

**Material Witnesses: The Altars of Republican Rome and Latium and
the Memory of Sacrifice**

By Claudia H. Moser

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This dissertation by Claudia H. Moser is accepted in its present form
by the Joukowsky Institute for Archaeology and the Ancient World as satisfying the
dissertation requirement for the degree of Doctor of Philosophy.

Date_____

Susan E. Alcock, Advisor

Date_____

John Bodel, Advisor

Recommended to the Graduate Council

Date_____

Stanley Stowers, Reader

Date_____

Christopher Smith, Reader

Approved by the Graduate Council

Date_____

Peter M. Weber, Dean of the Graduate School

Claudia Moser

Joukowsky Institute for Archaeology and the Ancient World
Brown University
Box 1837 · Providence, Rhode Island · 02912
Email: Claudia_Moser@Brown.edu · Phone: 917-655-4080

Education

Ph.D., Joukowsky Institute for Archaeology and the Ancient World, Brown University, Providence, RI.
Degree: September 2007- December 6, 2013 (defense date)
Dissertation title: *Material Witnesses: The Altars of Republican Rome and Latium and the Memory of Sacrifice*
Dissertation Committee: Susan E. Alcock and John Bodel (co-chairs), Christopher Smith, and Stanley Stowers

M.A., Classics, Brown University, September 2007- May 2010
Thesis title: *Religious Matter: The Symbol of the Altar in Latin Literature*.
Advisor: David Konstan

B.A., *summa cum laude*, The University of Pennsylvania, 2002-2006
Majors: Classical Languages and Literature; Classical Archaeology
(Individualized Major)
Senior Honors Thesis: *Naked Power: The Phallus as an Apotropaic Symbol in the Images and Texts of Roman Italy*
Honors and Awards:
2006: Phi Beta Kappa
2006: Phi Beta Kappa Thesis Award
2006: Rose Award for Undergraduate Research, University of Pennsylvania
2005-2006: Penn Humanities Forum Undergraduate Research Fellowship, University of Pennsylvania
2005: George Allen Memorial Prize in Classical Studies, University of Pennsylvania
2005: Ben Franklin Scholars Research Grant, University of Pennsylvania
2003-2006: Ben Franklin Honors Program, University of Pennsylvania

Intercollegiate Center for Classical Studies, Rome, Italy, Fall 2004

Doctoral Fellowships

2012-2013 Irene Rosenzweig/Samuel H. Kress Foundation/Helen M. Woodruff Fellowship of the Archaeological Institute of America Pre-Doctoral Rome Prize, American Academy in Rome
2011-2012: *Memoria Romana* (Max Planck Society) 12-month Dissertation Fellowship in Rome
2007-2008: Joukowsky Presidential Fellowship, Brown University

Teaching and Research Interests

Roman archaeology, Roman and Greek religion, Latin prose, ancient social and cultural history

Teaching Experience and Teacher Training

2014: Instructor on Record (curriculum designed and taught entirely by myself): ARCH 1764: *25 Things! 250 Years of Brown's Material Past*, Brown University.

2013: Teaching Assistant: ARCH 1750: *Building Big! Supersized Architectural and Engineering Structures from Antiquity*, Brown University, Prof. Felipe Rojas.

2013: Assistant Director, Classical Summer School, American Academy in Rome.

2011: Instructor on Record (curriculum designed and taught entirely by myself): ARCH 1160: *World of Museums: Displaying the Sacred*, Brown University.

2011: Sheridan Center Teaching Certificate, Brown University, Providence, R.I.

2010: Teaching Assistant: ARCH 0666: *Cult Archaeology: Fantastic Frauds and Meaningful Myths of the Past*, Brown University, Prof. Michelle Berenfeld.

2009: Teaching Assistant: ARCH 0100: *Introduction to Field Archaeology*, Brown University, Prof. Susan Alcock.

Publications

Books:

Moser, C. and C. Feldman (eds.), *Locating the Sacred: Theoretical Approaches to the Emplacement of Religion*. Joukowsky Institute Publication 3 (Oxbow Books: Oxford). January 2014.

In prep: Moser, C. and J. Knust (eds.), *Ritual Matters: Material Residues of Ancient Religion*. Memoirs of the American Academy Supplement Series.

Articles:

"Linear Reflections: Ritual Memory and Material Repetition in the Thirteen Altars at Lavinium," in *Locating the Sacred: Theoretical Approaches to the Emplacement of Religion*. C. Moser and C. Feldman (eds.), Joukowsky Institute Publication 3 (Oxbow Books: Oxford). January 2014.

"The Orientations of the Altars at Lavinium and the Republican Calendar" (with Sophie Hay). *Papers of the British School at Rome*. Volume 81. October 2013: 363-366.

In press: "Potent Charm: Phallic Amulets in the Collection of the University of Pennsylvania Museum of Archaeology and Anthropology." *Expedition*. (Forthcoming).

In prep: "The Architecture of Changing Sacrificial Practices in Pre-Roman and Roman Gaul," in *Arts of Rome's Provinces: Studies in Honor of Natalie Boymel Kampen*. Mariana Egri, James F.D. Frakes, and Susan E. Alcock (eds.). To be submitted to Getty Publications, Getty Research Institute.

In prep: "Giving the Gods Their Space: Architecture and Topography in the Sacred Area of the Republican Temples at Ostia," in *Ritual Matters: Material Residues of Ancient Religion*. C. Moser and J. Knust (eds.). To be submitted to the *Memoirs of the American Academy Supplement Series*.

Reviews:

Review of *Facing the Gods: Epiphany and Representation in Graeco-Roman Art, Literature and Religion*, by Verity Platt. *College Art Association*. CAA.reviews.org, December 5, 2012.

Other Publications:

In press: Entries s.v. "Altar," "Lavinium," "Fascinus," in *Routledge Dictionary of Ancient Mediterranean Religions*. Eric Orlin, Nicola Denzey Lewis, Lisbeth Fried, and Michael Satlow (eds.), London: Routledge. (Forthcoming).

"Eastern Religions in the Roman World" in *The Timeline of Art History*
http://www.metmuseum.org/toah/hd/errw/hd_errw.htm, Metropolitan Museum of Art, February 2007.

"Priapus: Origins, Cults, Roles" in *Etruscan News* 7 (Winter 2006): 5-6.

Presentations and Invited Lectures

2013

"Mixed Blessings: Sorting out the Sacred at the Sanctuary of the Republican Temples at Ostia." Paper presented at *Substance of Sacred Place: An Interdisciplinary Workshop on Locative Materiality*. Kunsthistorisches Institut – Max-Planck-Institut. Florence. June 2013.

"Giving the Gods Their Space: Architecture and Topography in the Sacred Area of the Republican Temples at Ostia." Paper presented at the *Ritual Matters: Material Residues of Ancient Religion*. American Academy in Rome. May 2013.

"Mapping Material Memory: The Construction, Placement, and Evolution of the Thirteen Altars at Lavinium." Paper presented at the *Landscape and Memory in Ancient Latium International Workshop*. German Archaeological Institute at Rome and the Royal Netherlands Institute in Rome. May 2013

"What Remains of Ritual: A Study of the Archaeological Record of Animal Sacrifice in Republican Rome and Latium." Invited paper presented as part of the Babcock Lectures at the *Intercollegiate Center for Classical Studies*, Rome, Italy. April 2013.

"Faunal Remains, Architecture, and Topography at S. Omobono, Rome." Invited paper presented at the conference *Archaeology of Cult in the Roman West Seminar*. Center for the Study of Ancient Religions, University of Chicago. April 2013

"Fleshing out the Remains: The Local and Regional Context of Republican Roman Animal Sacrifice." Paper presented at the American Academy in Rome. March 2013.

"Reiterating Ritual: Multiple Altars and Their Replicated Miniatures at the Sanctuary of Largo Argentina, Rome." Paper presented at the *Archaeological Institute of America Annual Meeting*, Seattle, WA. January 2013.

2012

"Devotional Reflections: The Deposition of Miniature, Votive Altars at the Area Sacra di Largo Argentina." Paper presented to the *Associazione Internazionale di Archeologia Classica*, Rome, Italy. June 2012.

"'Think like an Archaeologist': Teaching Critical Thinking Skills through Archaeological Concepts in the Providence Public School System" (with Katherine Harrington, Emanuela Bocancea, and Jessica Unger). Poster presented at the *Society for American Archaeology Annual Meeting*, Memphis, TN. April 2012

2011

"Viewing the Remains: Sacred Topography and Sacrificial Deposits at Republican Sanctuaries in Rome and Ostia." Paper presented at the *Brown Bag Lecture Series*, Joukowsky Institute for Archaeology and the Ancient World, Brown University, Providence, RI. April 2011.

"Think Like an Archaeologist: Using Concepts of Archaeology to Teach Critical Thinking Skills." (with Katherine Harrington, Emanuela Bocancea, GERALYN Hoffman, Jessica Unger, Mariani Lefas-Tetenes, and Laura Atchinson). Paper presented at the *Brown Bag Lecture Series*, Joukowsky Institute for Archaeology and the Ancient World, Brown University, Providence, RI. April 2011.

"Rite Ordering: The Structuring of Sacrificial Ritual at the Thirteen Altars of Lavinium." Paper presented at the conference *Gods in Ruins: The archaeology of religious activity in Protohistoric, Archaic, and Republican central Italy*, Oxford, UK. March 2011.

"Sacred Matter: Sacrifice and the Altars of Republican Rome and Latium." Paper presented at the conference *Archaeology of Italy: State of the Field 2011*, Brown University, Providence, RI. March 2011.

"Negotiating the Sacred: Sacrifice and Religious Topography at the Sacred Area of the Republican Temples at Ostia." Paper presented at the *Archaeological Institute of America Annual Meeting*, San Antonio, Texas. January 2011.

2010

"Linear Reflections: Ritual Memory and Material Repetition in the Thirteen Altars at Lavinium." Paper presented at the *Theoretical Archaeology Group Annual Meeting*, Providence, RI. May 2010.

"Putting Sacrifice in its Place: Topography and Archaeology of the Sanctuary of Mater Matuta." Paper presented at the *Archaeological Institute of America Annual Meeting*, Anaheim, CA. January 2010.

2009: "Phallic Representations in Pompeii." Invited lecture for ARCH 1120: *Pompeii*, Prof. Michelle Berenfeld, Brown University. March 31, 2009.

2008: “Phallic Plaques at Crossroads in Pompeii.” Invited lecture for CLAS 1750I: *Highways and Byways in Antiquity*, Prof. Susan Alcock and Prof. John Bodel, Brown University. February 20, 2008.

Organized Conferences, Sessions, and Workshop Participation

2013: *Ritual Matters: Material Residues of Ancient Religion* (conference and workshop co-organized with Jennifer Knust). American Academy in Rome. May 17-18.

2013: Workshop Participation: *Landscape and Memory in Ancient Latium*. German Archaeological Institute at Rome and the Royal Netherlands Institute in Rome. May 4-13.

2010: *Locality of Sacrality: Theoretical Approaches to the Emplacement of Religion* (conference session co-organized with Cecelia Feldman, Brown University). Theoretical Archaeology Group (TAG-USA), Brown University. April 30-May 2.

2010-2011: Workshop Participation: *Mellon Graduate Workshop: (Re)uniting Fractured Disciplines: Intellectual Coherence and Methodological Consistency in Study of the Ancient Mediterranean World*, Brown University.

