton et al. 1978, p. 54-78
[685] Ibrahim et al. 1976, p. 268

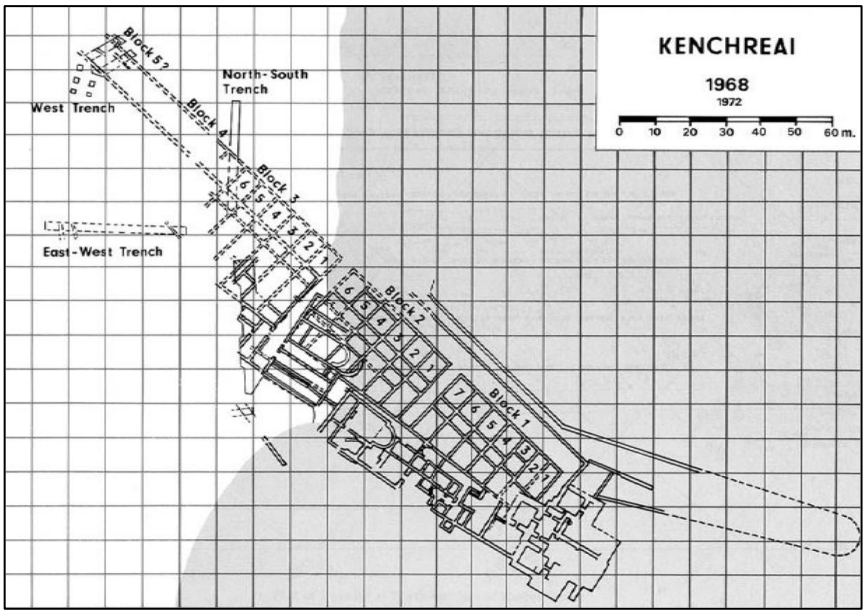


Figure 63: Structures on the south mole of the harbour (Rife 2011, p. 399)

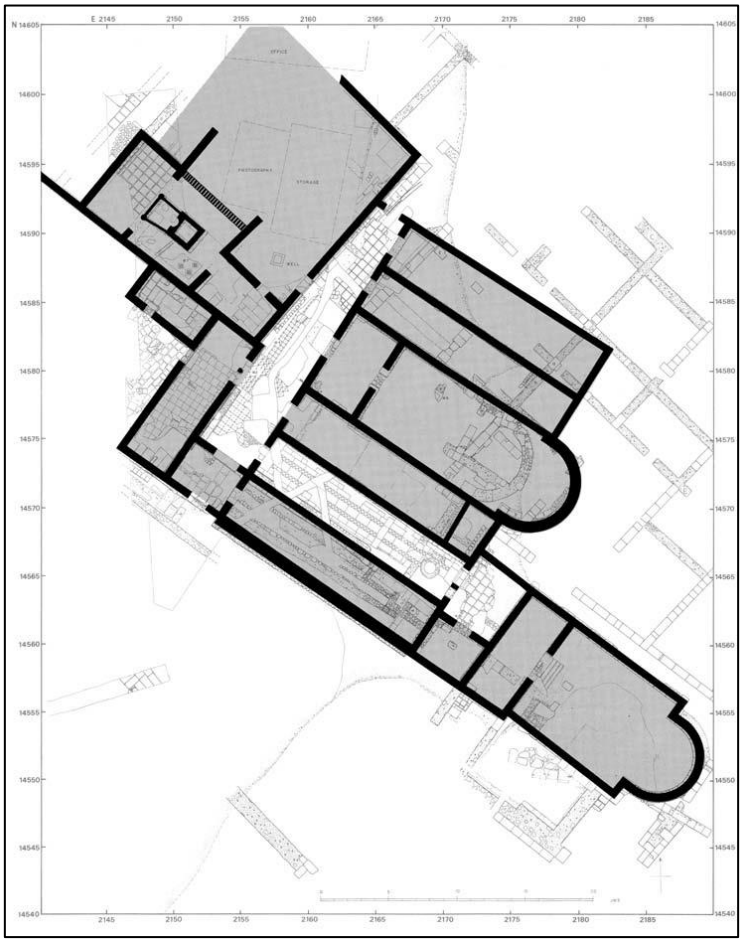


Figure 64: Christian basilica on the south mole (Rife 2011, p. 426)

During these excavations, around 120 glass panels in *opus sectile*[686] were found, in their boxes, in the "Fountain Court". Some of them depict scenes of harbour life [687]. On the panel XVI (ID 025), a temple is depicted on the left side. Two temples stand on each extremity of the arched mole. Behind the portico, in a closed structure, another temple is represented on a podium, next to a tholos. It may represent the three temples mentioned by Pausanias: the temple of Aphrodite and Asklepios at each extremity of mole and a closed sanctuary of Isis behind the walls (?).

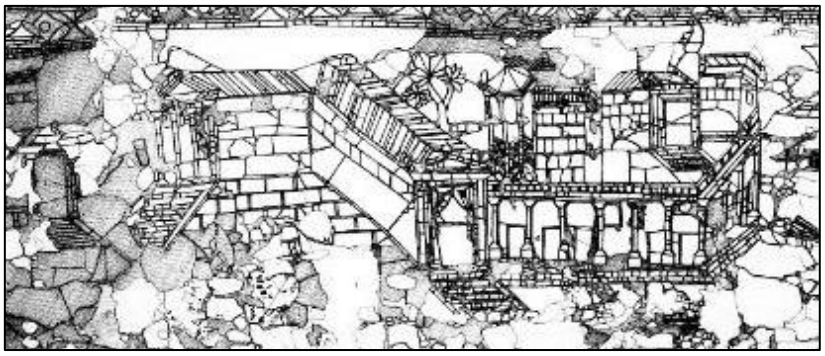


Figure 65: Mosaic of Kenchreai, panel XVII (ID 025)

Another piece of evidence could also confirm the presence of Isis at Kenchreai: the dedication (*SEG* XXVIII 387) to Isis *Orgia* ("Isis of the Mysteries") on a column found in the destruction debris over the Christian basilica[688] that we mentioned in the previous case study. Isis *Orgia* is also known by an altar of the third century, found in Salonica, which has an inscription dedicated to her (*IG* X 2, 2, n 103). The hymn of Kymé (*Kymé* 24-26) also refers to the goddess: "*I taught men initiations*". For Rothaus[689], this is not necessarily a dedication to the goddess but it may simply be the name of the dedicant as examples of the name *Orgius* are known (*CIL* 13 1992 and *CIL* 13 1462, 2608, 2609).

Rothaus[690] is also sceptical, quite rightly, about the interpretations of Scranton because of the lack of clear archaeological data. He identified a nymphaeum rather than an *iseum* because of the apsidal form and the presence of the fountain. He compares it with the nymphaeum of Baiae. For me, his argument is not enough. First, what was the interest to build a nymphaeum at the south extremity of the mole? The case of Baiae is exceptional as it was an imperial nymphaeum built by

[686] Ibrahim et al. 1976
[687] Rife 2011, p. 404
[688] Scranton et al. 1978, p. 73
[689] Rothaus 2000, p. 70
[690] Rothaus 2000, p. 69-83

the Emperor Claudius[691]. The harbour of Baiae was not as important as Kenchreai – but it had imperial connections. For me, it would be surprising to build a nymphaeum at this so important place in the harbour. For Rothaus, as Odyssean panels adorned the nymphaeum of Baiae, the panels found in the courtyard at Kenchreai were dedicated to a nymphaeum. In fact, we have seen in Chapter 4 several examples of port or Nilotic scenery in nymphaeum (or other rooms related to water) such as the mosaic of Palestrina (ID 030), the mosaic from the Capitol (ID 001) and the painting of San Giovanni and Paolo on the Caelian Hill in Rome (ID 180). However, at Pompeii, frescoes adorned the walls of the porticoes around the courtyard of the sanctuary of Isis. These panels could be suitable at the same time to an Egyptian cultic space and a nymphaeum. However, one detail draws my attention, c. 120 panels of very good artistic quality seem to represent a huge amount of money for a private nymphaeum located in a luxury residence in a harbour and perhaps it could indicate that it was rather a public funding (public fountain or sanctuary that had a public status?).

5.5.2.5. Spain

5.3.2.5.1. Baelo Claudia

The Isiac sanctuary of Baelo Claudia is well documented by the archaeological excavations that have been the subject of an interesting monograph published in 2008[692]. It is a big contribution to our understanding of the functioning of the sanctuaries of Isis and how her cult was disseminated around the Mediterranean. It was identified in 1983 as an Isiac sanctuary due to the presence of inscriptions. The *iseum* is datable from Nero[693]. Perhaps first infrastructures dated from the late Augustan period but out of Campania, Isiac buildings were not usual during the first decades of the Empire. Excavations revealed that first buildings from 10-20 AD were used until the middle of the first century AD, that perhaps belonged to a first sanctuary of Isis. On the riverbank, the *iseum* was built between 60 and 70 AD, according to the archaeological material found. The material found in the altar area located in the courtyard is dated before the third century AD. It appears that the sanctuary was abandoned around 250 AD probably because of an earthquake.

[691] Sciarelli 1983
[692] Dardaine 2008 ; Bricault 2010b
[693] Dardaine 2008

For Fincker[694], the sanctuary of Baelo Claudia has been built according to a precise plan, a normative program that corresponds to the imperatives of the Isiac cult, a cult of mysteries and initiations. We can notice similar elements peculiar to Isiac sanctuaries: enclosure, only entrance in the south from which we could access by means of a ramp or steps. Five specific spaces are typical in *isea*: porticoes, courtyard, temple, residence for priests and room for the initiatory rites. However, the architectural program of the *iseum* depended on the urbanistic constraints of the city in the second half of the first century AD. The techniques of building are the same than the other three temple of the Capitol and the *macellum*. The sanctuary measures 29.84 x 17.80 meters. It is accessible by an only one entrance in the south. Stairs at the entrance leaded to the temple surrounded by a rectangular enclosure that isolated it from the rest of the city. Two symmetrical square caissons that should have supported statues or sphinx flanked the entrance like on the late mosaic of Apamea[695] (ID 009). They can be compared to the sanctuary of Sabratha (piers?). Are they decorative or utilitarian? Similar towers appear in the mosaic of Palestrina[696] (ID 030). The entrance leads to a courtyard with portico with 14 columns with Attic bases and Corinthian capitals. The temple is adjacent to the northern portico. It stands on a podium with stairs at the entrance that leads to the *pronaos* and the *naos* (or *cella*). Within the enclosure, there was a courtyard surrounded by a portico, a temple and three rooms behind. The room P1 should have been a kitchen. The room P2 was perhaps a bedroom or a room for banquet (perhaps a *pastophorion*, or residence for priests). The room P3 seems to have had a religious vocation due to presence of an altar (room for initiations and mysteries?). In the courtyard, there was a rectangular basin that underlines the importance of water in Isiac cults. In front of the temple, there was a fireplace and an altar.

The position of the Isiac sanctuary of Baelo within the town was important strategic. The sanctuary was built on the terrace overlooking the forum in the eastern extension of the Capitol of the city. It stands next to the temples dedicated to the Capitoline triad and is located, at the same time, next to the so-called "colonnaded street" that leads to the sea. This sanctuary is in the meantime integrated into the public life of the city and easily reachable by people arriving from the sea in the harbour. The sanctuary of Isis was integrated in the orthogonal plan since the beginning of the first century. It was linked to the sea by the cardo 4 (the so called "rue à colonnes"). This sanctuary reflects the importance of the isiac community of Baelo as they got from the local authorities a strategical location of the *iseum*: next to the main gods of the city and accessible by mariners from the sea and foreign merchants.

[694] Dardaine 2008
[695] Balty 1970 ; Salido Dominguez and Neira Jimenez 2014 ; Balty and Balty 1977
[696] Croisille 2010, p. 31 ; Gullini 1956 ; Whitehouse 2001b, p. 70-132, fig. 20-23 ; Whitehouse 1976 ; Meyboom 1995 ; Guimier-Sorbets 2009, p. 648, 662 ; Dunbabin 1978, p. 49-51.

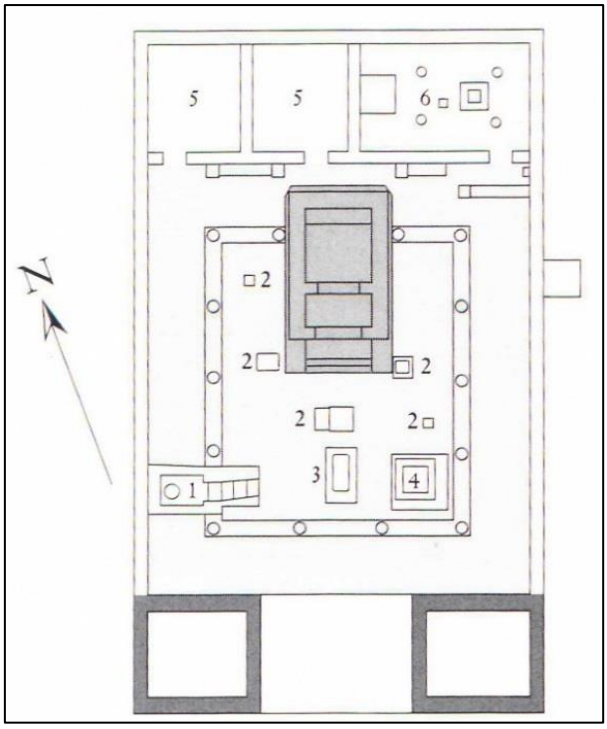


Figure 66: Sanctuary of Belo (Dardaine 2008, p. 144, fig. a)

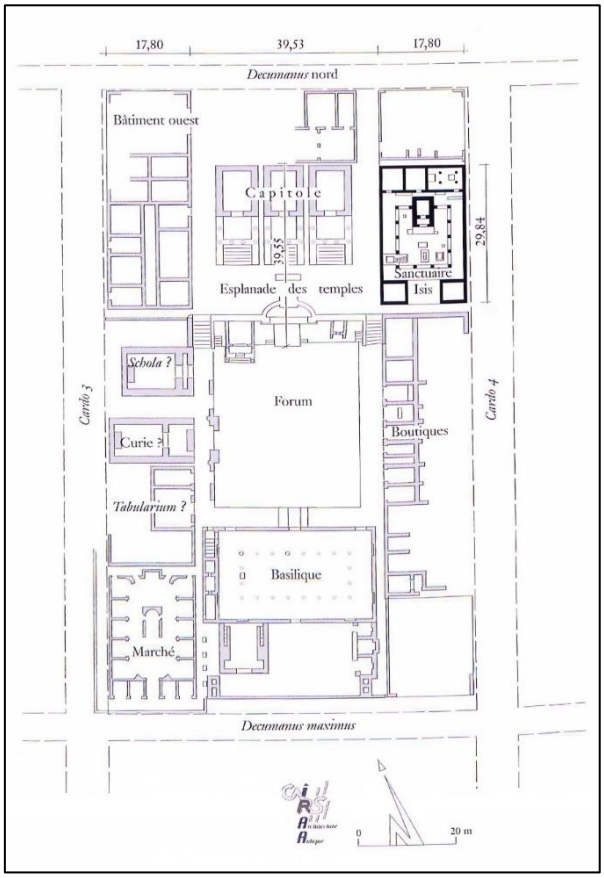


Figure 67: Map of the civic centre of Belo (Dardaine 2008, p. 5, fig. 4)

