

Introduction

This study developed over several years. It began with my research into Ostia for an MA thesis; ever since, my interest into this remarkable site has grown over the years, developing into the larger research project of this doctoral thesis. My initial unassuming enquiries into the spatial organisation of Ostia through its monumental house entrances grew into an extensive spatial assessment of Ostia's built environment. In the course of my endeavours I built up a keen interest in theoretical approaches to space and the related human use of space.

This thesis comprises nine chapters, including the conclusion. It will take the reader along the route of a spatial enquiry into the Roman city of Ostia, through which I intend to shed completely new light on the society of this port town. This survey begins with a stock-take of the works of various scholars of Ostia who have contributed to a better understanding of the city's urban development. Naturally such an assessment needs to be selective: only works which relate to the formation and development of the urban fabric were examined; these studies share a heightened awareness of the importance of urban space in structuring social activities. The critical assessment of earlier work helps us define the research objectives of this study, clearly identifying the lack of studies which combine data-driven theoretical analyses with the results of archaeological investigations to provide a more detailed account of the built environment.

The second chapter concentrates on Roman urban studies outside of Ostia. Pompeii has always been the prime site where novel ways of looking into the ancient city have been pioneered. What can be learnt from studies of other Roman cities like Pompeii and Empurias? Chapter two looks into contributions from some of the most influential scholars of Roman urbanism which developed out of Pompeian research (Zanker, Wallace-Hadrill and Laurence), but also

at the innovative work from a new generation of researchers who have promoted analytical methods for urban analysis. Among the studies examined there are quite a few protagonists of a methodology known as Space Syntax (Laurence, Grahame and Kaiser), and it is, above all, their work which has inspired this thesis.

As a result, chapter three is dedicated to Space Syntax. It aims at explaining the theoretical underpinnings of the method, but also provides a brief overview of Space Syntax studies in archaeology. The common assumption shared by most other theoretical approaches termed 'spatial analysis' is that space acquires significance through some other agency or social process which gives it its shape and its meaning. Hence spatial forms, or in Hillier's words the 'patterns of shaped and interlinked spaces of everyday life' should be studied only in the light of their social causes.¹ Such a clear preoccupation with the dominant role of human agency in spatial transformation leads to a methodological problem in archaeology, in that material culture appears deprived of influence on human life. However, archaeological knowledge of past urban life can be retrieved from the highly materialized form of the social life of encounter and place. Therefore the material forms in themselves will be of central interest and worthy of study, making past urban space an object of investigation and an entity of theoretical interest in its own right.

There are also far wider implications to the 'spatial turn' in the history of urban studies. Space Syntax prioritises the role of the built environment in structuring and giving occasion to social encounters. The incorporation of Space Syntax into any study of wider perspectives offers insights that reach beyond observations made only from building

1. Hillier (2008a: 223).

plans and visible structural remains. Space Syntax's methods not only provide evidence for the intricate organisation of urban space, but also investigate the active role of space in the constitution of society, through considering the ways in which social processes map into built form. Studying Ostia from a 'spatial' perspective entails more than singling out one of several possible thematic choices (e.g. urban planning, economy, household archaeology); a spatial approach is rooted in archaeology itself. In pursuing a spatial approach our study takes us immediately into a much wider theoretical field where space and its implications play a key role in the analysis of all social and economic processes.

Chapter four will lead us to the archaeological methodologies followed in this study and takes us to the technicalities of applied Space Syntax. This chapter discusses the methods and techniques used for data capture, processing and analysis. It explains all the preparatory work needed before methods of spatial analysis can be applied to the archaeological record, when we try to apply it to a site which is beset with problems.

Surprisingly, although Ostia's built environment has been attracting wide-ranging research interest in recent years, nonetheless the city's spatial organisation has remained a neglected field of study, with only limited attention given to formal methods of spatial analysis. Before being able to apply spatial analysis, however, it proves necessary to undertake a major work of re-mapping the city, incorporating a critical review of the excavation history and the forms of recording applied to the city and the strength and limitation of the available data. We shall show that excavation techniques and restoration methods reflect the bias of the excavators. Moreover, Ostia's history of excavation is intimately associated with Italian national history.