Fieldwork Experience

2012, 2011, 2010	S.Omobono, Rome; Co-directors, Nicola Terrenato and Paolo Brocato
2011:	Petra, Jordan; Co-directors, Susan Alcock and Christopher Tuttle
2010:	Mt. Lykaion, Greece; Co-directors, David G. Romano and Mary Voyatzis
2009:	Villa Magna, Italy; Director, Elizabeth Fentress. (Responsibilities: Dig Manager.)
2008:	Villa Magna, Italy; Director, Elizabeth Fentress
2005:	San Venanzo, Italy; Director, Claudio Bizzarri
2004:	Akrotiri, Greece; Director, Christos Doumas

Travel Grants

2013, 2012, 2011:	International Affairs Travel Fund Award, Brown University
2013, 2011, 2009:	Graduate School Travel Grant, Brown University
2011:	Lemmermann Foundation Scholarship Award, Rome Italy
2011, 2010:	Archaeological Institute of America Graduate Student Travel Grant
2009:	Judaic Studies Travel Grant, Brown University
2009:	Joukowsky Institute for Archaeology and the Ancient World grant for travel and field work

Departmental and Academic Service

2012-2013	Academic Mentor to undergraduate students at the Intercollegiate Center for Classical Studies, Rome.
------------------	--

2012	American Academy in Rome representative for <i>Associazione Internazionale di Archeologia Classica</i>
-------------	--

- 2010** Education Outreach Proctor, Joukowsky Institute for Archaeology and the Ancient World
- created and administered the outreach, five-session pilot program “Think like an archaeologist”
 - taught sixth-grade classes in public schools in Providence
- 2009** Exhibitions and Vault Proctor, Joukowsky Institute for Archaeology and the Ancient World
- designed organized and installed exhibitions of artifacts (ancient, Islamic and modern)
 - organized and displayed the department’s collection of ancient art within the artifact storage vault
 - composed labels describing the artifacts on display
- 2009, 2008** Co-Organizer of the New England Graduate Archaeology Workshop, Brown University
- 2009, 2008** Events Proctor, Joukowsky Institute for Archaeology, Brown University

Other Professional Experience

- 2010-present **Getty Foundation**
 Administrative Assistant for the Getty Foundation Seminar: *Arts of Rome’s Provinces*
 Directors: Susan Alcock and Natalie Kampen
- research, compile, and disseminate bibliography for the seminars’ reading lists
 - design and administer website for the seminar
 - organize and oversee the preparatory and on-site logistics for the seminars in England, Greece, and Los Angeles.
- Fall 2008 **The Museum of Fine Arts**, Boston, Art of the Ancient World
 Curatorial Intern to Richard Grossman, Assistant Curator
- composition of labels for the Greek and Roman sculpture gallery
 - independent research
 - prepared and led tours of the Greek galleries
- June 2006- June 2007 **The Metropolitan Museum of Art**, Department of Greek and Roman Art
 Curatorial Intern to Sean Hemingway, Associate Curator
- assisted with new installation of Hellenistic, Etruscan and Roman galleries
 - independent research
 - assisted with scanning slides, text and preparing lectures
 - *Timeline of Art History*
 - prepared and led a tour of the new Greek and Roman galleries

- Winter 2005- 5/2006: **Corinth Computer Project**, University of Pennsylvania Museum of Archaeology and Anthropology
Research Assistant
- digitally mapped ancient Corinth using AutoCAD software
 - researched and analyzed recent Corinthian scholarship
 - reviewed, revised and edited outdated plans using new technology
- Summer 2005: **The Metropolitan Museum of Art**, Department of Greek and Roman
Volunteer Intern to Sean Hemingway, Associate Curator
- independent research
 - assisted with scanning slides, text and preparing lectures
 - assisted with preparatory stages of the gallery's new installation

Academic and Professional Societies

Archaeological Institute for America
Society for Ancient Mediterranean Religion
American Philological Association
Associazione Internazionale di Archeologia Classica
Society of Fellows, American Academy in Rome
Phi Beta Kappa

Languages and Skills

Languages:

Latin (high level of fluency in reading)
Ancient Greek (high level of fluency in reading)
Italian (high level of fluency in speaking and reading)
French (fluency in speaking and reading)
German (reading knowledge)

Computing:

ArcGIS software
AutoCAD software
TMS (The Museum System)

Professional References

Professor Susan E. Alcock
Director, Joukowsky Institute for Archaeology
Brown University
Susan_Alcock@brown.edu

Professor Christopher Smith
Professor of Ancient History, St. Andrews
Director, The British School at Rome
Director@bsrome.it

Professor John Bodel
Professor of Classics and History
Brown University
John_Bodel@brown.edu

Professor David Konstan
Professor of Classics, NYU
Professor Emeritus of Classics,
Brown University
David_Konstan@brown.edu

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involving me in conferences and workshops, and introducing me to a field of researchers and scholars who helped to shape my project. I thank the American Academy in Rome not only for its extraordinary year-long support, but also for the community and continuing collaborations it so fostered. Thanks is also due to the Lemmermann Foundation for its support for fieldwork and research in Rome.

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The graduate students in the Joukowsky Institute have been excellent colleagues and friends. In many different ways, each of the graduate students affected my research

and time at the Institute and I owe each one huge thanks for their contributions to the dynamic, intellectual environment that I enjoyed. Several among them deserve special recognition. I thank Keffie Feldman for being such a great friend and co-editor, for testing my feats of agility, and for always being willing to let me talk through ideas. Very special thanks are due to Jessica Nowlin, who made beautiful maps of Ostia for me and to Sarah Craft, who enthusiastically hosted and guided me to all the sacrifices in Istanbul during Kurban Bayrami. My supportive cohort, Tom Leppard and Alex Knodell, made graduate school feasible and fun.

In Rome, my research was directly assisted by a number of individuals who gave me access to data and archives, helped me get permissions, made professional introductions, facilitated surveys. I am grateful to Lisa Fentress for always letting me talk through and test out ideas about orientation or animal bones, for teaching me how to excavate, for endless professional introductions, and for being an exceptional friend. Great thanks are due to Simonetta Serra, who first starting helping me when I was in my 2nd year of graduate school and hasn't once stopped. Simonetta has introduced me to colleagues, helped get me access to sites or archives, and challenged me on gelato favorites. Monica Ceci deserves enormous thanks for all her help and support throughout my research on Largo Argentina – personally searching for the collection of terracotta votives, allowing me to visit the archives to photograph and study the material at all times, laying out all the excavation reports from the site and taking time to help me decipher handwriting or notes. I thank Alessandro Jaia for his unfaltering persistence in helping me get a permission for the site of Lavinium, for his opening of his storerooms to me, letting me study and photograph miniature altars, and for taking me on a tour of his

excavations. Thanks are especially due to two people who helped me do surveys necessary for my dissertation: Sophie Hay and Elizabeth Robinson. Sophie (along with her team from the British School at Rome including Elizabeth Richley and Alice James) conducted the survey of the thirteen altars at Lavinium and produced a map and data that have been invaluable for my research. Elizabeth generously (and patiently) helped me with a survey of the sanctuary at Ostia, providing data which have proven important to both my dissertation and larger research. Special thanks are due to Nicola Terrenato and Paolo Brocato for welcoming me as a member of the S. Omobono excavations for three years and for giving me access to the archives and maps. The community of fellows and staff at the American Academy were an amazingly supportive and collaborative group of colleagues and friends. Special recognition is due to Adele Chatfield-Taylor, Christopher Celenza, and Kimberley Bowes, as well as to the cohort of fellows who never failed to collaborate with me, advise me, read drafts, or talk through ideas endlessly – particularly Beth Saunders, Yoko Hara, Irene San Pietro, Peter Bell, Steve Ellis, and Jennifer Knust.

Finally, I owe enormous gratitude to my family and friends. They have put up with all stages of stressed-out Claudia and supported me throughout this process. Friends from Providence, from archaeological projects (particularly from Villa Magna), from Rome, from the Academy, from home, have kept me sane, made me laugh, and always cheered me. I thank Chris for putting up with me, making me smile, and endlessly supporting me during this last year of the dissertation. My family contributed more to this project than they will ever know. I thank my sister, Diana, especially for showing me that I don't always have to be stressed. And to my parents, Janet and George, for everything – even just naming me Claudia and thereby setting me on my Classical path.

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INTRODUCTION

Altars supply a critical point of ritual contact between humans and gods, matter and spirit, the natural world and the divine. The ordinary act of sacrifice *upon* an altar can be best understood when viewed as a momentous event – a monumental spectacle, at once ephemeral, iterative, and eternal, centered on and bound to a specific site. A study of the altar as a cultural object cannot therefore be divorced from a study of the sacrificial ritual enacted around it; the monument and practice are interdependent, in constant dialogue, perpetually reinforcing, impacting, and qualifying each other. In the chapters that follow, I argue for a sacrifice that is assuredly an experience of the material world, a practice centered on and determined by the altar itself, a practice that is markedly site specific, inherently fixed, and locally bound. While sacrifice may indeed have some universal or, at least, regional aspects that can be seen as independent of the location of its enactment, I will show that sacrificial ritual is most effectively viewed as fundamentally emplaced and local, characteristically distinct, particular, and bound to its specific topographical and material situation, and most especially so to the specific altar at which the sacrifice occurred.¹

¹ Throughout this dissertation, I will repeatedly use the term “material.” As befits a study of the relation of materials to action, my definition of “material” is operational. I view “material” as an adjective used normatively with the noun “object” to denote, in the narrowest sense of the term, a category consisting of distinct, demarcated regions in the field of human tactile perception which are relatively stable and resistant to the touch. If one wants to use the term in a more extended sense, one can weaken the demarcation and resistance conditions. Materiality then is effectively synonymous with “touchability.” One may combine visual perception and tactile experience to infer materiality. In a narrow sense, material o

We can no longer study Roman sacrifice as a subset of Greek practice, or Republican Roman sacrifice as a direct ancestor of better attested Imperial models, or Italic sacrifice during the Republican period as an imposition or mimicry of Roman culture.² We can no longer base studies of Republican sacrifice on Imperial figurative or literary depictions – with their characteristic artifice and their aspirational attempts to control what they purport to portray. The defining particulars of the sacrifice necessarily vary with the cultural and temporal emplacement of the ritual. This investigation, a study of the sacrifice enacted at each of five sanctuaries, will underscore this claim in great detail; general definitions of Roman sacrifice can be formulated, but the nature of a community's experience and memory of the import of the rite will reflect the local character of the ritual's materials and topographical setting.

The research in this dissertation focuses on five sanctuaries, carefully selected for correspondences in period and regional setting, and for the ability of each to offer a rich archaeological assemblage consisting of a multiplicity of sequentially constructed, permanent altars together with organic and inorganic sacrificial deposits. The dates of the sanctuaries span the entire Republican era – S.Omobono in Rome (6th-3rd century B.C.E.), the Thirteen Altars at Lavinium (6th-4th century B.C.E.), Area A at Fosso

objects may be further classed usefully as cultural (physically worked) or natural. In a broader view, the noting of an object is itself a cultural act and, in that sense, all such material objects are cultural objects. The operational, haptic definition of materiality avoids another vexing issue by taking no note of the relationship of internal neurobiological processes to the contact of the body with external materials – what is sometimes called the problem of mind-matter dualism. In my definition, the existence of an object's materiality resides in the certainty that there would be cross-cultural agreement that the object is touchable. In discussions below of the concept of material agency and the extended mind, I will face the mind-matter issue head-on and take the view that cognition and the external material world are inseparably bound.

² See De Cazanove (2000) and Glinister (2006) for recent discussions on the spread of anatomical votives within Latium. See also Chapter 3 for discussion about the spread of votives.

dell'Incastro at Ardea (4th-2nd century B.C.E.), the Sacred Area of the Republican Temples at Ostia (3rd-1st century B.C.E.), and Largo Argentina in Rome (3rd-1st century B.C.E.). While representing diversity of form, setting, and materials, these sanctuaries nonetheless share features that invite a coordinated archaeological, contextual, and topographical study of Roman sacrifice.³

How to begin? A theoretical tool box:

Sacrifice is imprinted on the archaeological record. In starting (literally) from the ground up, in examining this material record and relying as little as possible on textual accounts and figural images (which themselves can be biased or not of the same period), I examine the intricate entanglement of sacrificial practices and their material settings in the chapters that follow. If, as I argue, sacrifice is indeed site-specific, and if indeed the particularities of a sanctuary (its layout, organization, orientation, and architecture) all contribute decisively to the procedures and practices of sacrifice, then such a materially grounded empirical study requires a correspondingly grounded understanding of the theoretical assumptions we may be making when we approach the study of sacrifice.