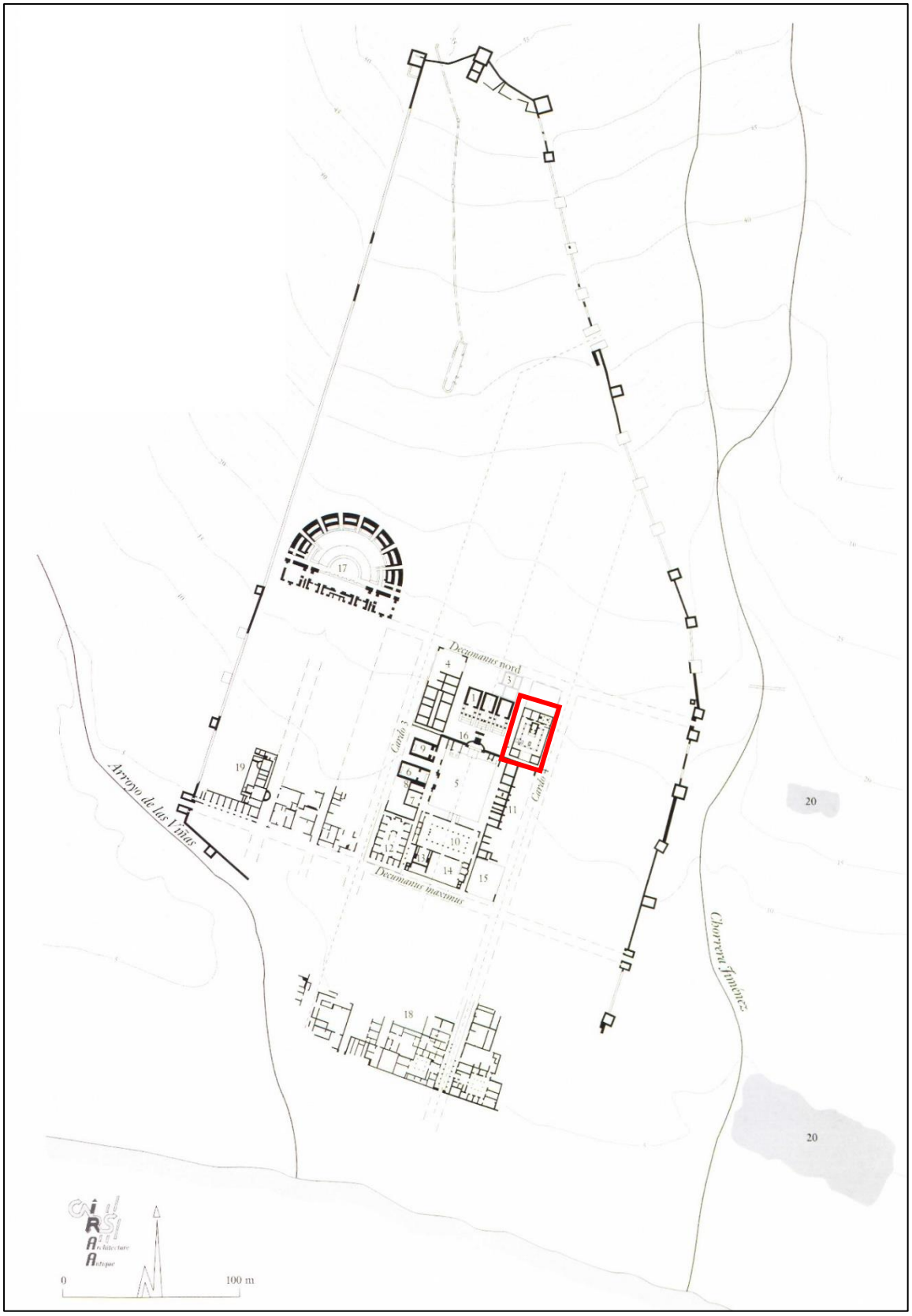


Figure 68: Map of Belo (Dardaine 2008, p. 3, fig. 2)

5.3.2.5.1. Emporiae

The sanctuary of Serapis and Isis at Emporiae[697] was the oldest in the Iberic Peninsula. It dates from the end of the second quarter of the first century BC, a period during which temples dedicated to Alexandrian deities were erected in the main Mediterranean ports. Its construction comes from the private initiative of the Alexandrian Numas (*AE* 1991, 1116). Its location is not integrated with the civic center of the city like Belo but it is located immediately to the right of the monumental entrance of the city on an elevated terrace, facing the sea. It was an enclosed space with a single opening at the northwest corner of the portico. It is located next to the temple of Asclepius, on the other side of the monumental entrance. Its plan is close to that of Pompeii and its dimensions are larger than Belo.

Statues of divinities related to the sanctuary were discovered as well as a dedication to Isis and Serapis (*IRC* III 15). For a long time one of the male statues has been identified as Asclepius but it is possible that it is actually Serapis. The identification of this statue has been the subject of several debates. For some it would be a Hellenistic copy of known statues of Asclepius, for others, it would be rather a syncretism of Asclepios with Serapis. The presence of the snake (*Agathos Daimon*) corresponds indeed to one of Asclepius's attributes but examples of the association of the snake with Isis and Serapis are known, notably in Portus where it is associated with a statue of Isis Pelagia[698]. The association of Isis and Serapis with Asclepios is quite common. We have seen many times that a certain number of sanctuaries of Serapis and Isis also had a curative function and that the practice of incubation was attested like in Delos.

Figure 69: Map of the location of the sanctuary in the city (Ruiz de Arbulo Bayona and Vivó 2008, fig. 64)

[697] Ruiz de Arbulo Bayona and Vivó 2008
[698] Van Haeperen 2019g

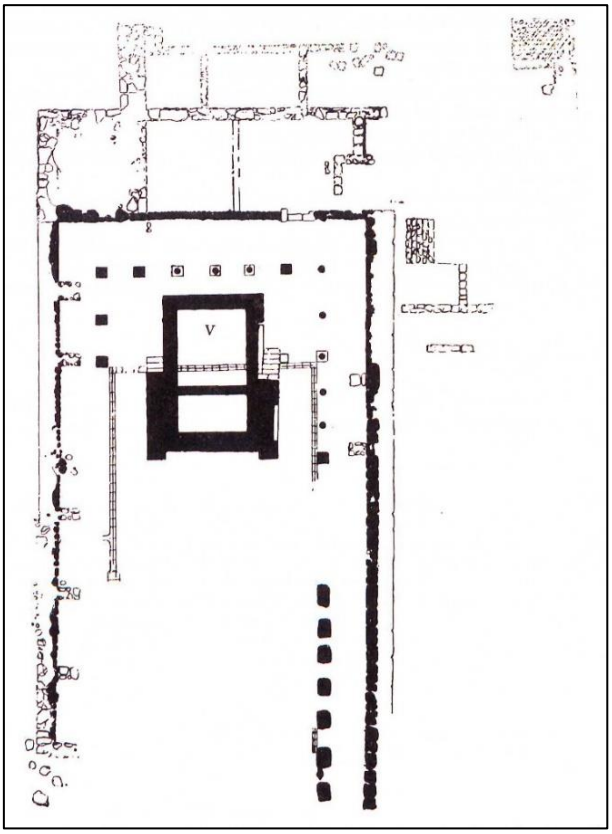


Figure 70: Plan of the sanctuary of Emporiae (Wild 1984, p. 1759, fig. 4)

5.5.2.6. Africa

5.3.2.6.1. Sabratha

Sabratha was an important port in Tripolitania. The maritime traffic was well developed and this city played an important role in the distribution of African goods in the Roman Empire. Sabratha had an office on the *Piazzale delle Corporazioni* at Ostia (*statio* 14) that testifies to its close relationship with Rome[699]. Like other port cities, Egyptian cults appeared early in Sabratha due to the presence of foreign merchants. The temple of Isis at Sabratha[700] is the best known and excavated in Roman Africa. It has been excavated since 1934. It was identified by means of an inscription (*IRT* 00008: ISIDI SAC/LIA/CA) and the discovery of depictions of Isiac deities. In 1950's, Pesce[701] published a monograph on the sanctuary of Isis at Sabratha.

[699] Grimal 1983, p. 243
[700] Dardaine 2008, p. 193-199
[701] Pesce 1953

An altar to Isis existed before Roman period in Sabratha and a first temple dedicated to her was built in the city under Augustus[702]. However, from the first century AD, a new temple was erected, on the seafront, at the north east of the theatre. The second sanctuary was built under Vespasian, embellished under Hadrian and was still active under Julian towards the middle of the fourth century AD[703]. The temple is the largest in the Mediterranean, and twice the size of the temple at Belo for example[704]. Unlike other examples of *isaea*, that at Sabratha was located far from the harbour, out of the city centre and far from the temple of Serapis. It was next to maritime baths. As we can observe in the following plan (Figure 72) this temple faces away from the city centre and its religious buildings. It is directly opened to the sea and welcome the travellers arriving by boat. It is arranged parallel to the coast with its monumental entrance oriented to the east. The large size of the sanctuary may be explained by a large flow of travellers and Isiac believers who must have frequented the sanctuary on their arrival and before leaving. This large size, must also probably be explained by the fact that there was no spatial constraint (like in Pompeii for example where buildings were already built) and may be by a significant maritime traffic related to port activities from Sabratha. The temple opened to the east by means of a monumental portico. The mariners who arrived from the sea could access to the sanctuary by a monumental staircase of seven steps. It was enclosed by a wall. A colonnade surrounded a courtyard on all four sides. Within it, there was a rectangular cistern, which was habitual in a sanctuary of Isis because water was necessary for the Isiac cult[705]. At the southwestern corner of the courtyard, there was an altar measuring 1.44 x 1.83 m. It was built from isodomic blocks. The entrance to the temple is high on a podium to the east that has seven steps leading to the *pronaos*. This staircase is in the axis of the *cella*. The temple is a tetrastyle peripteral with a prostyle facade. In the crypt (located under the cella), a statue of Isis, approximately full-scaled, was discovered with an inscription from the third century. Pesce[706] made the hypotheisis that there was an adyton where the rites of initiation would have taken place. On the western side of the peristyle, at the back of the temple, are seven annexes and a corridor. Their respective functions are not clear[707]. Compared to other sanctuaries, the number of annexed rooms is important. This is certainly explained by the large size of the sanctuary and also by the fact that, as the sanctuary was a little out of the way, it needed to live perhaps a minimum in self-sufficiency. In this respect, traces of ancient fishponds have been observed at the bottom of the sanctuary.

[702] Di Vita et al. 2005
[703] Pesce 1953
[704] Dardaine 2008
[705] Wild 1981
[706] Pesce 1953, p. 71
[707] Dardaine 2008, p. 194-197

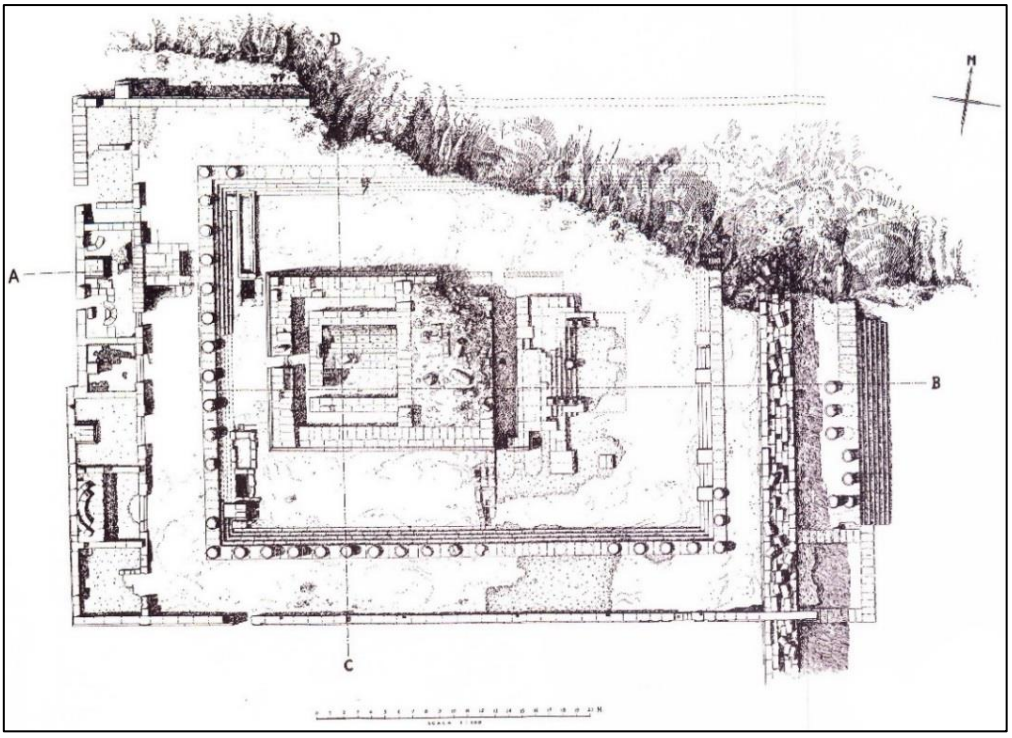


Figure 71: Plan location of the sanctuary of Isis at Sabratha (Wild 1984, fig. 41)

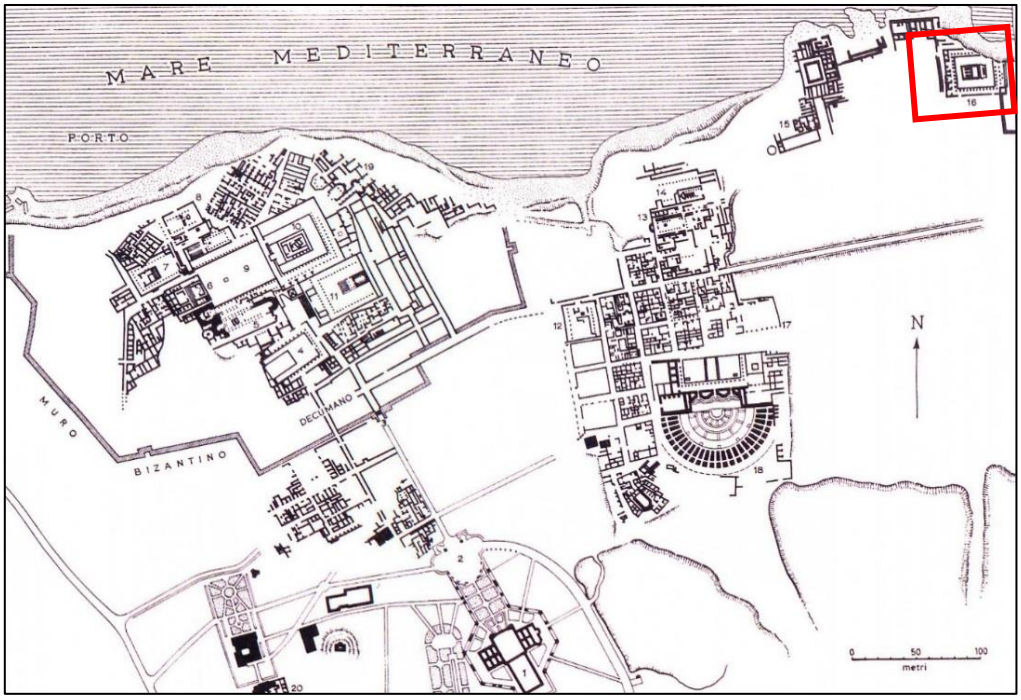


Figure 72: Location of the Isis sanctuary at Sabratha (Wild 1984, p. 1816, fig. 40)

5.3.3. Synthesis on the Isiac sanctuaries in port contexts

The sanctuaries of Isis in ports environment had a certain overall homogeneity that met the requirements of the Isis cults. The architecture of the temples of Isis had similarities regarding the essential elements to the isiac worship but are not really uniform. They had small variations in the annexed rooms, the location of the temple in relation to the courtyard and porticoes, their size etc. Their sizes could indeed vary, especially because of space constraints. For example, the sanctuary of Pompeii was smaller because monuments like the theater were already built. These temples seem to be part of a Mediterranean architectural style from the Hellenistic period diffused in the great ports of the Mediterranean. All the sanctuaries that I have evoked present common features. Portus seems to have been an exception as Isis was not worshiped in a usual *iseum*. She was honoured in a building that was the seat of an isiac association. It is possible that this building was a meeting place for the association or collegium of Isis worshippers, and that the actual temple was elsewhere at Portus.