Having clarified the potential of the maps and textual information for the built environment of Ostia, our analysis proceeds through a sequence of increasing spatial scales, with a central emphasis on the active role of the built environment in constraining and enabling social behaviour. We begin in chapters five and six with individual houses and their enclosing

neighbourhoods (Insula IV ii), moving next, in chapter seven, to the street network and the public places of the city. Finally chapter eight focusses on a building type located across the whole urban fabric – the guild seats. A common theme elaborated in the context of the street system and the guild seats is the 'movement economy', where spatial behaviour is strongly conditioned by the opportunities and limitations for human mobility imposed by the physical structure of the city's traffic infrastructure.

The heart of this scalar analysis is the complete re-working of the archaeological evidence and its interpretative potential for one city block comprising 14 buildings in the south-eastern inner suburbs of the city (Insula IV ii), which has never been published in its entirety. This part of the thesis, we hope, will form in itself a major contribution to Ostian studies beyond the value of the Space Syntax analysis we have carried out for this and other parts of the city.

The final chapter summarises what has been achieved in the thesis and the future potential of such an approach for archaeological studies of past urban environments. A particular point which will be stressed here is the non-destructive nature of such investigations, to which we can add their ability to operate over entire cities as well as in different urban contexts regardless of time and place. Indeed, Space Syntax has been primarily developed from the analysis of recent and contemporary cityscapes but has proved to be extremely valuable for nucleated communities stretching back into later Pre-history, as well as for historical cities of the more recent past.

Ostia – a brief introduction to the site (Fig. 0.1)

In Antiquity Ostia was located at the mouth of the Tiber on the Tyrrhenian coast, about 25 km southwest of Rome. The course of the river changed over time and its estuary silted up, gradually moving the shoreline seawards. Today Ostia is located about 2 km inland, but still near the Tiber, where the ancient site is found on the southern bank of the river.

Earliest activities in the area have been connected to salt processing, probably dating back to the Middle and Late Bronze Age. An archaic road system

leading from the mouth of the Tiber to Rome and the Etruscan cities in the north of Rome seems to have been linked to the transport of salt. Ancient writers have assigned the area close to the mouth of the river to salt processing;² even Late Roman textual sources still referred to the area as the ‘campus salinarum Romanorum’.³ However, no secure archaeological evidence for the ancient salt pans has been identified and their exact location remains an open question, while the existing salt pans have been dated to the Medieval and modern periods, when salt was processed under the papal government.⁴ Surface pottery, dating to the 7th or 6th century BC, gives support to the idea that a small settlement predating Ostia might have existed in the south-east of the later city, presumably also linked to the salt production.⁵

Ancient writers attributed the foundation of Ostia to the fourth King of Rome, Ancus Marcius,⁶ who, according to tradition, ruled in the late seventh century BC. This long-established view was kept alive and even further reinforced by the second century AD city, when Ostia commemorated her foundation as the first Roman colony by placing a marble inscription in honour of the event.⁷ So far no archaeological evidence has been retrieved which could support such early dates for the foundation of the city. The earliest settlement that can be identified is the so-called Castrum, a rectangular military structure (195 x 125.7 metres) with four gates, built with large tufa blocks. The foundation dates for Ostia’s Castrum are not securely established, while the most likely dates point to 300 – 275 BC, based on pottery finds from the foundation layers.⁸