³ In this dissertation, I will be examining “public” sanctuaries and altars and “public” sacrifice. I will be looking at the communal sacrifice that occurred at monumental, public, permanent altars. This dissertation will not be examining portable, temporary altars. While not the primary focus of this dissertation, miniature, terracotta portable altars will nonetheless be examined in Chapter 3. By public I mean “statal” or civically sponsored. I fully recognize the pitfalls and problems of using the generic terms “public” and “private.” How would we categorize the public rooms of a private residence (for example, the cult room in the Villa of the Mysteries at Pompeii)? For the purposes of this project, it is not necessary to address such distinctions. Ancient authors (Marcian *Institutiones* bk.3; Ulpian *ad edictum* bk.68), albeit much later than the period studied in this dissertation, made this very same distinction between public and private religious rites. In these Latin authors’ terminology, religious acts in public (by statal decree or authority) are termed “*sacer*,” this word referred to ownership and to the property of the gods. Those religious actions that are connected with places or objects marked by death, such as burial or places struck by lightning, are termed “*religiosus*” (Ando and Rüpke 2006:10-11; Scheid 2003:23-25).

The following detailed case studies explore just how sacrifice is a site-specific practice, how the character of the ritual is uniquely crafted by its surrounding religious setting and associated ritual objects. Approaching the existing data from a material, social, and cognitive perspective, this dissertation moves away from considering Roman religion and sacrifice from the traditional intellectualist perspective in which culture, action, and experience are manifestations of doctrines, beliefs, and concepts.⁴ I view sacrifice as religious behavior inseparably bound to the Roman experience of the physical world. Viewing sacrifice as a ritual, as human behavior, accessing Roman religion from different standpoints, necessarily requires a bigger ‘tool kit,’ supplementing standard analyses of the verbal record of belief with an assortment of theories originating in other disciplines and designed for other kinds of problems; but all the theories are rooted in the

⁴ Sacrifice in general may be associated with a relatively stable set of beliefs across a population, or may have a core pattern or procedure that remains invariant over substantial shifts in belief. In a recent volume, *Imagistic Traditions in the Graeco-Roman World: A Cognitive Modeling of History of Religious Research*, a number of papers focus on the doctrinal aspects of Roman religion; the various authors argue that Roman religion was “pre- or protodoctrinal,” a religion that could have developed into a “full-blown doctrinal modality” (apart from the absence of a body of explicit religious teachings) (Gragg 2004:75-76, 82; Martin 2009:240; Whitehouse 2004: 29-47; 2004b 226-227). Aleš Chalupa’s article, “Religious Change in Roman Religion from the Perspective of Whitehouse’s Theory of the Two Modes of Religiosity,” breaks down Roman religion into its principal cognitive science components – transmissive frequency, level of arousal, principal memory system, ritual meaning, techniques of revelation, social cohesion, leadership, inclusivity/exclusivity, spread, scale, degree of uniformity, and structure – and reveals how each aspect underscores the doctrinal character of Roman religion. Chalupa argues that this very frequency and repetition would have established a high level of uniformity in practice (2009:122). While it may be true, as Chalupa states, that “procedural laws were strictly observed and considered immutable,” sacrifice at distinct sanctuaries in diverse regions was not, on the ground, a mere imitation of some model procedure, but rather specific to its particular place, to its natural and topographical setting, to the specific god who was the object of worship. The cognitive science of religion is founded on its concepts of memory but its view of Roman religion, as will be discussed later in this introduction, seems to focus on religion synchronically and does not consider, for example, the near absence of written sacred texts or a centralized religious authority during the Republic (for example, Griffith 2009:164 asserts a high level of uniformity in religious practice, viewing it as centralized and as having a low level of arousal). Such universalizing and blanket assertions need to be unpacked and tested for consistency with the data for each particular time period and each particular place.

need to organize data that are primarily social, cultural, economic, and cognitive.⁵ As will become clear throughout the following chapters, in reorienting the study of Roman sacrifice to focus on the experience of the ritual, no one theory of ritual or sacrifice has universal applicability; each approach has its limitations and each can be useful in its own way; each theory can lend itself in different ways to different contexts. In fact, when carefully coordinated, the use of such theories can be surprisingly compatible – complementing and mutually reinforcing one another in their ability to help us make sense of the archaeological data.⁶

In what follows, I draw on a variety of theories to understand public sacrifice, the characterizing phenomenon of Roman religion, as a practice that is a psychological, procedural, sensual, and most importantly, a material experience. Although these approaches may *seem* disparate, they connect and interact usefully in a manner that serves to reinforce an understanding of Republican Roman sacrifice as an embodied and sensory cognitive event, as a manifestation of human behavior, as a structured individual and communal experience in the material and physical world. For example: phenomenological theories about boundaries and movement from the various schools of cognitive science, landscape archaeology, anthropology, and behavioral studies help to model the interaction among the religious buildings within the Sacred Area of the Republican Temples at Ostia; theories underlying miniaturization (borrowed from

⁵ Reifying the concept of belief, Ulucci (2008:45) nicely notes that “beliefs were tied to practices and the practical understandings they assume.” Therefore, it is not specific beliefs that necessarily shape a Roman sacrifice, but rather the practices (these actions themselves serving as manifestations, under some interpretation, of beliefs) that offer the intellectualist scholar an understanding of the Roman ritual of sacrifice.

⁶ See Chapter 6 for the ways in which ritual instruments can be viewed as both material agents and supernatural agents.

semiotics, language composition, and pre-historic archaeology) or mimesis (from art history literature and post-colonial studies) are used to investigate the offering of *arulae* from Largo Argentina; theories of reciprocity, gift-giving, value, and production and consumption (borrowed by the fields of religious studies, anthropology, and economics) serve to elucidate the particularized practice of animal sacrifice at S. Omobono; tenets of calendrics, astronomy, and agriculture inform the study of the orientation of specific altars at Ardea and their connection to the ritual calendar and annual sacrifice; and the distinct ways in which two types of ritual schema impact memory, as prescribed by theories of religion and memory from cognitive science, are translated from the study of the mind to that of matter in order to explore the idea of material memory at the Thirteen Altars at Lavinium.

What the application of these varied theories contributes to this study is a way to access and understand better the phenomenon of sacrifice as a site-specific practice, centered on and bound to a designated altar in a particular sacred setting. By viewing religious activities as structured experiences in the material world, I am intentionally giving priority to the religious materials and settings themselves. Throughout each of the following chapters, in each sanctuary examined, I will anchor inferences about religious actions and material experience firmly in the archaeological record – whether in the architectural setting, in the votive or animal offerings, in the precise placement and orientation of an altar, or in various altars' material repetitions and iterative constructions. Through these examples, through these different media, I invoke the concept of material agency and attribute a sort of overriding authority to materials, assigning the primary,

active, determining role in ritual to the objects and space that comprise the permanent physical context of the ephemeral actions of the sacrifice.⁷ The attribution of a regulatory role in the determination of human behavior to materials does not in any way entail conscious intent on either side of the relationship. Materials are not endowed with animate consciousness nor are the humans who respond to the operation of this authority necessarily aware of its source. In the study of Roman religion, there is often concern for finding a discourse of authority, attributing decisions to some individual or collection of individuals. In this dissertation, I argue instead for a more inclusive *landscape* of authority, one in which the physical context and material resources of religious activities, spaces materially remembered and actively re-experienced, establish patterns for the reenacting of sacrifice. At each sanctuary examined, it will become clear that the ritual objects, the performance space, and the sacred settings themselves served to limit, shape, and effectively localize the character of the experience of Republican Roman sacrifice.

We cannot limit studies of sacrifice to representing one specific meaning or to conveying one particular ideology (as often seems to be the case when focusing on a single moment in the sacrificial procedure, e.g., the feast or the slaughter). Rather, in examining the entire sacrifice (from the breeding of the animal to the selection of the victim to the procession to the altar to the libations – wet and dry – to prayers, slaughter, the examining of entrails, the cooking and division of the meat, the feasting, and the

⁷ Bloch (1989, 2004) emphasizes that ritual's source is seen by the participants as outside themselves, with a reliance on the authority of others to guarantee the value of what is performed within ritual. For Bloch, a participant or observer in ritual does not need to understand something in order to accept it, modeling his behavior in ritual according to what he believes others have done before him. While I too am arguing that the ultimate authority guiding ritual resides outside the community of contemporary participants, I instead see this authority as generated by the religious objects and spaces in which the ritual action is embedded.

disposal of the uneaten remains), I will study many different aspects and layerings of practice, revealing not a single, defining meaning for the enactment, but a multiplicity of relationships (material, human, divine, and animal), a variety of transactions or arrangements, an assortment of outcomes.⁸

Sacrifice both fits within the disciplines of broadly universalizing ritual studies and at the same time remains a distinct practice, bound to the particularities of its social and cultural environment.⁹ Sacrifice is a context-specific subset of ritual, possessing certain attributes that are necessarily shared with other religious practices but nevertheless, most prominently and manifestly, presenting a characteristic material aspect that is particular to sacrifice itself. This property of sacrifice, arguably the most materially elaborate of all communal experiences, calls for a range of theories that access the behavior of humans and their relation to their things, not just to religious thought or doctrines. For sacrifice does not have a single general, definitive meaning, a single setting, a single script; rather the multiplicity of meanings brought to the sacrifice by each participant mirrors, in ways that differ from other kinds of ritual, the cultural and site specificity of the ritual action itself. We have to move away from the idea that there is a single meaning in order to better understand and access Republican Roman sacrifice; we have to focus instead on

⁸ For the purposes of this study, I see sacrifice neither simply as a transaction between the god and human (Evans Pritchard 2003; Parker 1998; van Baal 1976), nor solely as a means for distributing meat (Detienne and Vernant 1989; Rüpke 2005; Scheid 2005), nor simply as a mechanism for social cohesion (Durkheim 1995; Rappaport 1999; Turner 1977). Rather, sacrifice is a complex interaction involving different projections of human experience onto the world – social, divine, animal, and most importantly, as I will argue, material.

⁹ In what follows, the words “ritual” and “sacrifice” are used interchangeably with “religious activity,” all to suggest an act, an experience set in a particular sacred site. I am well aware of the nuances and difficulties inherent in the word “ritual” within a variety of disciplines. My conception and use of “ritual” for this study follow more the meaning inherent in the Latin *sacra* or *caerimoniae* (the content of the rites or rituals) than the Latin *ritus* (the way of celebrating a traditional ritual). For the purposes of this study, however, I always use the word ritual to denote an action involved with its physical and material context.

the materials, settings, and objects used in the ritual and examine how they themselves actually inform and craft the character of sacrifice.

Heterogeneous Landscape: Sacred and Political

As will become clear in the detailed analysis of the different cases investigated in this dissertation, even within a study region quite restricted geographically (the farthest site examined only 27 kilometers away), the material representation of Republican sacrifice was unmistakably particular to the local character of the site in which it was enacted. The different patterns and models of sacrifice manifest in the material record of the region serve to support recent recognition of a corresponding diversity in other cultural practices, language, and political organization. The scholarship of the last fifteen years or so has emphatically revealed that, from a variety of different cultural institutions, the landscape of Central Italy, as a geographic entity, does not present the monolithic social panorama that previous scholarship might have led us to expect – the region was not so completely under the political sway and cultural influence of Rome that local practices could not hold their own when faced with the alternatives presented by their powerful neighbor.¹⁰ For example, recent studies of scripts documented in this region during the period of Roman expansion have called into question the supposed close correspondence between written scripts and spoken languages. It would seem that, as the Latin language

¹⁰ See Fentress (2000), Bispham (2000) and (2006).

followed Roman political and cultural expansion, Latin script spread neither so straightforwardly nor in direct relation to the dissemination of the language.¹¹

The region's newly discovered cultural diversity, as revealed in recent studies like those on script and language in Central Italy during the period of the Republic,¹² has caused scholars to shift attention away from the similarities between Rome and its neighboring communities and onto the differences; research on religious practices and sanctuaries in this period must also begin to question long-held assumptions. As Stek (2009) has aptly argued in his recent book, *Cult Places and Cultural Change in Republican Italy: A Contextual Approach to Religious Aspects of Rural Society After the Roman Conquest*, the religious Romanization of Central Italy is problematic; even *coloniae* – the most Roman of the communities of the region within Rome's political and cultural sphere – were clearly not, after all, what Aulus Gellius claimed them to be, “small copies” of Rome (NA 16.13.9).¹³ Perhaps the recent work on sacred architecture and ritual practices in Italy, on Capitolia and on anatomical votives, underscores particularly the need to question the usefulness of viewing the rituals and the architecture of Italic religion as reflexive, “small copies” of Roman practices, and to ask whether religion in this region in the Republican period was much more heterogeneous. After all,

¹¹ For discussion and further bibliography see Benelli (2008), Bodel (2012), and Rix (2005).