In port contexts, Isiac sanctuaries were very important. Isis played a prophylactic role for sailors. This was testified by the numerous votive paintings of the castaways rescued by Isis Pelagia, exhibited in the temples of Isis[708], according to Juvenal[709] in the *Satires*, in the end of the first century and the beginning of the second century AD. *Iseia* were specifically located so as to be easily accessible from the sea at Belo, Pompeii and Sabratha. Throughout the examples, we have seen that, despite they were dedicated to a foreign deity, they were not marginal and they seem to have been integrated into the civic life of the community within which they were located. Most of them depended on public cults as at Pompeii, Belo, Delos and Portus. By their significant topographical choice, they reflect the integration of foreign communities within the communities of port cities as well as the insertion of their cults among local communities. In Pompeii, the sanctuary had a particular location between the civic centre (in the city walls, next to the triangular forum and the temple of Asklepios, behind the theatre) and near the sea (accessible from the *Porta di Stabia*). The location of the sanctuary of Isis at Belo is indicative of its religious and civic importance. The temple had a dominant position in the city, on the same level as the Capitoline gods protecting the city. We have seen that, in Belo, Isis was not considered as a foreign goddess but had been completely integrated in the civic centre. Its location is different from what Vitruvius recommends (near the

[708] Vermaseren 1962, p. 69-70
[709] Juvenal, *Satires* XII, 26-28

emporium)[710]. However, the *iseum* was on the other side of the *macellum* compared to the place of the forum[711]. In Sabratha and Pompeii (and perhaps Kenchreai?), the *iseum* was located near the warehouses related to maritime commerce. Located near the "Column Street", the sanctuary was easily accessible from the sea. In Emporiae, the *iseum* was not integrated with the civic center of the city like Belo or Pompeii but it was located immediately to the right of the monumental entrance of the city on an important topographical place (on an elevated terrace), facing the sea.

Iseia seem to have been multifunctional since, in some cases like Pompeii, Ampurias, Delos and perhaps Kenchreai according to Pausanias, they also had healing functions. They were close to the one of Asclepius and incubation was practiced due to the healing powers of these deities. Since the Hellenistic period, Isis was associated to Hygeia. She took her healing attributions for having brought Osiris back to life in the Egyptian mythology. In Delos, many ex-voto in the form of members were deposited in the temple by grateful patients[712]. It was common that the places of worship of Isis were close to those of Asclepius such as the *iseion* of the Acropolis of Athens[713]. For instance, at Athens, in the second century, a statue of Asklepios was consecrated in the *iseion*. This association testifies the cohabitation and the close relationship of the Greek and Egyptian gods. Isis also appeared as a healer in Smyrna where Aelius Aristide, in *Oratum* (XLIX 25) and *Sacra Oratio* (III 49-50 (319-20 l)), spoke about the temple of Isis of Smyrna[714] in the middle of the second century.

The cases of Puteoli and Kenchreai remain quite problematic since the archaeological data have not yet confirmed their existence. However, interesting elements can be observed in iconography and epigraphy and can come to enlighten us a little.

The question of a sanctuary of Serapis and Isis in Puteoli is still unclear. Even though it is likely that a temple of Serapis appears on the series of glass flasks from Puteoli, no document, except the *lex parieti*, confirms explicitly the presence of a *serapeum*, and there is archaeological evidence as yet. The *lex parieti* was found in 1637 close to the stair of the church San Stefanino di Pontone (that does not exist anymore), next to the harbour mole and not far from the shoreline and the area *emporium*. This inscription was probably displayed next to the *serapeum* in question and this discovery could perhaps give us an evidence of the potential location of the *serapeum* that seem to correspond to the images. At Puteoli, Serapis was also honoured in the *macellum*, what has been wrongly identified as the "*tempio di Serapide*" due to the discovery of a statue of Serapis that must have been in the apse of this building. The presence of a quite similar temple with the same

[710] Vitruvius, *De Architectura*, I, 7.1
[711] Dardaine 2008, p. 202
[712] Dunand 1973a, p. 258-259
[713] Walker 1979
[714] Dunand 1973a, p. 76, 205

emblems depicted on the vase of Odemira lets us supposed that it was likely an Isiac temple. The inscription ISIV(M) on the vase of Prague reinforces this idea. With the exception of these two indices and the Isiac material found in Puteoli, the presence of an *iseum* is not so obvious. Why is it not put in evidence in the other vases? Does it mean that the *iseum* in Puteoli was not as important as the *serapeum*, at least in the third and the fourth century AD? In Pompeii, Serapis was honored in the *iseum* while in Delos Isis had a shrine in the *Serapeum* C but, as we will see, there were sometimes several associated sanctuaries. Did the *iseum* associate to the *serapeum* or was it independent? Unfortunately, at this stage of the current archaeological researches, these questions remain without answer.

The new examination of the supposed Isiac sanctuary in Roman Kenchreai has provided new insights into certain problems on the sacred landscape of the Isthmus. The new data published on the sanctuary of Isis at Belo (eight years after the publication of Rothaus[715] and thirty years after the publication of the excavations of Kenchreai) allow us a new perspective on the interpretations of the location of the sanctuary of Isis at Kenchreai. Current archaeological data, however, do not allow us to conclude that the building was neither a sanctuary of Isis nor a nymphaeum and it is better to remain cautious because of the lack of archaeological evidence. My opinion is quite divided but I think that the hypothesis of a nymphaeum associated with a sanctuary of Isis is not impossible since, as we have seen, it happened that Isis was associated with nymphs as the epigraphic sources show. Isis was indeed called "*nymphê*"[716]. This epithet was given, for example, in the litany of the Oxyrrhynchos' Litany[717], and also by Plutarch[718] who considers Isis as the first of the Nymphs. Moreover, an associated of Isis with the Nymphs has been attested on an Athenian dedication of a statue of Aphrodite of the second century AD date found in the *iseion* (Vidman Sylloge 16 and 7) and on an inscription from Thessaloniki of third century AD date (*Thess* 254). In addition, a part of the sanctuary of Isis at Kenchreai would have had an apsidal shape like at Hellenistic sanctuary of Fortuna Primigenia at Palestrina in Italy, where a nymphaeum was located in the same apse where the Nilotic mosaic was found (ID 030). Moreover, a nymphaeum dedicated to Serapis was also present in the *iseum campense* at Rome[719] (Figure 73) that referred to the sea. Hadrian reproduced this maritime theater of the *nymphaeum* of the *Iseum Campense* in his villa at Tivoli where were also the statues of the Nile, Tiber (ID 130) and Ocean. On the other hand, confusion between nymphaea and shrines to Isis was already seen during the first excavations of Belo in 1970's, since

[715] Rothaus 2000
[716] Dunand 1973b, p. 13, 88
[717] *P. Oxy.* 1380, 30
[718] Plutarch, *De Is.* 3
[719] Lescuyer 2005 ; Lembke 1994 ; Versluys et al. 2018 ; Beard et al. 1998

archaeologists also thought, wrongly, that it was a nymphaeum whereas it was really a sanctuary of Isis[720]. In their archaeological report, archaeologists spoke about “a building where water was needed, a nymphaeum?" that they identified as a vast colonnade nymphaeum with a "ritual character for the inhabitants of the city"[721]. To finish, Rothaus's conclusions about the existence of a Neoplatonic School in a nymphaeum located in the port of Kenchreai do not seem to be relevant to me. What would have been the interest in a port as important as Kenchreai?

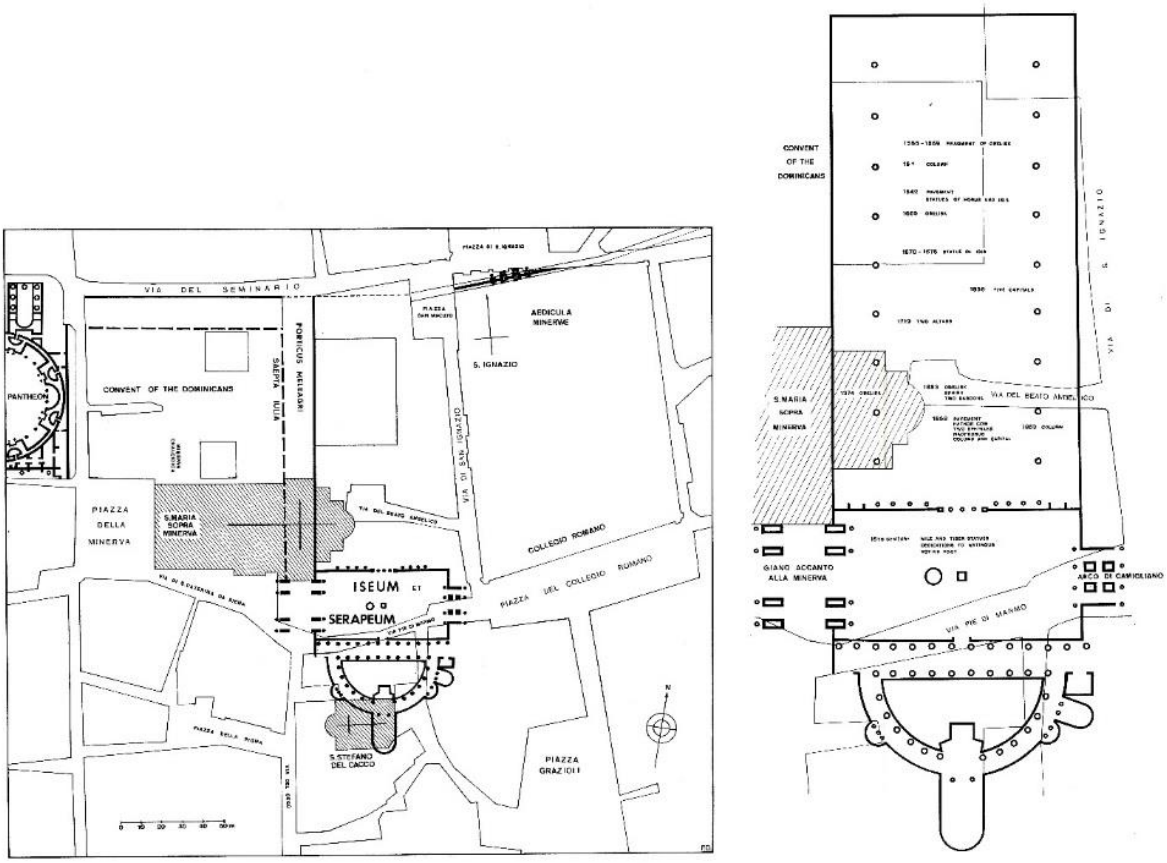


Figure 73: Plan of the iseum campense at Rome (Roullet 1972, fig. 347 and 348).

[720] Dardaine 2008, p. 7
[721] Ponsich 1974, p. 21 and 38, fig. 1

Chapter 6

The Roman portscape: an iconographic standard or a reality?

This chapter aims to study the urban syntax of portscapes through an interdisciplinary approach by integrating iconography and epigraphy and the archaeological data. It intends to analyse the portscape as an assemblage of buildings and monuments. In this research, I will examine the way functions and related buildings and monuments were distributed through space as well as their symbolic role in port topography. This chapter aims to answer the research question asked in the first chapter:

- What was the spatial organisation of port buildings?
- Did an archetypal layout of buildings and monuments exist?
- Did the iconographic standard correspond to the reality?

Through the concrete case study of Leptis Magna, I will compare the iconography with the reality known from the results of the archaeological excavations. Leptis Magna is chosen here because its port is well preserved and well documented by archaeology. It is an important case-study for Roman port infrastructures and portscape study in the late second century AD. It reflects very well the Severan policy in terms of architecture and urbanism. However, to understand the portscape of Leptis Magna, we have to consider it in its Mediterranean context. For that reason, it will be inevitable to develop a comparative study with other Mediterranean portscapes.

6.1. Leptis Magna: historical background[722]

The city of Leptis Magna (or Lepcis Magna) was founded in the tenth century BC[723] by Phoenicians from Sidon (Sallust, *Bellum Iugurthinum*, 78, 1) or Tyre (Silius Italicus, III, 256; Pliny, *N.H.* V, 76). In the sixth century BC, it came under the control of Carthage. In the second century BC, Leptis Magna allied with Rome after the Jugurthan revolt[724] (112-105 BC). Under Augustus and his successors, Leptis Magna underwent a major period of development, becoming a *municipium* in AD 74-77 and the *Colonia Ulpia Traiana Fidelis Lepcis Magna* in AD 110 under Trajan. The city knew its apogee at the end of the second century under Septimius Severus who was native of Leptis Magna. It was massively enlarged and embellished by several major public monuments like the new forum, a

[722] https://portuslimen.eu/site/lepcis-magna
[723] Di Vita 1969
[724] De Miro 2002

temple complex, the colonnaded street and the quadrifons arch[725]. The harbour was also significantly enlarged. Under Diocletian, the city became the capital of the provincial of Tripolitania in AD 303.