Owing to its presumed military character, Ostia’s Castrum has been associated with a series of ‘Coloniae Maritimae’ which were established along the Tyrrhenian coast. They were built with a concern for the protection of the coastal lands and hence colonists were dispatched to Antium in 338 BC, Terracina in 329, to Minturnae and Sinuessa in 296, and at an unknown date to Pyrgi,⁹ and also to Ostia. Various scholars have tried to establish a link between the foundation of Ostia’s colony and historical events, e.g. the advancing Carthaginian fleet which reached Ostia in 278 BC, or when the *duumviri navales*, the two officials in charge of the Roman ships in 311 BC, were appointed.¹⁰ There is however no specific mentioning of the foundation year of Ostia’s colony. In 267 BC Ostia became the seat of one of the *quaestores classici* (officials taking care of the fleet), and served primarily as a naval base. During the Republican period the city developed from a colony with presumed military character, administered from Rome, into a small civic town with its own local government. Concurrently a shift from a naval base to a commercially oriented port town took place, primarily focused on supplying Rome, but also supporting Ostia’s growing urban population. Towards the end of the Republican period Ostia had already grown into a city of considerable size and received new city walls enclosing an area of about 70 ha. In the Early Imperial period Ostia’s urban character was further developed, featuring new public buildings including a temple dedicated to Rome and Augustus and a theatre built by Agrippa.¹¹ Already in the Augustan period the city was supplied with fresh water by an aqueduct. A few warehouses developed, marking the growing importance of Ostia as a harbour serving Rome. However, all in all until the Early Imperial period the city showed a normal pace of urban progress and, although possibly lagging behind other prosperous cities like Pompeii, Ostia’s growth still developed along parameters which were not too different from other cities of the same period.

2. Livy i. 33.9: ‘silva Maesia Veintibus adempta, usque ad mare imperium prolatum et in ore Tiberis Ostia urbs condita, salinae circa factae.’ (Translation in Meiggs (1973: 16-17):

‘The Maesian forest was taken from Veii: Roman rule was advanced to the sea, and at the mouth of the river a city was founded, and salt-beds established near by.’)

3. Pavolini (2006: 283).

4. Pavolini (2006: 4-5).

5. Pavolini (2006: 4).

6. Ennius (Ann. II, fr. 22) is the first of a long line of writers who attributed the foundation of Ostia to Ancus Marcius, others followed: Livy i.33.9; Dion. Hal. iii. 44.4; Cic. De Rep. ii. 5 and 33; see Meiggs (1973: 16).

7. See Meiggs (1973: 16).

8. Martin (1996: 19-38).

9. See Meiggs (1973: 23) and Von Hesberg (1985: 129-173).

10. Warsenburg (1998), and Zevi (1996: 69-89).

11. Cooley (1999: 173-182).

Ostia's big urban transformation started at the end of the first century AD, and particularly during the first half of the second century, when the city's development seems to have accelerated in a way that was unparalleled in the ancient world.¹² The vast urban expansion was related to the construction and extension of the port facilities at nearby Portus, and the subsequent increase in trading volume. Ostia and Portus became Rome's principle ports, bringing supplies to the city of Rome, but also trading with the Roman provinces. The increased port activities brought prosperity to Ostia as well as an influx of new residents. During the first half of the second century AD Ostia's built up areas expanded far beyond the Late Republican city walls, extending the city's boundaries in all directions. New public buildings were added to Ostia's urban landscape including the impressive Capitolium in the northern extent of the *forum*, as well as the barracks of the fire-fighters and large public baths, and above all numerous warehouses and storage facilities. In the second half of the second century new building development slowed down, while existing buildings were modified and embellished. While Ostia still enjoyed prosperity during the 3rd century AD, the urban boom which was experienced during Ostia's commercial heyday had, however, ebbed considerably. Furthermore, the city also lost its political autonomy and came once more under the control of Rome who placed Ostia under the authority of the prefect of the grain-supply (*praefectus annonae*), who was the curator of the harbours.¹³

The fourth and fifth centuries saw a turn to punctuated luxury with several pockets of lavishly decorated Late Roman *domus* distributed over wide areas of the town, while other parts gradually fell into decay. Ostia was slowly abandoned and eventually became a quarry for marble and building material which was reused in Medieval buildings in the nearby Borgo. An interest in the site developed once again when the earliest excavations started in the 18th century when Ostia was part of the papal property.

A glossary providing brief definitions of the Latin terms, as well as technical or culture specific terms used in the study is found at the end of the book. The chronology of the imperial periods is also found at the end of the book. The Access data base which manages all structural data of Insula IV ii is available upon request.

12. Heinzelmann (2002: 105).

13. Meiggs (1973: 84, 186).