¹² For other examples of diversity in Central Italy see especially Fentress (2000), De Cazanove (2000) and Bispham (2000). See also Curti (2001), Curti et al. (1996), Terrenato (1998), (2001), (2005), and Van Dommelen and Terrenato (2007). For the questioning of the category of ‘colonization,’ see Sweetman (2011).

¹³ For arguments against the reliability of Gellius' text, see Ando (2007).

as Stek (2009:16) has pointed out, from the early Republic to the early Imperial period there was no clearly identifiable, culturally Roman “Rome.”

Quinn and Wilson’s article on Capitolia in colonial and provincial settings (2013) effectively argues that Capitolia are in fact much more rare than we have previously thought and that their presence or symbolic power has little to do with Republican political expansion. The evidence for the assumed Capitolia in the Republican colonies of Ostia, Minturnae, and Cosa, for example, is insignificant, and the insistence on the notion that a colony had to have this particular type of temple to mark it as “Roman” is an unsupported assumption about the character of religious architecture in Central Italy. There are only two literary references to Italian Capitolia outside of Rome, and five inscriptions relate the presence of a Capitolium locally; none of these textual references can be associated with a definite building.¹⁴ Such critical probing of the traditional scholarly association of a Roman-style Capitolium with colonial status puts yet “another nail in the coffin of the approach to Rome’s Italian colonies that sees them as mimicking the capital” (2013:25).

Similarly, in studying the Romanization of colonies in Central Italy, anatomical votives have traditionally been assigned, *a priori*, an “ideological weight” (Stek 2009:24). Claims such as Torelli’s (1999:41-42) statement that “Latin colonization was responsible for propagating, well beyond the original borders of central Etruria, Latium, and Campania, the use of anatomic ex-votos, with all the possible implications of such a

¹⁴ Quinn and Wilson point out that there are only eight certain Capitolia outside Rome (Beneventum, Capua, Cumae, Formiae, Falerio in Piceno, Histonium in Samnio, Marruvium Marsorum, and Verona) and that only those at Cumae and Verona can be attached to a specific building (2013:25).

use – a striking sign of Roman superiority both in the ideological and material sphere,” have been convincingly challenged in recent scholarship.¹⁵ For example, Glinister (2006), noting the broad range of specific local traditions and models, problematizes the theory that the presence of anatomical votives reflects Roman influence, since many colonized areas did not yield any votives while other non “Roman” areas did; Glinister therefore further questions the inference that these types of votives were actually perceived as representing quintessentially Roman rituals.

These recent reexaminations of Capitolia and anatomical votives in Central Italy are just two examples which can be used to effectively dismantle the evidence cited to argue for Roman control over religious practices and architecture. Aligned with these significant advancements made for studying the relationship between religion in Rome and in its neighboring cities, this dissertation turns attention to the sacred places and rituals in both Central Italy and Rome to underscore just how diverse and heterogeneous religion in this geographic region really was in the Republican period. The sanctuaries in this dissertation, both in Rome itself and in nearby communities with construction phases that span the entire Republican period, with evidence for local sacrificial practices continuing even after some became *colonia*, are sites representative of formative periods of history, sites that reveal patterns of regional diversity, local practices, and region-wide similarities predating Roman expansion, sites which ultimately help us explore the

¹⁵ See particularly Glinister (2006) and De Cazanove (2000). See also note 69, Chapter 3 of this dissertation for more bibliography. While the earliest evidence of this votive type comes from 6th-5th century B.C.E. northern Italy (Turfa 2004: 360), it is not until the late 4th century B.C.E. that terracotta anatomical votives began to be mass-produced throughout central Italy. Differences in style and manufacture indicate that these objects were likely produced locally, in close proximity to particular sanctuaries (Turfa 2004). The largest collection of anatomical votives found in the immediate area of Rome comes from the Sanctuary of the Thirteen Altars at Lavinium and the sanctuary at Ponte di Nona.

relationship between Roman political control and religious practices and sanctuaries in Rome and Central Italy.¹⁶ The five sanctuaries that form the primary focus of this dissertation make us closely question whether we should be thinking of and studying these sites in relation to Rome itself or, taking a more multifaceted view, in relation to each other.

The *How* of Ritual

In this dissertation, I will attempt to mitigate the tendency towards generalizing ritual away from its important function in linking the human activity to the setting where it takes place, and to restore ritual action to its proper place in a materially-articulated physical space. The implementation of archaeological methods strengthens and extends the knowledge base upon which sound theory rests. Archaeology, by giving material and temporal depth to the physical record, can make an important and novel contribution to the contextualization of ritual theory.¹⁷

But in what follows, in reorienting the study of Roman religion, viewing religious activities as manifestations of human behavior without permanent representable meaning and as structured experiences in the material world, rather than as expressions of a doctrinal, belief-based religious mentality, we cannot use the same “tool box” and stock set of approaches to ritual theory which were formulated in the context of the study of

¹⁶ The sanctuaries at Cosa and Pietrabbondante, two sites often traditionally used to demonstrate Roman influence on religious architecture, will also be taken into account in this dissertation.

¹⁷ I do not mean to imply by this that the archaeology of ritual is a heretofore unexamined field of research. In fact, in recent years many scholars of archaeology have investigated ritual and its material remains and many different avenues of study have developed from such research (Barrowclough and Malone 2007; Bertemes and Biehl 2001; D'Agata et al. 2009; Insoll 2004; Kyriakidis 2007; Renfrew 1985).

doctrinal religions; rather, a new collection of theories and alternative approaches is needed to consider Roman religion as culture and action, as an experience and a behavior. What I hope to contribute with this study is perhaps a new way of approaching the archaeology of ritual, a new perspective gained from resituating an established set of theories rarely (if ever) considered in the study of the materiality and physical context of ancient ritual.

In studying the materiality of sacrifice, in examining the archaeological evidence for this ritual, I move away from the pervasive scholarly discourse on the meaning of sacrifice (Durkheim 1995; Geertz 1973; Rappaport 1999; Turner 1977; Van Genepp 1960). Such scholarship focuses on universalizing questions of how sacrifice might be understood in terms of the complex of relationships among humans, animal, and god. Instead, in this study, in investigating the archaeological record of sacrifice, I focus primarily on the interaction of humans, animals, and gods with highly-particularized material monuments and physical spaces. The archaeological study of religious rituals needs to give priority to what is actually known or can be reasonably inferred from what is known – the action, the setting, the instruments, and the relations among these components of ritual action. These material things and the ephemeral actions they imply do not merely serve as background to describe what “really happened” mentally or socially, but rather provide a foundational structure to bridge the gap between matter and individual and collective mind, an empirical basis for sound theoretical interpretations of the implications or symbolism associated with these actions, settings, and instruments.

In turning aside from the questions concerning transactions and relations between humans and the divine (which will be addressed explicitly in Chapter 3), and directing my attention to the sorts of questions that might actually be suggested by the archaeological, material evidence at hand, I likewise shift the focus away from the pursuit of *what* ritual may mean, to the more grounded question of *how* ritual may mean (following Sperber 1975). For the archaeologist, this program entails seeking not *what* rituals might mean in the behaviors and verbal representations of individuals and groups, but rather asking *how* a ritual means, that is, how its action can be embedded in material objects and how these embeddings, these templates for constructing representations, can take on meaning. Additionally, this dissertation will examine not only how action, materials, and spaces invest ritual with the capacity to mean, but conversely, how the ritual experience imprints itself on and shapes the material world in which it occurs.

The *how* of a ritual's meaning finds its evidence in the material record. *What* the sacrifice might mean to its various participants (individuals, groups within the community, the community as a whole, all changing in personnel and in interpretation over the centuries), is something impossible to glean from the archaeological record, or from figural or literary representations (when such exist), selectively commissioned and preserved by particular groups at particular times. It is the *how* that can be quite tangibly determined, i.e., how a ritual is materially manifested, preserved, and transmitted; or conversely, how a particular sanctuary and its specific layout inform the procedure and embodied experience of the sacrifice. Such an approach frees us from the need to apply theories bound to their origins in religions of the book to the study of Roman religion and

instead allows us to examine Roman sacrifice and religion in a grounded way as aspects of human behavior and material culture.

From the very beginning of the procedure of sacrifice, to the procession of the animal, to the slaughter, inspection of entrails, distribution of meat, and communal feasting, the ritual leaves its physical traces on the sanctuary, offering evidence from which the details, intricacies, and implications of the practice can be directly and reasonably inferred. *How* a ritual means frees us from problems inherent to the multiple narratives or variable interpretations attributable to a sacrifice and instead focuses on the archaeological record (see Rodman 2003, addressed in Chapter 2, for a discussion on multiple narratives). For the ritual participants' intuitive knowledge of the religious ritual does not "depend upon their ability to provide interpretations or meanings for the rituals in which they participate or even for the prior rituals they presume...meanings simply do not seem to matter much" (McCauley and Lawson 2002:36). After all, as McCauley and Lawson (2002:48) state "participants may have a much richer sense of *how* to proceed than they have for *what* they are doing." The *what* aspects of the question of meaning, then, play a very small role in the approach taken in this dissertation; we are left instead with the sacrificial act itself and the materiality of how it is experienced.

Ritual and Mind

Whatever else it may be, religious ritual is an action – this much is agreed upon by all the schools of ritual theory. Sharing a view of ritual as primarily an action rather than as a secondary manifestation of some postulated, more fundamental state of mind, the two

separate disciplines of cognitive science and archaeology can combine to offer further layering to an explication of the performance, an action grounded and set in the material world.¹⁸ The “innate cognitive bias of humans,” that which we accept as universally true of the human phenomena which we – perhaps not so universally – lump together and give such names to as thinking, perceiving, remembering, choosing, etc., allows for an empirically-grounded, theoretical approach to the material study of ancient religion, especially, as is the case in Republican Roman religion, where there is a lack of written testimony (Martin 2004:82 quoted in Pachis 2009:17). A crucial aspect of the cognitive science view of religious ritual, and the starting point for most studies in this field, is an understanding of how a ritual is modeled in the mind, especially in relation to what distinguishes religious ritual from everyday, procedural actions. The theoretical apparatus employed for the representation of the cognitive character of religious ritual is the same system that is used for the representation of complex action in general, termed by Lawson and McCauley (1990) the “action representation system.” Interpretations and meanings may vary among observers and participants of some particular procedure or ritual, but the action’s underlying representational scheme will remain consistent. Textual descriptions of sacrifice therefore may present, intentionally or unintentionally, an interpretively-skewed view. Cognitive and material traces of that same sacrifice, on the other hand, will more likely be found to correspond with each other and with what is otherwise known of the physical circumstances of that ritual.

¹⁸ Stausberg (2005:151), discussing the social sciences in general, claims that one “of the (several) reasons why many scholars tend to be critical towards the cognitive paradigm is that they feel that it doesn’t help them to do something with their data.” However, as I will argue throughout this dissertation (particularly in Chapters 2 and 6), the cognitive science theory of the transmission of ritual memory and conceptions of sacred space is highly useful when applied to the field of archaeology.

Cognitively speaking, there are very few differences between everyday action and ritual action. Actions (ritual and otherwise) may be represented as being comprised of agents, acts, instruments, and patients – these fundamental constituents combining in ways which serve to distinguish a particular action from other events and happenings.¹⁹ An essential component of a ritual action, and the feature that distinguishes ritual from non-ritual action, is the particular role of the agent, some conscious entity, human or supernatural, that is doing something either to someone or to something. But, integrating the notions of agent and instrument, I will argue in this dissertation that although such agency might be interpreted by ritual participants as originating in the conscious determinations of individuals, groups, the community, ancestors, spirits, or gods, the source of the ritual action is, in fact, best conceived as residing in a particular religious setting, in an arrangement of sacred monuments, or in an ensemble of ritual objects. To be sure, this kind of material agency lacks, in itself, animate consciousness. But nevertheless, it possesses an unquestionable authority to compel highly-specific conscious responses in the minds of those humans with whom it might come into physical contact.