Thanks to the reconstruction of its artificial port under the Severan period, Leptis Magna flourished as a commercial hub in the Mediterranean. The gigantic works carried out in the port under Septimius Severus allowed it to considerably increase its capacity[726]. The 1300 m^2 of quays aimed to facilitate the mooring of the merchant ships in a relatively small basin. Having a harbour area of over 10 hectares made Leptis Magna one of the larger ports in the Roman Mediterranean. As a redistributive port (or secondary port)[727], it played an important role in the supplying of Rome and its Empire with olive oil, exotic and luxurious goods and wild animals by virtue of its location[728]; it was a nodal point at the Mediterranean end of the caravan network of inland trading routes from Africa and a major trading port.

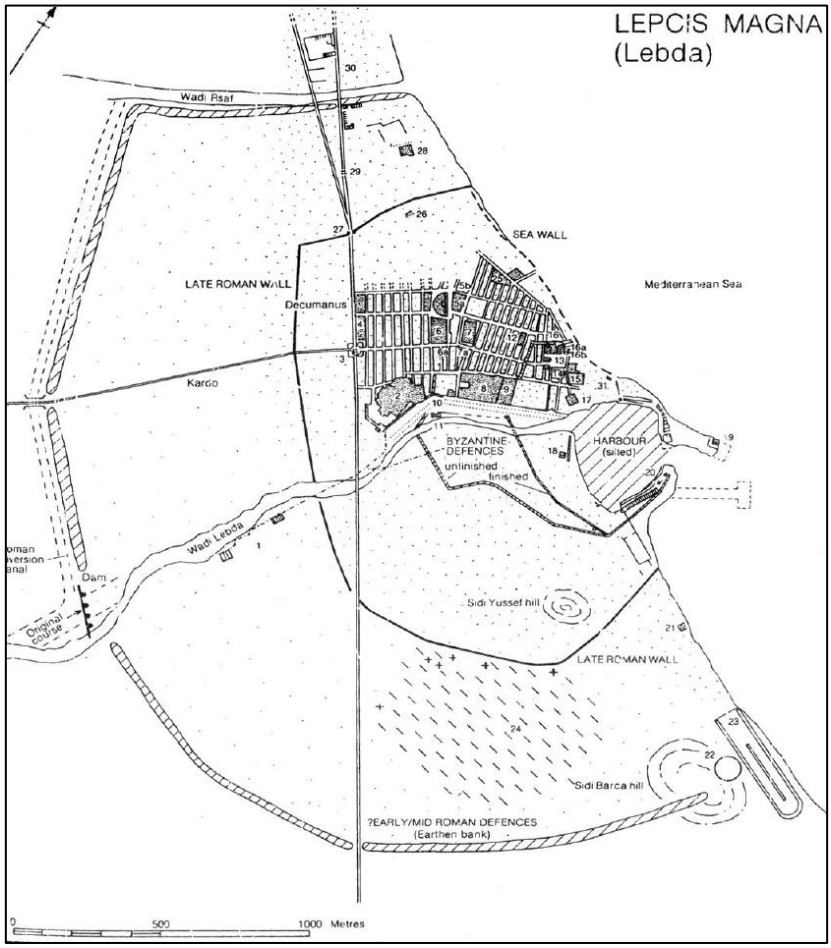


Figure 74: Map of the Severan buildings in Leptis Magna (Mattingly 2003, p. 117).

[725] Ward-Perkins et al. 1993
[726] Laronde 2001, p. 94-95
[727] Keay 2012, p. 19
[728] Mattingly 2003, p. 221, 251

The port of Leptis Magna was discovered by Italians in the early twentieth century. Major investigations were conducted by Bartoccini[729] and published in 1958 after thirty years of field work. The "Mission Archéologique Française en Libye" also undertook directed and published by Laronde[730] in 1988 and 1994. This research revealed that in its earlier phase of use it comprised an embankment running along the western edge of the wadi Lebda. This area was monumentalised under the reign of Nero. The surviving structures of the harbour largely date to the enlargement achieved on the initiative of Septimius Severus comprising: (1) the creation of an inner basin of circa 13 Ha that is silted up today, (2) the building of monumental quays that incorporate the two offshore islands to the west line of wadi Lebda and a third lying the coast, and (3) the construction of a third quay beyond the coaster quay that created a second basin. Archaeological remains dating to the Severan period are visible today, such as the mooring stone rings along the western and eastern quays of the inner basin. The lighthouse stands at the northern end of the western quay. The warehouses remain along the eastern quay with a temple and signalling tower. The temple to Jupiter Dolichenus stands in the southern side of the inner basin. A temple of Flavian date was also discovered in the western side of the harbour. Did these monuments follow a predefined urban plan? What did these monuments mean? Did they follow a standardised Roman portscape design?

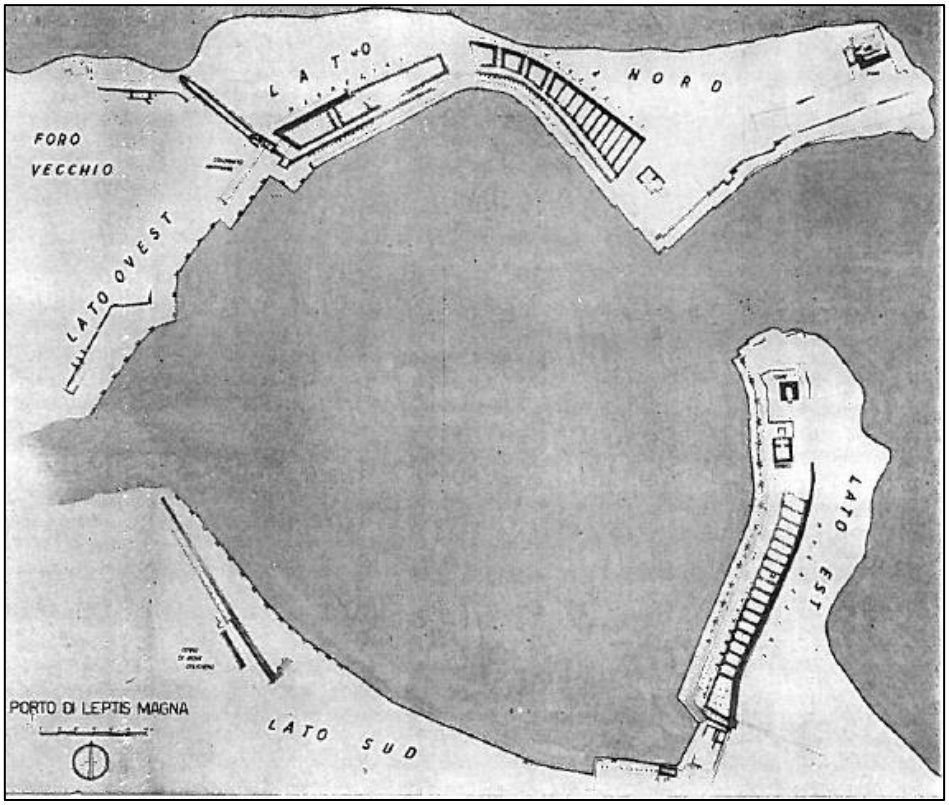


Figure 75: Map of the excavated structures at Leptis Magna (Bartoccini 1958, Tav. III).

[729] Bartoccini et al. 1958; Bartoccini 1961; 1962
[730] Laronde 1988b; 1994b; Laronde and Degeorge 2005

6.2. The urban programme of the portscape of Leptis Magna from Nero to Septimius Severus

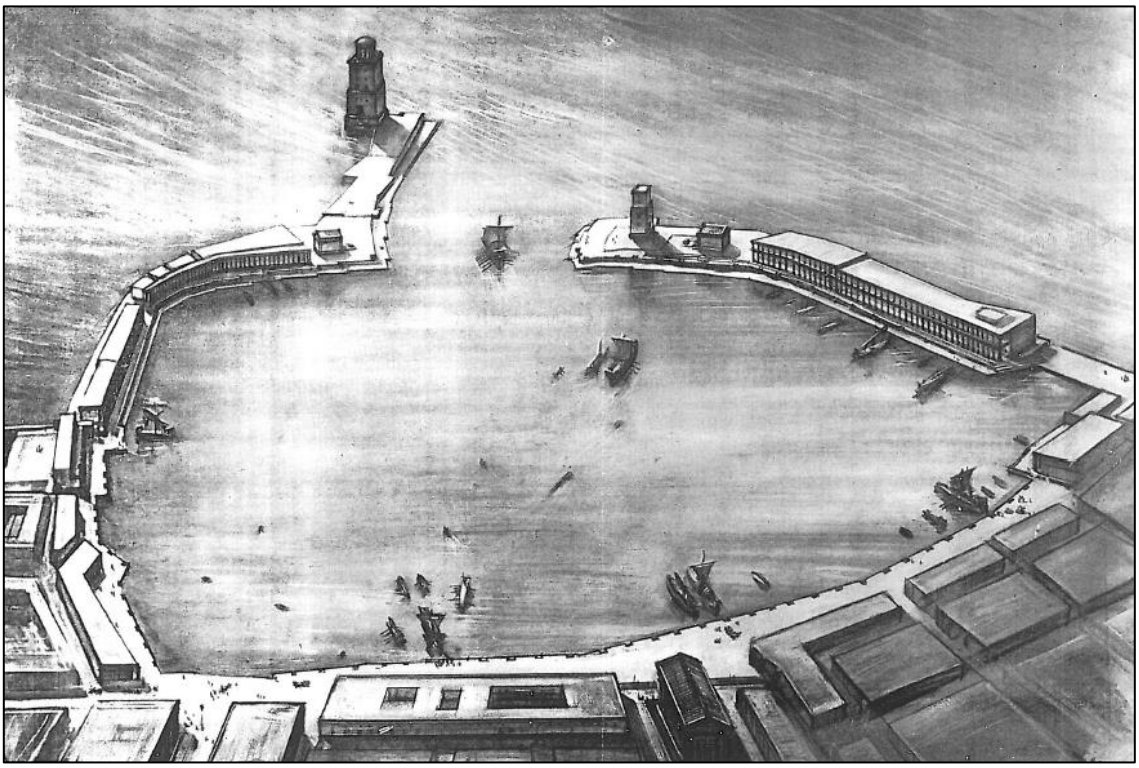


Figure 76: Hypothetical reconstruction of the Roman harbour of Leptis Magna by A. Carpicci (Bartoccini 1958, Tav. A).

6.2.1. The lighthouse

Most monuments at port entrances were evidently lighthouses. The Pharos of the Great harbour of Alexandria was undoubtedly the architectural model of Roman lighthouses. It was constructed under Ptolemy I and ornamented with a statue of Zeus Soter. It was important that a port was equipped with a working lighthouse, namely for the safety of sailors arriving from the sea by night. Sostratus' dedication of the Pharos[731] to the "Divine Saviours" seems to refer to Ptolemy I Soter ("Saviour")[732] and either his son Ptolemy II Philadelphus or his wife Berenice. This kind of reference to the “salvation” of sailors was already found on the sixth century BC metric inscription from Thasos (*IG* XII, 8, 683). It refers to a beacon that was set up as a safety for ships and sailors. Sostratus' dedication finds some corroborations in the inscription of the Neronian lighthouse at

[731] See Lucian (*Hist. conscr*. 62) and Strabo (17, 1, 6, C 791)
[732] Arnaud 2015a, note n°56

Patara[733] which refers to the building of a lighthouse by the Emperor. It was a deliberate echo to the Alexandrian text[734].

At Portus, Suetonius (*Claudius* XX, 3), said that the lighthouse of Portus was an imitation of the Pharos of Alexandria:

> "*He formed the harbour at Ostia, by carrying out circular piers on the right and on the left, with a mole protecting, in deep water, the entrance of the port To secure the foundation of this mole, he sunk the vessel in which the great obelisk had been brought from Egypt and built upon piles a very lofty tower, in imitation of the Pharos at Alexandria, on which lights were burnt to direct mariners in the night*." [735]
>
> Suetonius (*Claudius* XX, 3)

The location of this lighthouse at the end of the mole was probably a conscious evocation of the great harbour of Alexandria in Egypt. It presented architectural similarities to that of Alexandria as we can see on the Torlonia relief where the statue in contrapposto pose next to the lighthouse reminds us of the statue of Zeus Soter that was associated with the Pharos, as we can see on the vase of Begram (ID 098). This Alexandrian architectural influence was extended to other ports. The entrance of the port of Leptis Magna was also marked by a massive lighthouse[736]. It had a similar design to that of Portus. Standing on the right mole in the north side of the port, it belonged to the harbour renovations undertaken under Septimius Severus[737]. It measured 21.20 m^2 and was composed of three superimposed platforms, although we do not know what the lantern looked like. The total height must have been between 30 and 35 meters. Some topographical similarities to this can be observed on the coins of Caesarea Germanica and Pompeiopolis. On the reverse of each coin is a picture of the harbour as a semi-circular area enclosed by moles. At the termination of the right mole on each is a standing statue that we could interpret as a shorthand of a lighthouse such as on the *sestertii* of Nero (ID 048 and 056) due to the lack of space on the coin.

The lighthouse that appears on one of the relief panels of the quadrifons arch of Septimius Severus at Leptis Magna (ID 189) erected on the occasion of a visit of the Emperor in his hometown, has been interpreted as that at Leptis[738]. There are also arguments that it may represent the Pharos at Portus on the occasion of the return of the imperial family to Rome. It depicts the entrance of the Emperor Septimius Severus into the city of Leptis Magna with his sons Caracalla and Geta. They

[733] Jones 2008
[734] Arnaud 2012; Osborne 2014; Arnaud 2015a ; Osborne 2014, p. 70
[735] Translation in C. Suetonius Tranquillus, *Divus Claudius*, Alexander Thomson, Ed.
[736] Bartoccini et al. 1958, p. 67-68, pl. XVIII 30
[737] Cordovana 2012
[738] Tuck 2008

stand on the left in a quadriga and a triumphal procession is represented on the right. In the background, the city walls of the city and a four or three storey lighthouse with large arched openings. It is the only building pictured on the arch. It was apparently selected to give architectural context to the triumphal procession into the newly restored port city. In this, the lighthouse played a polysemic role, marking the entrance of the port and the beginning of the procession. The lighthouse at Leptis Magna was therefore a symbol of wealth and power. It was a triumphal monument in honour of the Severan military campaign in the East[739].

6.2.2. The religious monuments

As we have seen in Chapter 5.3, religious monuments were significant component in Roman portscapes. Though the example of Leptis Magna, I will focus upon their topographical importance (Figure 77) under Nero, the Flavians and the Severans, such as in the case of the central temple dedicated to Jupiter Dolichenus, and the two distyle temples that marked the port entrance. I will also demonstrate that they presented features in common with other ports and that they not only had a cultic purpose, but also formed part of an urban programme.