One way of approaching the organization of sacred space cognitively is to consider it as the visual counterpart and literal reification of the kind of conceptual “position” modeled by the principle of *cognitive optimum position*. This position in the cognitive

¹⁹ Studies have shown that humans can both distinguish actions and agents from other entities and events at an early age and attribute goals to the agents (McCauley and Lawson 2002:10-11). The ordinary cognitive mechanisms that supply the ability to invent or reproduce an action are associated with the “theory of mind” (TOM), a theory that is used by developmental psychologists primarily to describe the “domain of intuitive knowledge concerning the intentionality of animate beings” (Boyer 2001; Whitehouse 2004:34). Theory of mind employs the categories of agent, instrument, and patient to create a knowledge base.

domain of religion “constitutes a set of conditions favoring the selection of certain kinds of concepts found in all religious traditions, past and present” (Whitehouse 2004:29). These are concepts that the mind can naturally process and remember, associated with actions that trigger insightful inferences (without the special training that might be needed to master such concepts) (Whitehouse 2004c; see below for an example). So, as Boyer (1994 qtd in Barrett 1998:610) argues, for any single concept occupying one of these optimum positions, people will have various intuitive presumptions about its properties, beliefs stemming from theories about the concept’s ontology and assigning a basic structure to concepts.

According to the theory of the cognitive optimum, a religious idea or interpretation of ritual will survive only if it entails cognitive properties that make it stand out from other, more ordinary ideas (Lawson 2000:346). So religious ideas differ from non-religious ideas or concepts in that religious concepts possess aspects (“non schematic features”) that violate intuitive, natural assumptions (“casual schemata”). It is these very counterintuitive properties (for example, saying that a cat has nine lives), that make religious concepts particularly salient and memorable (Barrett 1998: 610; Sperber 1994). Therefore, a cognitive optimum can be reformulated as a balance between ontologically-driven intuitive assumptions and just enough violation of these assumptions that religious ideas become significant and memorable (Barrett 1998: 611). In line with these theories of a cognitive optimum, Boyer argues that a religious representation has to be both learnable and non-natural in order for it to be widely distributed within a community (discussed in depth in Pyysiäinen 2002).

The architectural layout of a sanctuary would necessarily be organized in such a way as to accommodate the cognitive optimum position, the sacrificial altars of a sanctuary acting as the primary “attention-grabbing” material manifestation of the centralizing concept of the supernatural “object” of the ritual, while the routinization and strict procedures of the sacrifice focused on the altar would engage certain mental processes and resources, providing cognitively optimal conditions for the conceptualization of *how* the ritual might mean (Whitehouse 2002). The structuring of the sanctuaries, (for example, the exact placement of specific altars), taps into normative, intuitive assumptions (directions that altars might be thought of as conventionally facing), while simultaneously creating an aspect that is strikingly singular (an altar may be distinctly oriented to a specific cyclical celestial phenomenon, as will be discussed in Chapter 5). If space is designed in such a way as to conform to norms, but at the same time to particularize and distinguish itself, then the ritual that would take place within these spaces likewise cannot be essentially uniform, the character of its fine texture mere eccentricity, inflection, articulation, dramatic relief.

Boyer’s theory of a cognitive optimum position in religion, with its mix of conceptual “norms” serving as background to the defining criteria of a set of concepts that stands in violation of such norms, coincides precisely with this dissertation’s archaeological argument that sacrifice is essentially a site-specific practice. Sacrifice, to be sure, has many universal aspects that may be usefully studied, but nevertheless, each tradition of repeated sacrificial ritual practice needs to distinguish itself from other such traditions in order to make itself memorable, salient, and attention-grabbing to the individual god to

whom the sacrifice is directed, as well as to the individual members of the ritual community. A typical sacrifice to a typical god at a typical place is very likely to be an eminently forgettable experience, producing disappointingly typical results. Rather it is the material particularities of a community's own practices, performed for its own god in its own way at its own monuments in its own setting and to meet its own needs, that comprise the essential ingredients of an enduring sacrificial tradition. Sacrifice must be understood fundamentally as an interaction between matter and mind, a memorable "representation" in words, movements, and materials of a community's or an individual's concept of its "place," of *how* it fits into the actual, local, physical circumstances in which it has "always" lived.

What "religion" is for this dissertation

Much of the Latin terminology employed in the modern, international study of religion derives for the most part (by way of Late Antique and Imperial reconfigurations of meanings) from conceptualizations first appearing in late-Republican texts (Ando 2008: 3-5).²⁰ Apart from the word *sakros*, which appears on the 6th century B.C.E. fragmentary inscription belonging to a tufa cippus of the Lapis Niger in the Roman Forum,²¹ the term *religio*, and Latin terms related to *religio*, seem to have their origin in a

²⁰ The shift in meaning of the term *religio* from public cult practices to faith based practice is exemplified in the 5th century C. E. Theodosian Code where the first chapter of Book 16 is entitled *De fide catholica* and the last chapter is called *De religione* (Ando 2006:126; for public cult practices as defining religion in the 3rd and 4th centuries C.E. see Digeser 2006).

²¹ The inscription might relate an early *lex sacra*, a warning to those who might in the future desecrate the site. Furthermore, the inclusion of the word "*sakros*" in archaic Latin in this inscription, could be the first occurrence of this word in an Italic religious context. For bibliography and introductory discussion, see Coarelli (1989).

late-Republican attempt to construct a category for those phenomena of human interaction with the supernatural that have a socially-binding character; a quintessential example would be the traditional, repetitive practice of communal animal sacrifice (see below for an in-depth discussion of *religio* and its socially-binding character).

In a striking parallel to modern scholar J.Z. Smith's influential views on taxonomical issues in the study of religion (see discussion below), Cicero moves from the singular to the plural when characterizing the practices that constitute the category *religio* as, collectively, *religiones*: *Cumque omnis populi Romani **religio** in sacra et in auspicia divisa sit, tertium adiunctum sit, si quid praedictionis causa ex portentis et monstris Sibyllae interpretes haruspicesve monuerunt, harum ego **religionum** nullam umquam contemnendam putavi mihi que ita persuasi, Romulum auspiciis, Numam sacris constitutis fundamenta iecisse nostrae civitatis, quae numquam profecto sine summa placatione deorum immortalium tanta esse potuisset* (Cicero *de nat. deorum* 3.5) (see Ando 2008:3 for a discussion about the tendency in modern translations to ignore Cicero's switch to the plural).²² In this late-Republican formulation, not only sacrifice but also the acts of public divination, augury, and the consultation of the Sibylline books were seen to have the character of a communally-binding event; the creation of the encompassing, catch-all concept of *religio* was thereby justified. Whatever might be associated with animal sacrifice (structures, instruments, places, institutions, officials, beliefs) as well as with

²² "The entirety of the *religio* of the Roman people is divided into rites and auspices, to which is added a third component, namely whatever warnings the interpreters of the Sibylline books or *haruspices* issue for the sake of foreknowledge on the basis of portents and omens. I hold that none of these *religions* should ever be neglected, and I have persuaded myself that Romulus and Numa laid the foundations of our state by establishing the auspices and rites, respectively, and that our state could never have become so great without the greatest appeasement of the immortal gods" (translation from Ando 2008:3).

ancillary practices occurring at its altars (individual sacrifice, small animal and bloodless offerings, votive depositions) could by means of this association be classed as “religious.”

Roman religion, primarily a religion of orthopraxy, cannot be very effectively understood with tools used to study familiar religions like Christianity, Judaism, and Islam, traditions that are conventionally approached in scholarship as systems of ideas and beliefs, as religions of orthodoxy, based on doctrines, theology, and an interpretation of books.²³ In the Roman context, religion is most often experienced and communicated not verbally but rather through practical, communal activity (performed by both laypeople and specialists knowledgeable of ritual practices not of texts).²⁴ An understanding of Roman religion, then, requires both its own proper set of tools and definitions as well as a more encompassing view of “religion” as a universal category than one can find in the literature of the modern study of religion.

Concern to define religion resounds throughout the historiography of the humanist and social disciplines. Scholars have attempted definitions in the rhetorics of theology, of sociology of anthropology, of natural science, and of cognitive psychology, and have addressed the question through such literary topoi as nature, belief, and reverence. The various traditions of scholarship, however, have made little progress toward settling on a consensus definition of religion.²⁵ There is even, in fact, an influential body of opinion

²³ This is in line with how Colin Renfrew views the term “religion,” as something dependent on the ‘book’ (lecture Nov.30th, 2011, palazzo Corsini, Rome).

²⁴ As will be discussed in much greater depth in the following pages, Cicero in his *de natura deorum* even highlights this character of Roman religion, defining it in practical terms by the *cultus deorum*, rather than by a set of doctrines.

advocating a multitude of useful definitions, each appropriate to some specialized sub-discipline or even to an individual author's own project, each asking and answering different questions; religion is a term "created by scholars for their intellectual purposes and therefore is theirs to define" (Smith 1998: 194).

J.Z Smith convincingly advocates that scholars not search for a single definition of religion.²⁶ He states that the historical scholar must perform a four step cultural-mapping procedure in order to understand a particular religion: description, analysis of what modern scholars have done with it, an attempt to rectify categories, and finally re-description. For Smith, "there is no data for religion. Religion is solely the creation of the scholar's study. It is created for the scholar's analytic purposes by his imaginative acts of comparison and generalization. Religion has no independent existence apart from the academy" (1982:xi). The scholar has to justify a conception of religion that is a scholarly second order category, an analytic tool, one that encompasses all or as many of the phenomena as possible, one that generalizes characteristics, is coherent, and aids in

²⁵ Modern studies of ancient religion tend to, if unconsciously, incorporate contemporary presumptions and biases. Scholars of religion need to find a middle ground that will permit immersion in their subject while at the same time consciously establishing a proper, useful working distance from distracting modern analogies. J.Z Smith would disagree with such a claim, stating instead that scholars need to use modern analogs to avoid a "translation" of material (as might be present in an archaeological study). As two examples of popular, familiar definitions of religion, we can cite the theories of Durkheim and Geertz. Progenitor of a functionalist view, Emile Durkheim (1995:91) analyzes religion as a social phenomenon and views religious representations and activities as symbolic of a collective (i.e., social) life organized into the sacred. For Durkheim, in the collective unconscious, the profane is that which has to do with the individual and the sacred is linked to the social. Taking the interpretive approach of symbolic anthropology, Clifford Geertz (1973:90-91) is often cited for viewing religion, a "cultural system of meaning," as a tool for understanding other aspects of culture. Alternatively, approaching "religion" from the point of view of a post-colonialist anthropological study, Talal Asad (1993:53) responds critically to Geertz's definition as based on a Western model of religion and rejects any attempt to formulate a context-free, universal definition, claiming that "religious symbols...cannot be understood independently of their historical relations with nonreligious symbols or of their articulations in and of social life."

²⁶ J.Z Smith (1998:193) alludes to James Leuba's *Psychological Study of Religion* (1912) (which itself lists more than fifty definitions of religion) to argue and advocate for the possibility of multiple definitions of religion.

explanation. As a specific example, Smith cites anthropologist Melford Spiro's definition of religion as "an institution consisting of culturally patterned interaction with culturally postulated superhuman beings... [for] religion can be differentiated from other culturally constituted institutions by virtue only of its reference to superhuman beings" (quoted and discussed in Smith 1998:281); for Smith, such an "anthropological" definition places the emphasis on human, cultural activities, with religion as a subordinate category (Smith 1998:281). This general notion of culture as a key ingredient in a general definition of religion (attractive to an archaeologically-based study of religion) will take us in due course to the more concise formulations of Stanley Stowers, a definition which I will adapt below for the purposes of the study of Roman religion. Smith claims that this kind of anthropological view requires that we recognize that "no matter how many instances of human religiosity we have observed, this does not justify the conclusion that man is religious" (1982:38). However, as I will discuss below, the cognitive science of religion establishes an empirical basis for just the kind universal cultural postulation of the concept of superhuman agency that will allow us to answer Smith's objections and to speak cogently of religion as well as religions.

For this study, Roman communal animal sacrifice is the definitive religious practice. Therefore, what we can say in general of religion we can say as well of Roman sacrifice. There is "sacrifice" and there are "sacrifices." While we can certainly conceive of a universal category that we can call sacrifice, a category involving postulated superhuman agency and various practices of animal slaughter, it is equally certain that all this universalizing tells us nothing about the character of the sacrifice.

In an extended analogy derived from a short story of Borges,²⁷ Smith compares a map (the scholar's theory) with the territory (the object of study), stating that it is impossible to come up with a map that fits the whole country. A map that covers everything is useless; a map is intended to get us somewhere, to solve problems. Similarly, for Smith, it is impossible to come up with a single definition of religion. The methodological proposal offered in this dissertation – that we view the experience of sacrifice as a highly particularized, locally-mapped practice – suggests a concrete approach to implementing Smith's and Borges' metaphorical idea of a customized map. There may be a universal definition of sacrifice, but it can surely be agreed and will be argued throughout this dissertation that there is no such thing as a universal experience of sacrifice. Rather, each ritual is specific to its own territory, to its own particular altar, and, arguably, to each individual implicated in the ritual; we thus need to study each site as its own example and entity so as not to artificially attribute or assign patterns or conceptions about what a Roman sacrifice *should* look like.

Despite the different underpinnings of various definitions, it seems as though most scholars would agree that religion is materially generative, manifesting itself in a variety of media – texts, inscriptions, portable artifacts, paintings, monumental architecture, sculpture. Indeed, the religion of the past can only be accessed with confidence, and the

²⁷ The short story, "On Exactitude in Science," is as follows: "In that Empire, the craft of Cartography attained such Perfection that the Map of a Single province covered the space of an entire City, and the Map of the Empire itself an entire Province. In the course of Time, these Extensive maps were found somehow wanting, and so the College of Cartographers evolved a Map of the Empire that was of the same Scale as the Empire and that coincided with it point for point. Less attentive to the Study of Cartography, succeeding Generations came to judge a map of such Magnitude cumbersome, and, not without Irreverence, they abandoned it to the Rigours of sun and Rain. In the western Deserts, tattered Fragments of the Map are still to be found, Sheltering an occasional Beast or beggar; in the whole Nation, no other relic is left of the Discipline of Geography."

reliability of its verbal testimonies tested through the study of such objects. It is for this practical rather than any theoretical reason that any approach to historical religion must be embedded within the specific context, culture, and media of the study; such an approach allows for a conception of religion as a “second order analytic tool,” a means of organizing, grouping, and understanding data.²⁸

A definition of religion necessarily must embed itself within a particular cultural and temporal context, obtaining its meaning through textual evidence and material manifestations, demonstrating its significance through the frequency of repetition of such forms, patterns, and conceptions throughout the various cultural manifestations of a society. Patterns and similarities in written discussions and in physical materializations will call attention to themselves. Any widespread and cohesive set of characteristics that meets the criteria of what the society being studied might call religion is, for the purposes of the study, by definition “religion.”

What these various scholarly conversations about the general notion of religion have in common – whether they attempt to universalize the concept or to dissect it, whether they take a straightforwardly intellectualist position or they approach religious thought by way of a cultural process – is an inclination to view religion as representation, as a phenomenon whose existence resides in a human need to express something about the supernatural. Therein, however, lies the problem for the study of Republican Roman religion.

²⁸ Smith argues that scholars cannot stop at a native, “folk,” or local conception of a religion but instead have to develop their own theories that solve intellectual problems (1978). Such categories of “folk” conceptions tend to lead to classifying religions as “theirs” and “ours,” making the distinction between the possible definitions of a “religion” and of the plural phenomenon, “religions” (1998:187).

The highly suggestive absence of evidence for any written liturgical or doctrinal tradition for Republican Roman religion needs to be recognized. Abundant opportunities to note the existence of such texts present themselves in ancient discussions of Roman religion, especially in the context of the great interest expressed in the peculiarities of orthopraxy (Plutarch, *Life of Numa* 22; Cicero *de divinatione* II.42). Cicero, in *De Divinatione* 1.72, is struck by the foreign-seeming bookishness of Etruscan religion, with its sacred texts divided into *libri haruspicini*, *libri fulgurales*, and *libri rituales*. What little written evidence we have for Roman religion was not intentionally created for the transmission and preservation of religious doctrine and knowledge (Beard 1998). A straightforward doctrine does not exist for religion in the Republican era.²⁹

How then to reconcile this Roman religion of behaviors and things with the religion found in standard, universalizing views of religion as a phenomenon characterized by its beliefs and concepts? For the purposes of this study, “religion” will refer to the practice of communal animal sacrifice along with those people, places, things, or ideas which might manifestly pertain to this type of sacrifice. This view of “religion” is consistent with the attested use of the term in the late-Republican period – in a slightly broader sense – to include practices, like augury, which in their social implications bear

²⁹ According to Whitehouse’s modes theory (a theory used to explain the ways in which different systems of memory are activated during religious rituals, returned to again in Chapter 6), in a routinized practice, explicit doctrine – a set of standardized teachings – is important to offer a rationale behind the performance of such actions. Perhaps, as Johnson (2004:46) argues, literacy and writing technologies might not actually be as essential to the initial development of the doctrinal mode as scholars have hypothesized; other forms of communication might contribute as well to the emergence of the doctrinal mode, a communication perhaps generated in response to the religious spaces and settings themselves. Whitehouse (2000:176-177, 180) provides for a doctrinal mode of religion without a fixed literary script; to Whitehouse, the control of social conditions of transmission, “monitored and policed by a priestly hierarchy,” is much more important than a fixed, written doctrine (Mithen 2004:20). To this view of unwritten control, the present study adds the notion that substantial responsibility for this “monitoring” and “policing” must be assigned to the religious objects and spaces themselves.

similarities to communal animal sacrifice. To be sure, in such communal practices, there will have to have been a multitude of perceptions of religion, a variety of interactions with and relationships to such sanctuaries, and a diversity of understandings of religion. I would argue that there had to have been some determinative, normalizing, overarching consensus guiding the understanding of what constitutes religion or, more exactly, what constitutes a sacred space and assigns significance to the localized occurring actions (see Chapter 2). Without such agreement, there would not be such coherence in later textual descriptions of religious actions or in physical manifestations of sacred structures, temples, sanctuaries (and their movable artifacts) associated with these actions.

For a universal concept of religion that will encompass the narrow definition of Roman religion given above, I will use a material-study version of Stowers' view that religion "consists of variously linked social practices (involving arrangements of entities at sites) that carry understandings involving the existence of gods, ancestors, and various normally unseen beings, and that shade off into other anthropomorphic interpretations of the world" (2008:442).

Stowers' joining of varieties of cultural practice to the culturally-postulated existence of superhuman agency provides us with a quite useful definition of religion. Adapting Stowers' formulation to the present study, which approaches practices by way of archaeological materials, I would substitute the perhaps more concrete terms "actions," "spaces," and "materials" for his "practices," "arrangements," and "entities;" furthermore, my use of Stowers' definition would make an explicit provision for experiences as distinct from his "understandings." We might then say, following

Stowers, that religion consists of materials (involving actions, spaces, and the culturally postulated concept of superhuman agency) which entail experiences that *can* carry understandings about superhuman agency. The crucial feature here for the study of Roman religion is the divorce of experience from belief or “understanding” – all the participant needs to understand is that practices have something to do with superhuman agency. Religion, in this representationally minimalist view, does not demand of the participant or audience member a further interpretation, or understanding, of what this “understanding” means.

When I discuss Roman religion from this viewpoint in my research, I give particular emphasis to “arrangements” at sites, prioritizing the topographical character of a particular site and its relation to the site’s sacrality.³⁰ The importance of place to religion, and particularly, of place to the ritual of sacrifice, is highlighted by Livy (5.52.2): *urbem auspicato inauguratoque conditam habemus; nullus locus in ea non religionum deorumque est plenus; sacrificiis sollemnibus non dies magis statim quam loca sunt, in quibus fiant*.³¹ Roman religion is not only exacting in its requirement of a specific natural or built setting, but this well-attested requirement of meticulousness in performance characterizes Roman religious activities in general (see Chapter 2). My definition and understanding of religion and my approach to a material study of the religious practices

³⁰ This would go against the idea in Christianity that god is omnipresent and beyond physical nature.

³¹ *We possess a city founded under auspices and auguries; in it, no place is not full of religion and of gods; there are not more days established for annual sacrifices than there are places in which they happen.* Livy again reiterates the site specificity of sacrifice in 42.32.2 when he states *praetorem eum enim, ne in provinciam iret, in contione iurasse se stato loco statis que diebus sacrificia habere...* (when he was praetor, he could not go to his province, as, by order in the assembly, he had sacrifices to perform at a specific place and on set days). Such an importance on place is fundamental to recent seminal works on Roman religion (see, for example, Beard, North, and Price 1998: Chapter 4, particularly).

emphasize the primary importance and authoritative role of the sacred sites themselves in determining and defining the specific character of religious activity, in establishing not only how to do it but – if we must have representation – conveying, as well, a specific understanding of how to do it correctly.

Placing definitions in context

As noted above, my definition of Republican Roman religion as that which pertains to communal sacrifice is intended to harmonize to some extent with the way that the Romans of the late-Republic, who serve as our earliest literary sources on the subject, addressed the concept of religion. We can know little of how this religion of communal sacrifice was understood in earlier Republican times; the best we can expect is the probability that, despite inevitable changes, there might have been some underlying measure of consistency with the later formulations and understandings. What, then, can we discover about what constituted the foundations of the late-Republican concept of religion that will contribute to our understanding of communal sacrifice in the earlier period?

The 1st century B.C.E. not only was characterized by an increased interest in the subject of religion, but also was a time in which religion, as action and subject, was viewed from the “traditional, undifferentiated, politico-religious amalgam of Roman public life,” a time when the Roman elite could take a particular stance in relation to religious activity (Beard 1986: 46). For example, Cicero, in his theological works (in which the main characters are both priests and philosophers), innovatively integrates

Hellenistic philosophical tenets with the traditional practices and thoughts of Roman state religion,³² developing theories which, for the first time, set “religion” apart as a type of study of scientific discourse (Beard 1986:36).³³ The view of sacrifice as a ritual centered on experience and action rather than on beliefs or doctrines underlies the conceptions of religion advanced by late Republican literary intellectuals and suggests a well-established tradition of regarding sacrifice in this manner.

Religion, for Cicero and for his audience, does indeed acknowledge gods and other animate supernatural entities.³⁴ But highly textured narrative about individual gods and their relations to humans was the province of poetry, not religion or theology. The nature of the gods that interested Cicero was their ontological nature, not their character as agents: what and if they were, not what they did and why they did it.

It is rather the actions taken by humans in consideration of the existence of these supernatural beings or the disposition to worship that lie at the heart of Roman religion,

³² According to Beard (1986:42), the one philosophical school that seems most compatible with traditional Roman religion is Stoicism. Three of the best known Roman intellectuals of the 1st century B.C.E., all belonging to the ruling class – Nigidius Figulus, Varro,³² and Cicero – best described the religious situation of the period.

³³ During the 1st century B.C.E. in Rome, the study of philosophy was intrinsic to Roman education and was the means through which the discussion of religion occurred: “men who discuss religion are concerned with the choice between the rational approach and the political approach to religion” (Momigliano 1984: 202).³³ In Book 2 of the *Laws*, Cicero puts forward specific laws about religion in an attempt to reaffirm the fact that Rome must continue to worship the traditional gods in their traditional forms and practice traditional modes of cult (2.26). In his later *de natura deorum* and his still later *de divinatione*, Cicero becomes increasingly more skeptical about Roman religion.

³⁴ As part of the philosophical environment, Epicureanism in the 1st century B.C.E. in Rome was quite popular. Perhaps Lucretius’ *de Rerum Naturam* presents one of the most explicit treatments of Latin Epicurean views on religion, cult, and sacrifice (See Summers 1995). Cicero (*ad Fam.* 15.16.1; 15.18.1) notes that Epicureanism had many followers and adherents as, for example, T. Albucius – *doctus etiam Graecis T. Albucius vel potius paene Graecus... fuit autem Athenis adulescens, perfectus Epicurius evaserat* (Titus Albucius was learned in all Greek things, or rather, almost completely Greek... he was a youth at Athens, and turned out a perfect Epicurean). See Obbink (1989), particularly for a discussion of Philodemus, a first century B.C.E. Greek Epicurean living in Rome as of 80 B.C.E., who discusses the social aspects of cult and the participation of Epicureans in ritual activities.

and, by extension, at the heart of this study. Cicero's literary depiction of religion centers not on beliefs and understanding but on actions and emotions, on scrupulously correct procedures of propitiation, on careful revision and consideration, on attitudes and approaches, on cult and worship. A similar privileging can be seen in the ordering of Varro's *Antiquitates rerum humanarum* and his *Antiquitates rerum divinarum*. Varro focuses on human matters before divine matters, *quod prius extiterint civitates, deinde ab eis haec instituta sint* (since communities existed first, then those things instituted by them). This privileging in Roman religion of action over belief, of experience and behavior over doctrine, is reflected in the approach to the evidence of Roman religion taken in this dissertation.