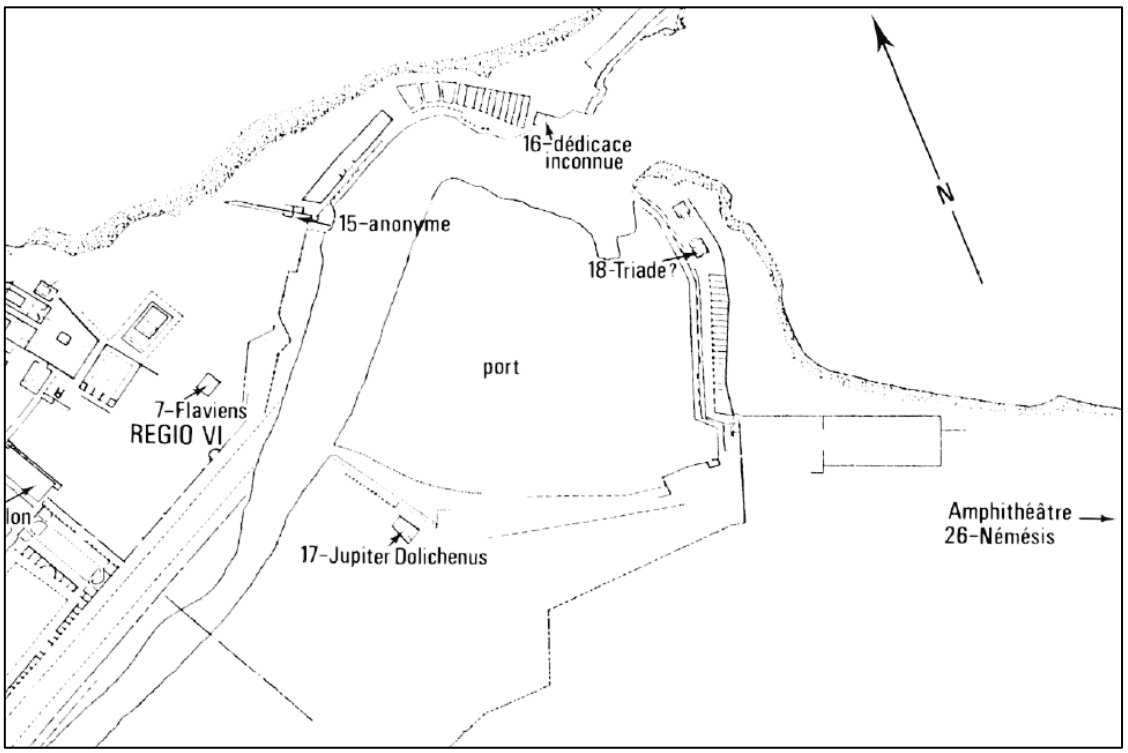


Figure 77: Leptis Magna, location of the cult places around the port (Brouquier-Reddé 1992, fig. 58): n°7 Flavian temple, n°15 Neronian temple next to the colonnade, n°16 Distyle temple at the end of the north mole, n° 17 Temple to Jupiter Dolichenus, n°18 Temple at the end of the east mole.

[739] Tuck 2008

- The anonymous temple near the Neronian colonnade

A temple has been found at the northeast end of the portico of Nero which rises on the west quay[740]. It is a limestone temple comprising a single rectangular room (*cella*) of 4.80 x 2.80 meters with a flat apse at the bottom. The temple is oriented east. Its dating seems to predate the works of Nero. Punic statues from the second or first century BC were discovered within it, but the cult space exhibits traces of reworking in travertine under Nero. This suggests that this temple was still functional in the Neronian era. It was integrated at the end of the portico.

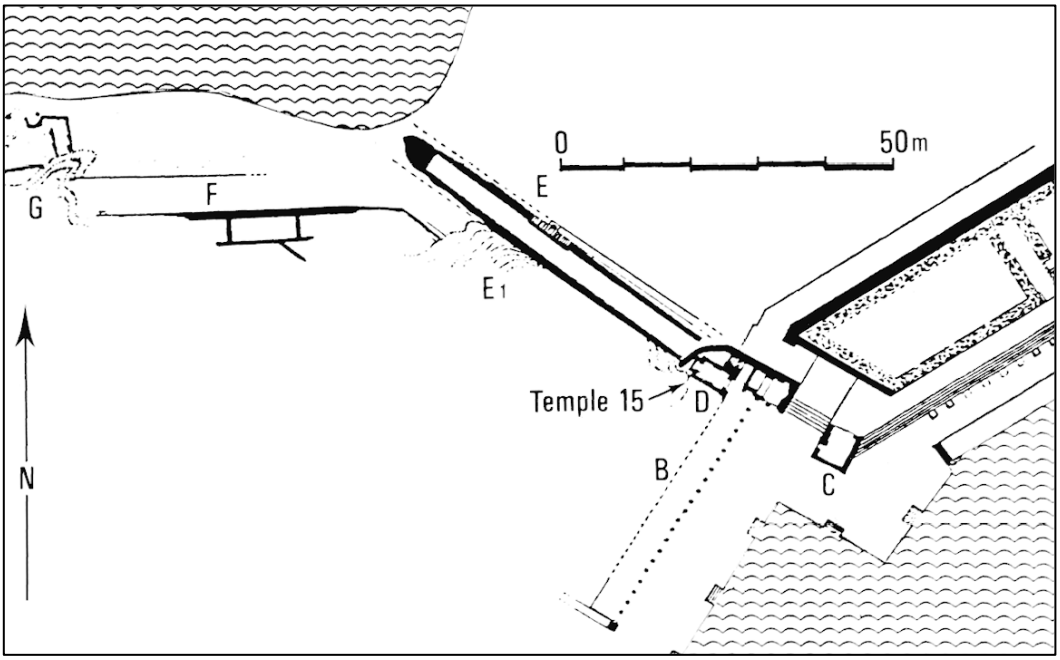


Figure 78: West mole of Leptis Magna and location of the Neronian colonnade (B) and the temple 15 (Bartoccini et al. 1958; Tav. 6)

- Flavian temple

Another pre-Severan temple[741] was discovered in the area between the harbour and the old forum almost straight across from the mouth of the first century harbour basin. A dedicatory inscription on the architrave (*IRT*, 1952, 348) made it possible to know that the temple was dedicated to the imperial cult. In this inscription, the reigning emperor Domitian is associated with the two dead emperors Vespasian and Titus. It dates between September 14, AD 93 and September 13, AD 94 on the basis of the tribunician power of Domitian. This temple, dedicated to the Flavian

[740] Bartoccini et al. 1958, p. 33-34; Brouquier-Reddé 1992, Temple n°15, p. 116-118, fig. 58, 59, 60
[741] Brouquier-Reddé 1992, Temple n°7: p. 91-94, fig. 29

Emperors, seems to have played the role of a central harbour monument before the Severan arrangements and must have been the most prominent monument in the harbour before the construction of the temple of Jupiter Dolichenus. It seems to have exercised a function similar to the temple of Rome and Augustus in the harbour of Caesarea Maritima and that of Augustus at Alexandria. Both of them were oriented to face the harbour basin. The temple of Rome and Augustus in the port of Sebastos (Greek for *Augustus*) at Caesarea Maritima was built on the site of Strato's Tower, a high platform that dated to the period of Herod. The podium was 15 meter high and the total height of the temple was around 30 meters. The imposing height created a visual effect. It imposed the presence of the Divine Emperor. This temple is known from two passages of Flavius Josephus (*Antiquities of the Jews,* 15.339 and *Jewish War* 1.414).

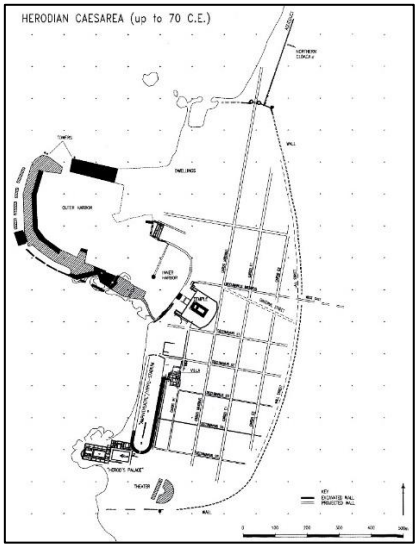


Figure 79: The harbour of Caesarea Maritima (Patrich 2011, fig. 8) ; Figure 80: Hypothetical reconstruction of the harbour of Caesarea Maritima (Holum 1996, p. 86, fig. 3)

The temple of Augustus in Alexandria (or *Caesareum*) was a sanctuary initially built by Cleopatra VII in honour to Marcus Antonius. After their defeat, Augustus dedicated it to the imperial cult to the divine Julius Caesar and later rededicated it to himself. Strabo reports that it was located near the shore in the centre of the harbour (Strabo, *Geography* XVII, I, 9). The text of Philo (*Leg. Ad Gaium* 151) is fuller and tells us that the temple was "*situated high up, opposite the sheltered harbours [the harbour mouth] and [was] very large and conspicuous*". According to Philo, this temple gave "*hope of safety to sailors when they set out to sea and when they return*". Pliny (*NH* 36-69) evoked the two obelisks from Heliopolis that adorned the entrance of the temple.

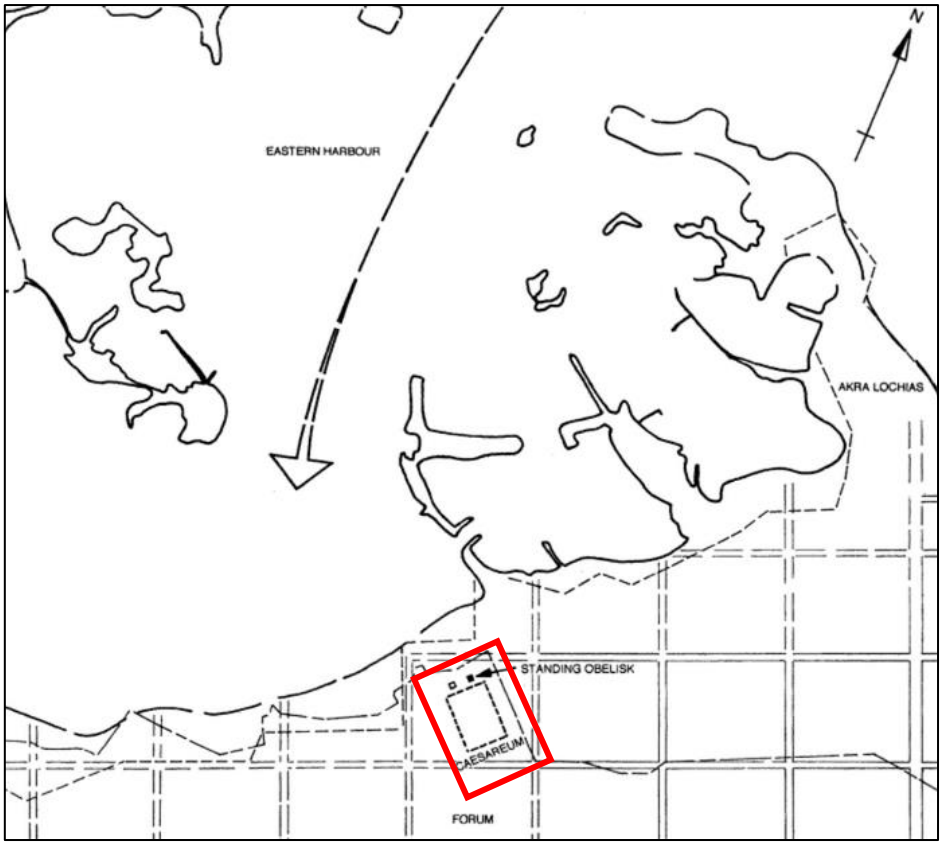


Figure 81: Plan showing the possible orientation of the Caesareum (McKenzie 2007, p. 178, fig. 304).

- The central temple to Jupiter Dolichenus

At Leptis Magna, a "temple to Jupiter Dolichenus"[742] stands in the most prominent location in the "Severan harbour", on the south quay of the harbour opposite the harbour mouth. It faces northeast and its front facade faces the sea. The association of the temple with this deity was made through the discovery of an altar dedicated to *Iupiter Optimus Maximus Dolichenus* (*IRT* 292)[743] by a centurion on the occasion of Septimius Severus' birthday, on the quay 30 meters northwest of the temple podium. Jupiter was not a common port deity as he was the god of the thunderstorm and the rain and in none of his aspects was he affiliated to sailors, sea, ports or trade. The only reason why we find him in some ports is because of the presence of his Hellenistic antecedent, Zeus, on the top of the Pharos in Alexandria. His cult had a particular attraction for members of the military[744] but the only evidence of his cult in port context comes from Leptis Magna. The worship of Iuppiter Dolichenus was strongly connected to that of Sol Invictus who also had close ties to the Severan family[745]. This temple seems to have succeeded the role played earlier by the temple to Vespasian

[742] Bartoccini et al. 1958, p. 99, pl. XLII 36, XLV ; see "Temple 17" in Brouquier-Reddé 1992, p. 119-121
[743] Reynolds et al. 1952, 292
[744] The altar was dedicated by legionaries
[745] Speidel 1978, p. 66

and Titus at the centre of the harbour. It temple took the most imposing place in the new design of the “Severan port”.

A temple was found at a similar location in the centre of the northeast side of the hexagonal port of Trajan. It was identified with Liber Pater Commodianus[746] by an inscription on a fragment of a curvilinear architrave (*CIL* XIV, 666; *IPOstie* B360; EDR150167) and a statue[747] found during the excavation of the temple by the Torlonia in the nineteenth century. According to Lanciani, the excavations brought to light a "round, peripteral, Corinthian temple, rising on a high stylobate and restored in times of great decay". A recent geophysical survey of the harbour of Portus[748] shows that the temple was in fact rectangular and situated within a rectangular *temenos*. On both sides of the place of worship, Lanciani reconstructed two rows of *horrea*. In front of the temple stood a square base (4.46 × 4.46 m) on which a colossal statue of Trajan[749] of an estimated height of 5.57 meters is understood to have stood. This fact, together with the inscription referring to Liber Pater Commodianus, suggests that there was also some association with the cult of the emperor. The central position of this religious complex, between the warehouses that bordered it, suggests that this temple was part of the original plan of Trajan[750].

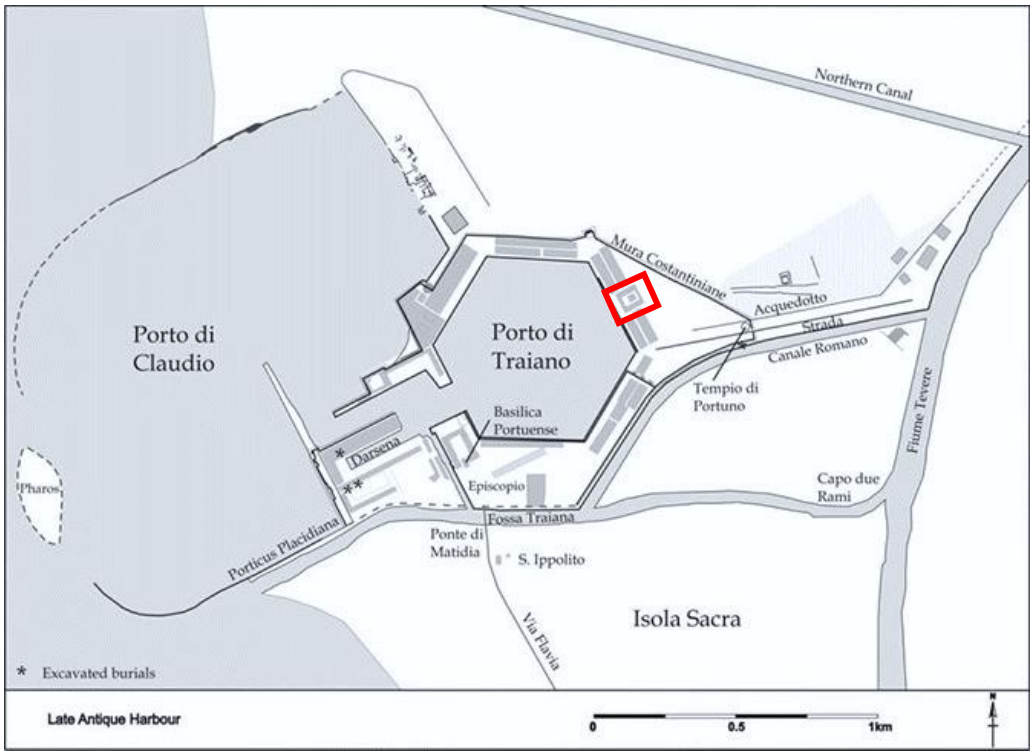


Figure 82: Map of Portus (Keay et al. 2005, p. 280, fig. 8.4).

[746] Van Haeperen 2019h
[747] Lanciani 1868 p. 181; Meiggs 1973, p. 165, fig. 6; Pavolini 2006, p. 286
[748] Keay et al. 2005
[749] Lanciani 1868, p. 165-166; Meiggs 1973, p. 165-166
[750] Keay et al. 2005, p. 283

Like Jupiter Dolichenus, Liber Pater was not a naval nor trade god nor the object of sailors' prayers. Liber Pater was a god of viticulture and wine, fertility and freedom. His cult and functions were associated with Dionysos/Bacchus. In the mythology, Dionysos/Bacchus was a heroic saviour, a founder of cities and conqueror of India whence he had returned in triumph drawn by a chariot of elephants[751]. The nautical association of Liber Pater occurs in Dionysiac iconography on a series of sarcophagi with Nereids and marine centaurs[752]. In the tradition of past emperors[753], Trajan associated himself with Dionysos as a "*Neos Dionysos*"[754]. The triumphal arch, ornamented by a quadriga of elephants on the top, which is shown on the Torlonia relief could be, in that respect, an allusion to the triumphant return of the god Dionysus after spreading the miracle of wine culture to India and the East[755]. It is probably not accidental that Liber Pater (Bacchus) stands just on the right of the arch[756].

These temples that were centrally-placed in the portscapes of Leptis Magna and Portus are indirectly linked to the emperors. They present a certain uniformity that reflects a model of monumentalisation and materialisation of the Imperial ideology under Trajan and later Septimius Severus. These temples were constructed on the edge of the harbour basin opposite and faced the harbour mouth. They were directly or indirectly dedicated to the Emperor. Most of them were large temples (hexastyle or octastyle) and the most prominent marker in the port basin (Figure 83).

Port	Dedicated to	Dating	Temple type
Leptis Magna – Flavian temple	Vespasian and Titus	Domitianic period	Octostyle
Leptis Magna – Jupiter Dolichenus	Jupiter Dolichenus	Severan period	Octostyle?
Portus Traiani	Liber Pater Commodianus	Trajanic period	Rectangular within temenos
Caesarea Maritima	Rome and Augustus	Augustan period	Hexastyle?
Alexandria	Augustus	Augustan period	?

Figure 83: Table that summarises the central temples in ports

[751] Beard 2009, p. 315-317
[752] Foucher 1984, p. 697
[753] Darby Nock 1972, p. 134-169 explains that the name of "*Neos Dionysos"* existed before the Imperial period, by Lagids
[754] Bru 2011, p. 96 ; Gensheimer 2018, p. 108
[755] See the sarcophagus of the Museum of Fine Arts in Houston: https://www.mfah.org/art/detail/56084
[756] Lanciani 1868, p. 181; Meiggs 1973, p. 165

- Small temples at the entrance of the harbour

In Leptis Magna, two small distyle Doric temples with columns *in antis* were placed at each end of the moles[757], at the entrance of the harbour. They faced the harbour entrance and were visible to those entering or exiting the harbour. According to the archaeological data, they date from Severan rebuilding, and were probably conceived as part of the overall building programme of the port[758]. If the temples were indeed Severan, they may have been built as part of the same ideological programme as the temple of Jupiter Dolichenus (but what was this ideological programme?) but we do not have any indications as to the identity of the deity.

On the upper platform of the great east mole, there is a square tower and a series of warehouses with a portico in front of them. A temple stands c. 23 meters from the end of the colonnade (Bartoccini 1958, Tav. LIII, 56). It faces north and measures 13 x 10.40 m; an altar was placed in front of it. This temple corresponds to the n°18 in Brouquier-Reddé's inventory[759]. According to her, it dates to c. AD 161-180. It is built on the quay at the north end of the east mole behind the lighthouse and 13.50 m in front of the colonnade of warehouses. The Severan port installations on the west side were adapted to incorporate the pre-existing buildings[760]. The Severan temples were the successors to the Neronian foundations on the extreme end of the west mole. At the northern end of the east mole, the temple is paired with a tower that must have been a lighthouse (Bartoccini 1958, Tav. LIII, 57). On the north mole that ends with a lighthouse at its extremity, there is a series of warehouses and a small temple[761] that stands opposite the entrance of the port. This temple corresponds to the n°15 in Brouquier-Reddé's inventory[762]. This building, placed in the corner of the port, faces south east towards the sea. Bartoccini reproduces a plan substantially identical to this of the anonymous temple of the east mole (n°18): a platform in front of the entrance to the vestibule and a distyle facade *in antis*. The vestibule is as deep as the *cella* and occupies the entire width of the base. It probably dates from the development work undertaken under Septimius Severus. These two temples terminating each mole created a certain symmetry at the entrance of the port of Leptis Magna. Unfortunately, no indication, until today, has allowed their identification[763].

[757] Bartoccini et al. 1958, p. 132, pl. LXI.1, pl. LVIII.56, LXVII, LXIII, LXL; Laronde 1988; p. 341-342, fig. 4
[758] Brouquier-Reddé 1992, p. 118-119, 122-125
[759] Brouquier-Reddé 1992, p. 118-119, fig. 58, 63, 65
[760] Bartoccini et al. 1958, p. 40
[761] Bartoccini et al. 1958, p. 67
[762] Brouquier-Reddé 1992, p. 118-119
[763] Brouquier-Reddé 1992, p. 125

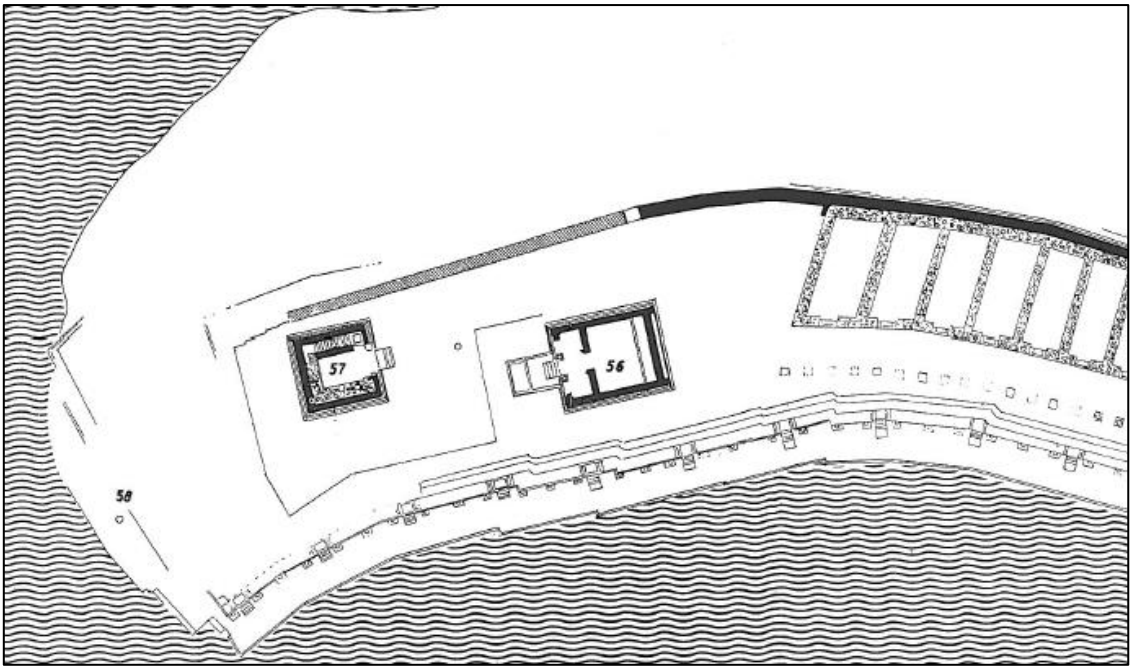


Figure 84: Map of the East mole terminated by the small distyle temple and the square tower (Bartoccini 1958, Tav. LIII).

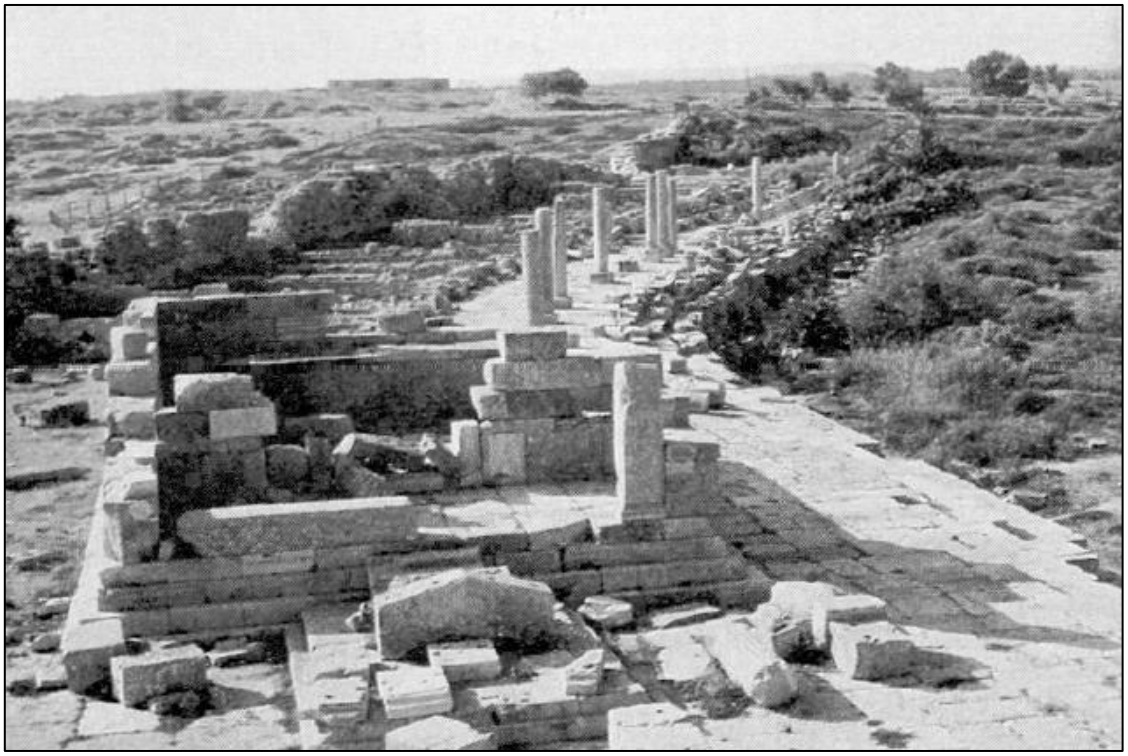


Figure 85: The eastern mole of the port seen from the tower. In the foreground, the Doric temple and on the right, the silted basin (Laronde 1988, fig. 4).

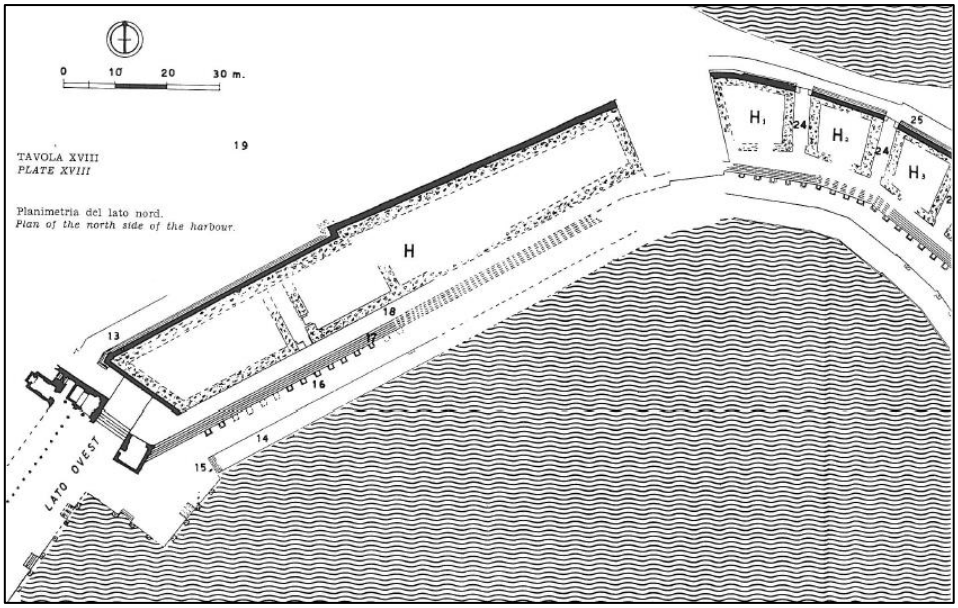


Figure 86: North mole and location of the small temple (Bartoccini 1958, Tav. XVIII).

We have seen that like the lighthouse, the Neronian and Severan temples were situated at, or close to, the end point of the west mole. This architectural configuration can also be found at Portus, with the Neronian *sestertius* (ID 048 and 056) issued to commemorate the completion of the Claudian harbour showing, a figure sacrificing in front of an altar next to a peripteral temple represented in three-quarter view, at the end of what was the southernmost mole. Similar altars located between a temple and a lighthouse must have existed in the harbours of Caesarea Germanica and Pompeiopolis, according to their coinage. On the coin of Pompeiopolis (ID 058), a port deity is represented between two moles. One terminates with a statue as a shorthand for a lighthouse, while the other one with an altar. On the issue from Caesarea Germanica, the mole similarly terminates with a statue, presumably a shorthand for a lighthouse and the other with an altar (ID 055).