Cicero comments on the experience of awe in the presence of the supernatural (*religionem eam quae in metu de caerimonia deorum sit appellant*),³⁵ the singular importance of cult in the sense of scrupulous observance of practices (*C. Flaminium Coelius religione neglecta cecidisse apud Transumenum scribit cum magno reipublicae vulnere*),³⁶ or uses *religio* as a metonymy for 'cult' (*suosque deos aut novos aut alienigenas coli confusionem habet religionum et ignotas caerimonias nos <tris> sacerdotibus*).³⁷ Cicero's characterizations of religion are consistent with more "archaic"

³⁵ In *De Invent.* 2.66: "They call religion that which relates to rites in fear of the gods."

³⁶ In *De nat. deorum* 2.3: "Coelius wrote that Gaius Flaminius, having neglected religion, had fallen at Trasimene, with a great wound to the republic" (here *religione neglecta* means disregard of ritual act).

³⁷ In *De Leg* 2.25: "The next law forbids individuals from worshipping private gods, or new gods, or strange gods, as this would introduce a confusion of religions, and ceremonies not known to our priesthods."

Latin usages denoting scruples, conscientiousness in observances, rethinking an action already taken up.³⁸

Providing a late-Republican definition consistent with this study's view of sacrifice as a communal practice and of social interaction as an inseparable aspect of traditional ritual action, Cicero derives religion, *religio*,³⁹ from the Latin verb *legere*, to gather, collect, to go over or to pick up: *qui autem omnia quae ad cultum deorum pertinerent diligenter retractarent et tamquam relegerent, sunt dicti religiosi ex relegendo, [tamquam] elegantes ex eligendo, [tamquam] [ex] diligendo diligentes.... (de nat. deorum 2.28).*⁴⁰

This definition is well known to be highly problematic but nevertheless is often cited in etymological explanations of “religion” and then applied anachronistically. When derived from *relegere*, *religio* for Cicero is tied to the idea of going back over again, of picking up again, carrying the sense of ‘religious scruple’ and conveying the need for a thorough observance of religious obligations and an attention to a set of traditional rules over time

³⁸ Plautus *Curculio* 350, Terrence *Andria* 941 and even Cicero *de nat. deorum* II.10, *Balb.* 24.55. Though beyond the scope of this dissertation, perhaps it might also be helpful to bring into the discussion the inscription found on the tufa cippus on the site of the *Lapis Niger* in the Roman Forum. See note 15 above. *Religio* in its earlier, ordinary sense thus linked individuals to prescribed, traditional actions. It would seem that in the late Republic the term could take on an additional restricted sense denoting a state *religio* that bound the whole community to its actions.

³⁹ Lucretius derides Roman religion and the observance of religious practices by using the Latin word *religio* as a substitute for *superstitio* in many of his passages condemning religious belief. Lucretius (*de rerum natura* 1.62-65) chooses to conflate the meaning of these two words, blurring the distinction between superstition, false fears and false beliefs, and any other motive for acts of worship, contra Cicero *de div.* II.148, see Pease (1963:579). Cicero instead distinguishes between these two words, describing *superstitio* as a groundless fear of the gods, a misuse of proper belief, and *religio* as properly pious worship (*de nat. deorum* 1.117). Cicero (*de nat. deorum* 2.72) offers an etymology for *superstitio*. Pease (1963:580) comments that the attempt to discriminate between the two terms has been unsuccessful since they are used subjectively and they have been based on etymologies which have not necessarily commanded wide acceptance. Pease (1963:580-81) additionally notes that the word *superstitio* often implies a superfluous addition, a sort of “fanaticism,” to religious observances.

⁴⁰ “Those who diligently brought back again everything that pertains to the worship of the gods as if they had re-collected it, they are called *religiosi* from *relegendo*, as *elegantes* from *eligere*, as *diligentes* from *diligere*...”

(an emphasis seen explicitly in *De nat. deorum* 2.3, see below) (Scheid 2003:22).⁴¹ Other authors (for example, Lucretius [1.931, with the Latin word *nodis*; 4.7] and Plautus [*Curculio* 350, in the sense of obligation]) use *religio* as related to the Latin *religare* (to bind), a sense that might serve to underscore the relationship (the bond) between men and divinity (Scheid 2003:22).⁴² Perhaps we could argue that both etymologies of *religio* (from *relegere* and *religare*), to pick up and go back over again and to bind or tie, have their place in this study. Republican Roman sacrifice is a repeated, traditional ritual that must be scrupulously and meticulously performed and observed throughout time (*relegere*); but it is also a ritual inherently communal that actively connects the human and divine worlds with particular sacred monuments, settings, or objects (*religare*).

Of course, such a literary account of “religion” from the late Republic necessarily postdates the most characteristic and important periods of the sanctuaries I am examining in this project. However, while my identification of Roman Republican “religion” (as a *religion* in a universalist sense) with communal sacrifice is independent of late Republican views, I see Cicero’s definition as a starting point to access how a Roman might have understood such a term in earlier Republican periods. As for a definition of Roman religion appropriate to this study, apart from the *sakros* inscription on the Lapis Niger, we must rely on the evidence provided by the remains of those sacred places, “sanctuaries” (see definition below), associated primarily with the practice of communal animal sacrifice. We can infer the importance of these sanctuaries to their communities from the quantity, quality, and monumentality of their remains; a site’s material authority

⁴¹ Aulus Gellius (4.9.1) also favors this etymology.

⁴² This etymology is favored among modern scholars.

is easily recognized. On the other hand, as a basis for inference about how this authority may have been interpreted, we have only the later Republican testimony that the authority of sacrificial ritual was tied to its communal character.

The Roman sanctuary may make a simple identification of itself as a place where important actions involving the community and its gods occur, but it does not assert anything in particular about the meaning of these actions. Rather, its topographical character can be seen as an active expression of ritual activity, as a materialization of “religion,” as a defining and determining factor in creating the form of the performed religious action. In fact, the inclusion of more than just one altar in each of the sanctuaries I am examining in this project discourages a view of the sanctuary as an embodiment of a singular belief: each sacred area incorporates not just one altar, but rather a complex of structures whose symmetry and multiplicity, together with the “natural” features of the landscape, reinforce and construct the sanctity of the place. Sanctuaries are spaces defined by their altars, temples, precinct walls, and settings. They are complex spaces that entail a highly valued integration, a continual and carefully calculated bringing or tying together, in late Republican terms, of a community’s gods and humans. The space, together with its structures and ritual objects, actively crafts the character of the enacted sacrifice.

Consistent with the late-Republican understanding of *religio* (and its earlier variants), my view of Roman Republican religion is centered around the notion of a binding entailment of communal experience by action, space, and materials without an accompanying entailment of specific beliefs, on the importance placed on the ritual

participants' experience of procedures, settings, and objects rather than on their understanding of what the experience might mean. As I will show in subsequent chapters, support for the cumulative, combinatory, centripetal nature of Roman "religion" underlying the Ciceronian view can be seen in the architecture and emplacement of sanctuaries or religious structures and complexes at this time period and earlier (see Chapter 2).

Perhaps by working from the inside, from the ground up, by accumulating examples – textual, material, topographical – we can reveal practices, actions, monuments, and spaces that can be categorized and organized by the concept of "religion" used in this dissertation. This concept is employed not merely as a universalizing interpretive framework that our theoretical apparatus imposes on our data – helpful as that type of approach may sometimes be – but rather as a principle of cohesion which can be usefully thought of as emerging from the data itself. And perhaps this kind of exercise in the combining of theory and method actually encourages complementary views of "religion:" as an aspect of human behavior embedded empirically in its historical and cultural context and as an abstract construct applied as a second-order analytic tool (Smith 1998). Each approach serves in its own way as a means to understanding the relations implied by particular spaces, texts, objects, monuments, and materials. Such a multi-faceted, multi-layered understanding of the experiential basis of "religion" serves to reinforce the need for a variety of theoretical approaches, each constructive in its own way for accessing the import of particular examples of material evidence of sacrifice, yet all securely grounded in concepts of experience and behavior.

Defining “Sanctuary”

As has already become evident in this Introduction alone, in speaking of a defined and demarcated sacred space, this dissertation uses the term “sanctuary.” But if we are to continue using this word “sanctuary” throughout this dissertation we need first, as we did for “religion,” to also explore what it means, both to this specific project and to contemporary Latin authors. In their effort to understand or explain what constitutes a Roman sanctuary,⁴³ modern scholars often look to the Latin terms which are used to designate sacred areas: *templum*, *aedes*, *fanum*, *delubrum*, *sacrarium*, *sacellum*. Of these, *templum* is the most frequently used term when referring to a sacred space in an immaterial sense, while *aedes* most commonly refers to architectural structures within a space (Dubourdieu and Scheid 2000: 64).⁴⁴ But the Latin words themselves are actually of little help in explicating the typologies and complexities of the rituals or religious activities occurring in the space, nor in understanding the reasons for the initial selection or marking of a particular site as sacred. Instead, the terms merely denote the structures or containing space of a site which has already been demarcated as sacred, and convey nothing about any relation of the architecture of the site to the natural landscape or urban setting in which the monuments are placed. In fact, in many examples of the spaces that

⁴³ The word sanctuary, taken from in the Latin, *sanctuarium*, was not used at all in the way we use it today. The term originally did not refer to sacred places but rather places that were linked to protection, like the protection that sacred spaces possessed (Dubourdieu and Scheid 2000: 63). The word is linked to *sanctus*; *sanctus* implied purity and was a more general term than *sacer*. *Sanctus* could also be applied to humans. A related term for this discussion is *sacer*. This refers to ownership (Macrobius *Sat.* 3.3.2), to things which had been dedicated to the gods. *Sacer* presents a quality which men ascribe to things or beings, not some sort of force inherent to the thing or being (Scheid 2003:24).

⁴⁴ The *lex aedis Furfensis* (see Chapter 3, page 237 note 22) describes the procedure of inauguration of a temple and a consecration of an *aedes*. See Laffi 1978; Stek (2010:94).

we modern scholars term sanctuaries (or whichever borrowed Latin term we may use), there is neither a temple nor a *temenos*⁴⁵ but only an altar. Sanctuaries were, therefore, defined not by monumental constructions housing cult objects nor by demarcated boundaries but rather by the central focus of the ritual activity – the altar. The altar is the overarching criterion for and indispensable feature of a sacred space, determining the sacred aspect of the area and extending this sacred character to the enacted ritual.

Words such as *templum* or *aedes* do not convey a lived, peopled place, not one generated by or resulting from ritual praxis, but instead a space that is a more passive location for actions.⁴⁶ The standard understanding and explanation of a Roman *templum* derive from augural practice. Standing at a chosen location and casting his gaze in some well-specified direction, the augur would discover a *templum* defined by signs in the sky. These celestial rectangles were then matched up with their terrestrial counterparts, the *templa* designated on the ground. But unlike the modern conception of a “temple” (the Roman *aedes*, in its narrowest sense, the material structure that housed the cult object, though the term could sometimes connote, by extension, the sanctuary itself as an architectural complex), these early Roman *templa* were more “technical” terms for earthly loci that mirror their models in the heavens. The use of *templum* with *inauguratum* is much less common⁴⁷ than the use of *templum* with *deorum*, a conjunction

⁴⁵ If we think of examples from early Greece, there are many cases in which a sacred space has neither a determined *temenos* nor a temple but only an altar. For example, the ash altar at Mt. Lykaion or peak sanctuaries from the Bronze Age.