A similar temple seems to be attested at the port of Terracina. Blanchère[764] identified a monument in an enclosed area at the end of the north mole as a temple open to the sea. Unfortunately, very little has been published on it. We can we can assume that it must have been a similar temple than those at Leptis Magna that marked the entrance of the harbour. Iconographic sources also attest their presence at port entrances. For instance, we can draw a parallel between the topography of these temples with the coinage of Patras (or Patrai) in Greece[765] where we can also notice the importance of the religious monuments in the portscape. The coin of Commodus (ID

[764] Blanchère 1881, p. 337-338
[765] Papageorgiadou 2015, p. 118, fig. 1.

054) synthesises the standard Roman portscape, with a two-storey portico in the background where a large central hexastyle temple stands flanked on each side by a distyle temple represented in three quarter view. These small temples seem to be similar to those that terminate the moles at Leptis Magna. The statue in the foreground could be a shorthand reference to a lighthouse. On one type of coin of Septimius Severus issued at Patras (ID 151), the same portico is depicted. A male statue stands at the front of a temple, holding an object (phiale?) for libation in one hand, and a conical box for incense used for sacrifice in the other. On another type of coin of Septimius Severus (ID 175), the portico appears in the foreground, and a temple in three-quarter view is situated to the right. In the upper register, a tower standing on a breakwater could refer to a lighthouse or watchtower. To the right of this, there is a horse with a rider that could refer be a representation of the Emperor. Similar temples appear on the panels XVI and XVIII of the mosaic of Kenchreai (ID 024 and ID 025). In the foreground of the panel XVIII, at the centre of the harbour mouth, there is a cylindrical structure which may be a watchtower, a beacon or lighthouse. Porticoes border the semi-circular moles where a small temple stands at each end. The temple on the left is tetrastyle while the right temple stands on a podium and has two columns *in antis*. On the numismatic evidence of Kenchreai (ID 049 and ID 057) and Mothone (ID 059), we find the same type of temples at the mole ends.

6.2.3. The monuments to the grain supply

Roman ports were involved in the storage and redistribution of foodstuffs in different parts of the Mediterranean basin. The needs of the grain supply were vital for the working of the Empire and, thus, a constant concern for Imperial administration[766]. The problem of storage in the port was central since it affected the grain supply requirements of cities. The grain supply problem has long affected Rome, especially after the end of the Second Punic War, a period during there was an acceleration of the population growth and an amplification of commercial activities in the second century BC[767]. So, feeding Roman citizens was a political, economic and social challenge for the emperors. Rome had indeed already met serious problems of famine, like the revolts in AD 51.[768] Thereby, new needs appeared, and led to the development of *horrea* in the Roman Empire. Therefore, the warehouses (*horrea*) were an essential component of the port, for storage of goods in transit in and around the harbours, and thus occupied the greatest amount of space around harbour basins.

[766] Erdkamp 2005, p. 246-249
[767] Virlouvet 1985; 1995 ; Andreau 2015
[768] Virlouvet 1985

In port iconography, *horrea* were very common. Nonetheless, images of warehouses in port iconography are difficult to identify as they were usually preceded by porticoes opened to the sea, except if there is an unloading or a loading scene in connection with the building, like the so-called "relief of the *tabularii*" (ID 148) from Portus that is now in the Torlonia collection[769]. In this sculpture, an unloading scene is represented with *saccarii* bringing bags of goods into a building that is vaulted and surmounted by a triangular pediment where individuals (*horrearii* or *tabularii*?) are receiving and controlling the cargo arriving to the port. On the Neronian *sestertius* (ID 048 and 056) issued to commemorate the completion of the Claudian harbour at Portus, granaries or warehouses are depicted on the left jetty. Excavations conducted in Claudius' harbour have shown structures with frontage porticoes with monumental colonnades next to the sea as are shown on the *sestertii* and are mentioned by Suetonius (*Claudius* XX, 3). On the Trajanic coins (ID 050), the hexagonal basin is surrounded by porticoes and structures with two floors. The breakwaters surrounding the harbour basin were covered by quays c. 2000 meters in length[770]. Behind these docks, horrea were built to increase Rome storage capacities. Marcus Aurelius built new warehouses at the entrance of the Trajanic port, the so-called Grandi Magazzini di Traiano[771].

On the mosaic of Kenchreai, porticoes are located next to the mole and temples. In the west part of the mole, remains belonging to Roman warehouses were found[772]. Excavations also revealed *horrea* next to the supposed sanctuary of Isis in Area A. Moreover, structures in north of the Roman port could be identified as warehouses and may correspond to what is represented in the *opus sectile* panel, since the portico seems to be next to the "sanctuary". On the coins issued by Aegina[773] and Patras[774] are the representation of port scenes, with the colonnades in background interpretable as warehouses surrounding the port basin. Furthermore, mosaics like that from Toledo[775], Kelenderis[776] and the Villa of Nile at Leptis Magna[777], also present semi-circular porticoes, like on the coins and lamps, to suggest the port basin.

As we can see, port images largely advertised these public monuments for the storage and supply of grain. More than utilitarian constructions, *horrea* were a major component of the port design and participated in the decoration and monumentalisation of the portscape. It can be argued

[769] Salido Dominguez and Neira Jimenez 2014, p. 204
[770] Bukowiecki 2018
[771] Rickman 1971
[772] Scranton et al. 1978, p.39.
[773] Price 1977, p. 41
[774] Price 1977, p. 41
[775] López Monteagudo 1994, pl. 9
[776] Ladstätter et al. 2014, p. 199-225
[777] Celdrán 1995, p. 229; see Salido Dominguez and Neira Jimenez 2014 about the *horrea* in ports from the perspective of the representations on mosaics

that their monumental architecture expressed the abundance of the Empire and the idea that the wealth of the Empire. At Leptis Magna, the excavations have revealed the existence of *horrea*. They date from the pre-Severan period and lined the south and west edges of the early harbour[778]. They were located between the harbour basin and the Old Forum. In the "Severan harbour", well-preserved warehouses were found on the massive concrete moles of the north and east sides of the port basin[779]. They were fronted by a Doric colonnade[780] similar to the *horrea* that lined the hexagonal harbour of Trajan. Colonnades made the warehouses very imposing. This aesthetic architectural association provided a monumental and a uniform character to the façade of the harbour. It emphasised the decorative aspect of the portscape and the importance of the monuments to the grain storage that ensured the continued supply of the *Urbs*. Placed along the edge of the port basin usually in long rows starting at the harbour mouth and covering much of the moles, *horrea* created a unifying visual effect, connecting different buildings within the harbour area. The decision to display *horrea* at this prominent location facilitated the transport, the loading/unloading and the storage of the grain but also had a propagandistic purpose as it demonstrates the richness of his Empire.

6.2.4. The porticoes

The presence of porticoes in Roman portscape across the Mediterranean is widely confirmed by the iconography, epigraphy and archaeology. They are one of the main motifs in port iconography. They were a major component of architectural "monumentalisation" of urban spaces[781]. According to Gros[782], the portico was "an inevitable component of any complex of any size which assumes in the Hellenistic and imperial city the functions of facade, connecting and closing element". They made it possible to link the different structures or monuments and create a certain homogeneity within the urban scheme than MacDonald called "urban armatures"[783]. They "consist of main streets, squares, and essential public buildings linked together across cities and towns from gate to gate, with junctions and entranceways prominently articulated. They are the setting for the familiar Roman civic building typology, the framework for the unmistakeable imagery of imperial urbanism"[784].

[778] Bartoccini et al. 1958, p. 9-12
[779] Bartoccini et al. 1958 p. 57-63 ; Rickman 1971, p. 134-135
[780] Bartoccini et al. 1958, p. 122-124
[781] Gros 2011, p. 95
[782] Gros 2011, p. 95
[783] MacDonald 1982, p. 74-75
[784] MacDonald 1982, p. 11

The visual importance of this harmony by means of porticoes is indicated, for instance, by the numismatic evidence. Ports are frequently defined by porticos that bordered the basin in the numismatic iconography like in Nero's Portus *sestertii* (ID 048 and 056) and Trajanic coins[785] (ID 050) as well as in the series of coins of Patras[786] and Kenchreai[787]. In Roman portscapes, porticoes seem to have played a symbolic and decorative role. As we have seen in the previous section, porticoes adorned the facades of the warehouses in order to enhance their architecture.

Among the first century port installations at Leptis Magna, a portico remains[788] on the west mole. It framed the west side of the harbour and unified the buildings along the mole as far as the temple at the end of the mole. The portico is attributed by its inscription to the benefaction of Nero[789]. This Neronian colonnade consisted of twenty-one Doric columns of travertine. The remains of a square buildings was also found. It could perhaps have been the foundation of a lighthouse from the pre-Severan phase of the port. The Neronian portico was probably built to unify, monumentalise, and regularise the west edge of the harbour. This kind of symbolic function is confirmed as well by the *Portico di Claudio*[790] at Portus, a monumental colonnade which defined the western seafront of the main land area of the Claudian port. It would have provided a monumental façade for ships approaching the basin from the west[791]. Recent ongoing research conducted by the French School in Rome[792] has made it possible to study two emblematic monuments of Claudius's port system: the 10 ha storage complex (the so-called *Grandi Magazzini Traianei*) and the long mole (north -South). Studies have revealed that this architectural organisation, symmetrical around an east-west axis called the *Strada Colonnata*, optimised the access of boats around the complex to facilitate the storage and circulation of goods as well as the staff within the same building. The *Portico di Claudio* consisted of travertine columns that ran around the storage complex, along the quays and around the *Darsena*. Today only less than a dozen columns of this portico remain. They testify to the monumentality of the *Portico di Claudio*. Thanks to the recent excavations, we know that more than half a kilometer of colonnade was deployed in front of the warehouses from the *Fossa Traiana* to the north by following the line of the long north-south mole. As it is shown by the Nero's Portus *sestertius* (ID 048 and 056), this imposing colonnade offered a long and majestic

[785] Abaecherli Boyce 1966; Meiggs 1973; Woytek 2010
[786] Papageorgiadou 2015
[787] Abaecherli Boyce 1958; 1966
[788] Bartoccini et al. 1958, p. 40, Tav. VI-B, IX, X, XI, XII
[789] Reynolds et al. 1952, n° 341; Brouquier-Reddé 1992, p. 115-117
[790] Keay and Millett 2005, p. 83
[791] https://www.futurelearn.com/courses/portus/0/steps/10917
[792] Bukowiecki 2018; Bukowiecki et al. 2018 (October 26), ; 2019 (October 7),

maritime facade "worthy of the majesty and greatness of Rome" as Dio Cassius said in his *Roman History*[793].

6.3. Discussion

6.3.1. The materialisation Imperial ideology in Roman portscapes

In Chapter 1, I have explained that monumentalising and adorning Imperial ports was an important concern for the emperors and their administration as Roman ports were, by nature, public infrastructures like *fora* [794]. Furthermore, the main principle of Roman urban space was the *maiestas imperii* as Vitruvius[795] underlined in the preface of his *De Architectura*[796]. Like *fora*, the planning of ports was highly codified and was a marker of Roman cultural and political identity. For Purcell and Horden[797], port monuments "developed expression of the idea that the identity of a powerful Mediterranean figure depends on how its territory is perceived from its maritime approaches". Roman Mediterranean harbours represent the greatest technical achievement that required advanced construction because they were constructed between land and sea. They were public spaces, like *fora*, elaborately monumentalised and decorated with temples, arches, statues and other structures that served as visual presentation of Roman authority.

As we have seen with the Nero's Portus *sestertius* (ID 048 and 056) and other numismatic examples, the construction of such monuments was significantly advertised and played an important role in Imperial propaganda. We have seen that port architecture participated in the construction of an image of the Roman Empire. In his article about the triumphal imagery, Tuck[798] argued that emperors utilised port monuments for the creation and projection of triumphal imagery through case studies of Claudius, Nero and Trajan at Portus and Septimius Severus at Leptis Magna. He underlined that "any who approached Roman space from the sea like travellers entering harbours would experience a deliberate expression of Roman identity"[799]. In this respect, port urbanism elements were supposed to be a recognised message proclaiming the identities of Emperors and Roman control. That explains the repetitions of forms in portscapes and that design models existed for ports and their monuments. They were replicated in the Imperial ports of the Mediterranean to create a particular visual effect. Roman planners who constructed harbours showed particular

[793] Dion Cassius, *Roman History* LX 11.
[794] Arnaud 2012, p. 173; Digest D. 1, 8, 4, 1
[795] *De Architectura*, I, 3
[796] Pont 2010, p. 207; Vitruvius, I, *Praef*. 2
[797] Purcell and Horden 2000, p. 126
[798] Tuck 2008
[799] Tuck 1997, p. 4-5

monuments rather than others to whosoever entered particular harbours. They highlighted certain monuments over others and created a certain hierarchy and scenography.

The case study of the port of Leptis Magna is quite interesting and illustrates that. Its enlargement resulted from a personal interest. Septimius Severus decided to embellish and aggrandise his birthplace. We have seen that the building programme of Leptis Magna presents an emulation of such Trajanic as the enlargement of Portus, and that the main components of its depended on a real monumental building program. I have also demonstrated that the urban programme of the portscape of Leptis Magna present some similarities with numismatic evidence for the appearance of portscapes, such as that depicted on Nero's Portus *sestertius* (ID 048 and 056), and the representations on the coins of Patras, Pompeiopolis and Caesarea Germanica. They seem to correspond to the reality that became an iconographic standard that was then replicated on other type of media, such as mosaics.

We cannot finish this chapter without talking about the mosaic (ID 094) found in the Villa of the Nile located between the inner port at the mouth of the wadi Lebda and the *carceres* of the Roman circus. Dated from the second or third century AD, this mosaic belonged to a series of three Nilotic scenes that decorated the villa like the mosaic depicting the Nile flood (ID 260). Despite its obvious Alexandrine influence and fictional figures such as the *putti* or the standard figure of the fisherman, this mosaic (ID 094) draws my attention because it depicts a portscape that could refer to Leptis Magna. Some topographical elements in common can be observed like the quay with the porticoes that front the probable *horrea* and the central temple.

6.3.2. Conclusion

In conclusion, the Severan architecture at Leptis constitutes an achievement of Imperial prestige architecture, perhaps over practical need as this harbour cost a huge amount of money and worked for a short period (until the fourth century AD) because of the problem of silting with the sediments carried down the wadi[800].

Although they were an emblematic motif of the Roman portscape according to iconographic sources, the *pilae* are not part of the portscape of Leptis Magna. *Pilae* are not attested in African ports (except the Heptastadion of Alexandria), they existed more in Italian ports as it was shown in the first century AD Campanian wall paintings like in the painting of Stabiae (ID 087) or in the series of glass flaks that illustrate the portscape of Puteoli-Baiae (ID 099 to 103 and ID 111). The

[800] Laronde 1994b

architectural language of the moles seems to have evolved during the imperial era. Instead of being adorned with pairs of columns associated with arches, the moles seem to have been occupied in the Neronian and Severan eras by *horrea* embellished with porticos on their front and temples at their ends. This is probably explained by the fact that during the Severan era, the storage challenges were greater. This need for storage space explains the imposing presence of *horrea* in the portscape. In the Severan period, the intercolumniation of the porticoes in front of the *horrea* of the *Grandi Magazzini di Traiano* at Portus was walled up[801]. Perhaps more storage space was needed at Portus[802].

Figure 87: Warehouse facade wall (Bukowiecki et al. 2011, fig. 138)

To conclude, we can say that no monument was randomly placed in a Roman portscape. Every monument depended on a well-thought-out programme and had its own symbolic value, especially in the case of an imperial port. This reinforces the argument that in Kenchreai (see Chapter 5, case-study 3) there was a sanctuary (probably that to Isis) at the end of the mole and not a *nymphaeum* as Rothaus[803] suggested, which would have no meaning and no coherence in the urban programme of the port since this does not would correspond neither to iconographic sources nor to archaeological reality.

[801] Bukowiecki et al. 2011
[802] Virlouvet and Marin 2003, p. 703-704
[803] Rothaus 2000

Chapter 7

General discussion

7.1. The contribution of the thesis

Through this work, I have argued that under the Roman Empire, harbours played an important role in the image of cities in a maritime context. They were more than utilitarian constructions. The buildings and monuments were organised through port space with a particular attention and a programmatic way that formed a real urban landscape that I have described under the term “portscape”. This term, derived from Zanker’s townscape concept, is understood as the urban aspect, layout and design of Roman ports but also as a lived environment with cultural meanings reflecting societies. Chapter 2 has outlined some theoretical frameworks to contextualise and define the portscape concept, as well as its issues relating to the influence of politics and religion in its development. Despite the fact that several scholars have studied maritime contexts, nobody has yet defined a portscape, or studied it in a holistic way by taking into account the fact that the portscape frames port activities and interacts with port societies. Some scholars have focused on port urbanism but no one has attempted to approach *portscape* in a systematic way. I have also seen how port infrastructures have been studied through different scholarly approaches.

Despite the recent excavations conducted at Roman ports, namely thanks to the development of the discipline of maritime archaeology these last decades, our knowledge related to port architecture is still very unclear and the reality of the port infrastructures remain poorly understood. The lack of well preserved monuments does not allow us to reconstruct port buildings properly, and the only source of information for the volume of port buildings comes from iconographic representations. In Chapter 3 discussion focused upon the interest of studying artworks as pieces of evidence to frame the cultural and the social context of ancient civilisations and their environments. It outlined how images can be used as evidence for better understanding Roman ports through the different general tools of reading and interpretation. I have also suggested how one might approach Roman art in order to better define the syntax of port images and ways of representation, as well as their social context, in order to understand their meanings. Although researchers have studied some depictions of ports and have contributed to better understanding the pieces of artistic representation, nobody had focused upon the function of port images or their meanings. The objective of this research was to study them in a broader perspective. My intention was to examine the ways in which iconographic material can provide information regarding port

architectures or arrangements by comparing the recent archaeological data with port images. This research is the first large-scale attempt to assess the documentary value of iconographic evidence for understanding the portscape. Thanks to the innovative interdisciplinary approach of the *PortusLimen* project with the interconnected database.

In Chapter 4, I have demonstrated that, although harbours played an important role in ancient societies, there was a certain lack of interest in depicting portscapes prior to the Roman empire. The few examples presented use only simple forms to refer to ideas about ports or maritime cities. They are just frames for scenes and not topics as they were not the purpose of the depiction. We can observe a change during the Hellenistic period. Inspired by the discoveries in geography, Alexandrians initiated the painting of *topoi* through the Nilotic or Alexandrian landscape that was a very popular genre that continued until Late Antiquity (*e.g*. mosaic of Sepphoris). During the Republic, we can detect a depiction of naval force through the diffusion of the *navalia* motif, down until the Imperial period. Under Augustus, the maritime landscape paintings as a genre was developed considerably as Pliny and Vitruvius's texts explained. During the Empire, namely after the sesterces of Nero, port images seem to be more than a pictorial genre as they emphasised largely the monumental feature of port. What does this change in the topics of representation mean? Examination of the iconographic corpus has allowed us to better understand this issue not only in terms of the systems of representations but also in the object depicted: the Roman port itself. The importance of harbours for Roman cities and societies is revealed by port motifs that are represented on every type of media (portable artefacts and non-portable artefacts) at different scales, ranging from the monumental down to the smallest gemstones which measure only 1.5 cm. Their expansion attests the importance of ports in Roman art and for Roman societies that seems to be connected to the historical context of the first three centuries when Rome, in full apogee, established the connection with its provinces through the networks of ports all around the *Mare Nostrum*. I have argued that port images come from a syncretism of artistic habits at the cross-road between Hellenistic traditions and sacro-idyllic landscape. Finally, I have defined different layers of meanings of ports images according to their social context through brief case-studies. We have seen that the numismatic material can serve as a tool of Imperial propaganda or of individual cities, as with the Peloponnesian ports of Corinth and Patras. In the domestic context, I have emphasised the aesthetic function and the demonstration of wealth. Finally, in funerary contexts, ports seem to be connected to the symbolism of passage and guidance.

The study of port iconography helps us to understand port architectural landscapes. However, we cannot rely only on the iconography because of the limitations of this type of evidence. That is why it was fundamental to check the iconographic data with other sources like epigraphy and

archaeology and to develop an interdisciplinary approach to go beyond the limits and clarify them at some points. The big challenge of this research was how to relate the data together? Chapter 5 puts the methodology into practice throughout three concrete case studies.

The first case study has highlighted the question of the weighing control in ports. The examination of the iconography, epigraphy and archaeological material confirmed that a specific place, located near the *emporium*, called *sacomarium,* was dedicated to the weighing control in port activities in the harbours of Puteoli, Portus and Tarraco. This study confirmed the presence of large scales in port contexts as indicated by the mosaic of Sousse and the *aequipondium* found in the port area of Tarraco that could lift 1500 kg. However, it raised some questions as regards to the type of goods controlled by the *sacomarii*. Except for the weights found at Ocriculum, we do not have epigraphic information concerning the nature of goods that they were used to weigh. The discovery of the *aequipondium* in Tarraco suggests that the *sacomarium* was used for weighing heavy goods such as metal ingots, stone, wood or sandbags or other building materials.

The second case study has underlined the question of the single monuments attested by iconography in portscapes like the freestanding column monuments, the arches and the trophies. This study allowed to raise the problematic related to their functions and their symbolic importance in port topography. I have demonstrated, through the examples of the columns of Caesarea Maritima, Cyzicus and Kreusae and the arch of Zara, that they were used not only to decorate and monumentalise port space, but also commemorated and honoured people, events or deities. Beyond their honorific and commemorative functions, the single monuments seem to have contributed to materialise religion in Roman portscapes. In fact, in port imagery, several deities could be identified thanks to the iconographic and epigraphic evidence. There were statues of Neptune at Portus, Isis Pelagia at Puteoli, as well as Priapos on the shores of the painting from Nabeul for example. The epigraphic data indicated that a votive column dedicated to Isis Orgia should have stood in the harbour of Kenchreai, while votive columns were dedicated to the Genius (*CIL* II, 3408), Mercury and the *Lares Augustales* (*CIL* II 5929) in the port of Carthago Nova. Beyond their aesthetic and votive functions, this case-study has underlined that freestanding columns could also serve as reference points for mooring in port basins. This utilitarian function seems to be confirmed by the discovery of numbered columns found around the Trajan's hexagonal basin at Portus, and the base of a column that explicitly mentions the repair of the column VII. As for the arches, we have seen that they were erected in portscapes to commemorate or honour an individual. In some cases, as at Ancona, it marked the passage from the sea to land, effectively acting as a *Porta Maritima*. On most of them, there was a statuary group of the chariot of Neptune or trumpeting Tritons. The question of the trophies in portscapes is, however, still unclear because of

the lack of information except in iconography. Ultimately, I have underlined the significant similarity of the architectural syntax between *pilae* with the bridges throughout the example the two arches at the extremities of the Flavian bridge of Saint-Chamas in the South of France and the pair of columns at the extremities of the bridge on the Euphrates River.

The third case-study has analysed the sacred spaces in Roman ports by focusing on the case-study of the sanctuaries of Isis. It has demonstrated the importance of the religion in port contexts and the preponderance of the deity figures or religious structures (temples) in Roman portscapes. Though a panel of ten sanctuaries of Isis in ports in the Mediterranean (Puteoli, Pompeii, Portus/Ostia, Cumae, Kenchreai, Delos, Baelo Claudia, Emporiae and Sabratha), I have attempted to understand their functions, how they fitted into the portscape and what link there was, if any, between the architecture, the liturgy and the maritime activities. We have seen that the sanctuaries to Isis had a significant topographical position in portscapes. Some of them were integrated in civic centres, as at Pompeii and Baelo Claudia, while others were placed at an important location in the city like in Emporiae where the *iseum* was located immediately to the right of the monumental entrance of the city on an elevated terrace. Most of them were specifically located so as to be easily accessible from the sea, as at Baelo Claudia, Pompeii and Sabratha. The cases of Puteoli and Kenchreai, however, are quite problematic since the archaeological data have not yet confirmed their existence. Even so, interesting elements can be observed in iconography and epigraphy and can enlighten us a little. The series of glass flasks indicate the presence of a prominent temple in the portscape of Puteoli that must have corresponded to the supposed temple to Serapis, whose existence is confirmed by the *lex parieti*. The presence of a temple with the same emblems as the temple of Serapis (a disk with plumes and two horns) depicted on the vase of Odemira suggests that it was probably an Isiac temple. The inscription ISIV(M) on the Prague flask reinforces this idea. With the exception of these two examples, and the Isiac material found at Puteoli, the presence of an *iseum* is not clear. The new examination of the supposed Isiac sanctuary at Roman Kenchreai has also provided new insights into certain problems on the sacred landscape of the Isthmus. However, current archaeological data do not allow us to conclude that the building was neither a sanctuary of Isis nor a nymphaeum. The hypothesis of a nymphaeum associated with a sanctuary of Isis is not impossible since we know that a nymphaeum was located in the Hellenistic sanctuary of Fortuna Primigenia at Palestrina and in the *Iseum Campense* in Rome.

Finally, the Chapter 6 has answered the question related to the spatial organisation of Roman ports. Focusing on the case-study of Leptis Magna, it has analysed what was the spatial organisation of the main port monuments like the lighthouse, the religious monuments, the monuments to the grain supply and the porticoes. The interest of this chapter was to check if the

monuments followed a predefined urban plan and if they correspond to a standardised Roman portscape design in reality and in iconography. I have demonstrated that no monument was randomly placed in a Roman portscape. Every monument depended on a well-thought-out programme and had its own symbolic value. The lighthouse of Leptis Magna was partly influenced by the model of the Pharos of Alexandria. Its likely representation on the quadrifons arch of Septimius Severus shows its importance in the harbour. In addition to marking the entrance of the port, it also materialised the beginning of the triumphal procession of Septimius Severus. The religious monuments were also significant components in the portscape of Leptis Magna. The Flavian temple dedicated to the Emperor's family seems to have played the role of a central harbour monument before the Severan arrangements and must have been the most prominent monument in the harbour before the construction of the temple of Jupiter Dolichenus. It seems to have exercised a function similar to the temple of Rome and Augustus in the harbour of Caesarea Maritima and that of Augustus at Alexandria. Both of them were oriented to face the harbour basin. After the Severan arrangements, the temple to Jupiter Dolichenus stood in the most prominent location in the Severan harbour. I have argued that it had a similar location to the temple identified with Liber Pater Commodianus in the centre of the northeast side of the hexagonal port of Trajan. We have seen that these temples that were centrally-placed in the portscapes of Leptis Magna and Portus were indirectly linked to the emperors. We have seen that the two small distyle Doric temples with columns *in antis* placed at each end of the moles at the entrance of the harbour of Leptis Magna, corresponded to an archetypal image of the port that could be put in relation with the coins of Kenchreai and Patras. The presence of an altar close to the temple and at the end of the mole, can also be found at Portus, as can be seen on the reverse of the famous Neronian *sestertius* of AD 64. Similar altars located between a temple and a lighthouse are also attested in the coins that depict the ports of Caesarea Germanica and Pompeiopolis. As for the monuments to the grain supply, this study has emphasised that they were not only public monuments for the storage and supply of grain but they became a major component of the port design and formed an integral part of the decoration and monumentalisation of the portscape. Their position in the mole not only facilitated the transport, loading/unloading and the storage of the grain, but also had a propagandistic purpose as they also advertised the richness of the Empire. Finally, the porticoes in harbours adorned the facades of the warehouses in order to enhance their architecture. They were built to unify, monumentalise, and regularise portscapes. The symbolic function of porticoes in Roman ports is confirmed by the *Portico di Claudio* at Portus*,* a monumental colonnade which defined the western seafront of the main land area of the Claudian port that would have provided a monumental façade for ships approaching the basin from the west. To conclude, we have seen that the urban

programme of the portscape of Leptis Magna corresponds to a design model of harbour disseminated around the Mediterranean that became an iconographic standard that was replicated on coinage and then on other type of media, such as mosaics.

7.2. Limitations and directions of a future research

A range of limitations were encountered during the research process, many of which have the potential for future studies. The first of these is in regard to offices. The question of the τελώνιον (toll-office, custom house) has not been studied here because of the lack of iconographic and archaeological information. These structures are well attested by several inscriptions in the harbours of Ephesos, Harlikarnassos, Parium and Hippo Regius. Only recently, during the Austrian excavations undertaken in the harbour of Ephesos in 2014, an ancient building next to the modern mouth of Kaystros River, might have been a customs office, which was later converted into a Byzantine church. However, the date and exact purpose of the earlier structure is still unclear[804] as only a superficial survey and limited excavation has been undertaken, making any interpretation of the site difficult.

A second limitation was encountered in studying religion in portscapes, given the sheer breadth of the subject. While the case-study on Isis provided some interesting results, it remains inconclusive because she was too polymorphic as a deity. Time constraints for the thesis made it impossible for me go into the question of the *iseum* at Puteoli in depth. In future research, it would be interesting to map the isiac material found at Puteoli. Furthermore, I would like to extend this research to other ports and deities and focus on the religious landscape of Roman ports by attempting to make a GIS of the cult and epigraphic material in port contexts.

Thirdly, I found that the study of the urban layout of portscapes could be deepened. It deserves to be the subject of a chronological study in order to better understand the evolution of the Roman portscapes and check the particularities according to the regions of the Roman world. Leptis Magna gave some interesting results but is unlikely to have been typical of ports across the whole of the Mediterranean. Other case-studies could open-up new perspectives.

[804] According to an email exchanged with Hans Taeuber (the epigraphist of the Austrian excavations at Ephesos) in February 2015.

A final imitation that I have encountered concerns the question of the single monuments. It would be interesting to draw an inventory of freestanding columns and arches as well as their measurements in order to better contextualise them in the portscape reconstruction.

	Height	Diameter
Caesarea Maritima (Column I)	1.43 m	0.51 m
Caesarea Maritima (Column I)	1.50 m	0.51 m
Kenchreai	1.27 m	0.37 m
Brindisi		
Numbered columns of Portus		
Columns found in the harbour of Ancona (now in the Capitoline Museum)		

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