⁴⁶ Here we look forward to the discussion in Chapter 2 of the modern theorization of place and space. These Latin terms would be understood as aspects of *spaces* and not characteristics of *places*.

⁴⁷ This usage can be found in Varro (*LL* 7.8-12). In literary sources from the 1st century B.C.E., *templum* is used to designate the Rostra in the Roman Forum, the Curia, and in the Imperial era, the word

that serves to reserve for *templum* the sense of a specific area on the ground dedicated to a specific deity and to put less emphasis on the more general notion of the area as demarcating an inaugurated space (Dubourdieu and Scheid 2000:66-67).⁴⁸

Road Map of the Dissertation: Organization of Chapters

This archaeological, materially-grounded, localized approach to sacrifice takes on a different face in each of the following chapters as it accommodates the distinct categories of the evidence analyzed, the varied landscapes and settings investigated, and the diverse range of theoretical frameworks activated by the particular character of the data or the types of questions asked. Each chapter embraces the conception of Roman sacrifice as an *experience*, taking as *a priori* the formulation of sacrifice as a human behavior bound to the material world and not as a reflection of a system of beliefs or doctrines. As the variety of evidence will show – everything from the architectural arrangement of the monuments in a sanctuary to the votive, faunal, and vegetal offerings to the specific orientation and precise placement of an altar to the iterative construction of stylized altars at a specific sanctuary – Republican Roman sacrifice was not conceived of or dictated by some conceptualized doctrine, not authorized by some sanctioned institution, group, or individual, but rather generated and crafted from the religious spaces, objects, and resources themselves.

is used to describe, more generally, fora or promenades (places which may or may not be actually inaugurated). See, for example, Beard, North, Price (1998:22); Scheid (2003:60-61).

⁴⁸ Dubourdieu and Scheid (2000:62, 63) point out that augural space and sacred space, though often confused, must be thought of as two separate things. Sacred spaces don't necessarily have to be augural. Inaugurated spaces are not sacred in and of themselves but only consecration can bestow such a quality.

Arguably, the following chapters could have been arranged in any number of ways – chronologically, geographically (rural vs. urban), by sanctuary type. But the nested, thematic organization of this dissertation is intentional: each chapter builds on earlier chapters; each chapter presents a different category of evidence that amplifies the organizational overview of the data previously introduced; each chapter offers a distinct theoretical approach (or approaches) to understanding and reading the material record of sacrifice that expands on earlier arguments.

The outstanding distinguishing characteristics at each of the five sites are what provide the organizational framework for five thematic chapters. Each chapter is informed by a different theoretical approach to the assembled data: organization of sacred space, economies of ritual (votive and faunal), orientation, and memory. Since each of these themes can be traced, to a greater or lesser degree, at all five sanctuaries, it is possible to compare evidence across the case studies, supplemented with data from other sites in the region. This approach, tracing themes suggested by individual sites rather than constructing an overarching view of what would be, in effect, five separate case studies, encourages dialogue between sites, among locales, across time periods.

Chapter 1 presents a comprehensive summary of the material database, a diachronic description of the generally accepted, principal evidence relating to the architecture, architectonics, ornament, materials, votive deposits, and, in considerable detail, the construction phases of the altars of each of the case studies presented in the dissertation. Chapter 2 opens the thematic progression of chapters with an investigation of sacred space centered on the Sacred Area of the Republican Temples at Ostia. While focused

primarily on this sanctuary, the questions asked can equally be applied to all the sanctuaries examined in this dissertation (as well as to Roman sanctuaries in general). This chapter takes a grounded and layered approach to the question of sacred space and its relationship *over time* to ritual, using the physical space itself – its layout, its infrastructure, its building phases, its connection to neighboring temples, secular monuments, and its relationship to the surrounding city. Chapters 3 and 4 focus on questions of the economy of ritual through a study of votive deposits at Largo Argentina (Chapter 3) and faunal deposits at S. Omobono (Chapter 4) and examine how a sacrificial offering, whether raised, grown, made, bartered for or bought, was necessarily an *economic* act occurring within the larger framework of the community's overall production, distribution, and consumption of goods and services. Chapter 3 focuses on the collection of miniature altars, *arulae*, found at Largo Argentina, exploring and questioning the interplay between the monumental altars at the sanctuary and their miniature models through theories of miniaturization and mimesis. Chapter 4 builds on the conceptions of production, consumption, value, and resources discussed in the previous chapter and closely examines the faunal assemblage from S. Omobono to determine what might be particular about the animal sacrifice at this sanctuary, how details about the architecture of the sanctuary and the surrounding topography might provide clues to interpreting the faunal data (and vice versa), revealing the extent to which sacrifice at the sanctuary can be seen as markedly local and topographically-bound. Chapter 5 begins where Chapter 4 leaves off: at the archaic altar at S. Omobono and its specific orientation. This chapter considers the orientation of altars (at S.

Omobono, Ardea, and Lavinium) as intentional and independent of the more architecturally and topographically-privileged symmetries of the sanctuary. The chapter investigates the ways in which alignments of monumental altars can be securely associated either with the preservation of the location of a preceding, ritually buried altar, or with the occurrence of specific celestial phenomena linked to calendrically-dictated annual festivals. The concluding chapter elaborates on and deepens the previous chapter's investigation into the significance of shifts in orientation seen at the altars at Lavinium. Here, questions are raised as to how these very shifts in orientation (along with collections of votives, repetition in form, style, design, and material) might involve these altars with the memory of experience in a manner that might be usefully termed material memory. This chapter also explores other examples of material, monumental iteration and questions of forgetting or reactivating, looking as well at successions of built and buried altars at Largo Argentina or Ardea. Approaching these questions from the cognitive science study of religion and memory transmission, this chapter investigates the archaeological record of ritual participants' interaction with the setting of the sacrifice and how materials communicate, promoting memories of past ritual practice.

In the chapters that follow, while I may occasionally refer to materials in their active roles as protagonists in the performance of sacrifice, my principal theoretical model – allowing the ritual objects, the performance space, and the sacred setting themselves to limit, shape, and effectively localize the character of the experience of Republican Roman sacrifice – will more usually be applied to materials in their role as a kind of chorus: ever present guardians of tradition, echoing, transmitting, and shaping memory.

Placing places of sacrifice in conversation with each other offers an integrated approach to studying these sacred spaces, and amplifies the significance of this dissertation's inescapable conclusion: the emphatically local character of sacrifice.

CHAPTER 1

Site Summaries

A site specific study of sacrifice, placing the ritual in its proper topographic and chronological setting, must necessarily base itself in a thorough understanding of the existing research on the material character of each setting. The following chapter provides a comprehensive summary and diachronic description of the generally accepted, principal evidence relating to the architecture, architectonics, ornament, materials, votive deposits, and, in considerable detail, the construction phases of the altars of each of the five case studies of this project. This survey of the research pertaining to the material characteristics of each site is limited primarily to the Republican period and its antecedents. The chapter is organized by sanctuary and roughly chronologically, beginning in the late archaic period with S. Omobono, and ending in the late Republic with Largo Argentina. The purpose of the detailed summary provided here is not to address issues of interpretation or the reliability of evidence – that will come in later chapters – but rather to give a consensus overview of the knowledge base for the natural and material setting of Republican sacrifice. It is intended, as well, that the details presented in this account of the significant published (and in some cases, unpublished) literature will serve as highly contextualized and organized points of reference which may be conveniently, briefly, and repeatedly noted in subsequent chapters.

On the ridge below the Capitoline Hill, between the Forum Romanum and the Forum Boarium, lie the remains of two south-facing temples in their late Republican phase, Temple A (supposedly dedicated to Fortuna) and Temple B (supposedly dedicated to Mater Matuta). The first excavations of the area occurred in 1937 during the construction of new, government office buildings along the Via del Mare, today Via Petroselli;¹ further excavations occurred in 1959, 1961-1962, 1964, 1974-75, 1977-79, 1985-86, and the most recent series of excavations, begun in 2010, continue today. The area was occupied as early as the middle Bronze Age, as evidenced by Apennine culture ceramics material dating to the 16th century B.C.E. found in the collection of votive deposits from the end of the second phase of the archaic temple (see below) (Adornato 2003:810). The site was first claimed as sacred in the second half of the 7th century B.C.E..

At this early stage, the sanctuary was located in a prominent commercial and exchange area of the city, extremely close to the shore of the Tiber (**Figure 1**). Among the earliest evidence of transport and exchange in the Forum Boarium are imported materials associated with the trade of salt and the saltworks on the coast (Castagnoli 1981:124-129).² The saltworks, ascribed to Ancus Marcus by literary sources,³ were traditionally located on the right bank of the Tiber and linked the mouth of

¹ For more information on the initial discovery of the site, see Pisani Sartorio (1995:57ff.).

² For literary sources on the saltworks, see Solinius I.8; Frontinus I.5; Livy 24.47.15.

³ Livy 1.33.

the river with the Via Campana.⁴ To enter into the city of Rome, salt traders would use this road which followed the right bank of the Tiber to the Campus Salinarum (Pisani Sartorio 1989:16). There may have been saltworks present on the left bank of the Tiber as well (Pisani Sartorio 1990: 111)⁵ and the salt could have been transported either by water or by the Via Salaria (which followed the left bank of the Tiber and terminated near the Forum Boarium) (Torelli 1993:106-107).⁶

At the time of initial construction of the sanctuary, as literary sources attest, the surrounding natural terrain would have been dominated by a forest of oak trees.⁷ The *lucus Poetelinnus*, apparently near the mid-Republican Temple of Portunus, and the *lucus Stimulae*, near the foot of the Aventine, were groves devoted to the cultivation of olives, grapes, cereals, and vegetables (Pisani Sartorio 1990:112). Olives and grapevines are common votive dedications (and evidence of olives pits excavated near the altar of Temple B attest to S. Omobono's connection to the nearby cultivation) (Cristofani:1985:137-138) (See Chapter 4). S. Omobono was bounded on the north by the

⁴ The connections between salt trade and Hercules will be stressed later in this chapter on page 72 in the discussion of the sanctuary at Ostia (Torelli 1993). For now, it should be emphasized that S. Omobono is also located in the area of the *ara Maxima*, a monumental altar sacred to Hercules. Its exact location remains unknown. It is thought that the large tufa stones under S. Maria in Cosmedin belong to this monumental altar.

⁵ Recent archaeological evidence attests to salt works also in the marshes on the left bank of the river, near the Canal dello Stagno in the pine forest of Castelfusano, connecting with the via Ostiense which follows the left bank of the river and ends at the Forum Boarium near the Salinae, to the south of portus Tiberinus (Pisani-Quilici 1984; Pisani Sartorio 1989:16). Evidence for the distribution of salt dates to the 7th-6th century B.C.E. (Pisani Sartorio 1990:111).

⁶ Later known as the Via Ostiense. The Via Salaria led into the center of Italy, passing through the settlements of Antemnae, Fidenae, Crustumerium, and on into the territory of the Sabines. Festus p.436 L; Pliny *NH* XXXI.89.

⁷ Livy. xxxix. 12, 13; Ovid. *Fasti* VI.518; Varro *L.L* V.50.

Vicus Iugarius and on the east by a street that branched off from the Vicus Iugarius; the western and southern limits are less clear.

Early Phases of S. Omobono

The earliest structures⁸ on the site were one or more wattle and daub huts,⁹ documented by post holes at the site (Figure 3); evidence for wood is preserved by the water-logged strata (at a great depth). Above an alluvial deposition of sand and clay, this layer consists of beaten earth mixed with sand, pieces of tufa, and carbonized material (probably from destroyed huts), and fragments of cookware (cups, *olla*, vases). Excavations of this early phase also produced bucchero pottery, impasto rosso ceramic, large dolia, and a large oval stone, perhaps connected to the use of grain during a sacrifice (Ioppolo 1989a:29). Unfortunately, we do not know the character of this stratum in detail nor the activities associated with it. The next phase of the sanctuary preceding the construction of a first monumental, archaic temple in the 6th century B.C.E, included

⁸ See **Figure 2** for Gjerstad's, Ioppolo's, and Virgili's renderings of the strata. Gjerstad dates the first phase to the end of the Latial III period, the permanent pavement of the outer court to 575 B.C.E. (in relation to a date derived from the dating of the Forum Romanum), the second and third pavements to 525 B.C.E. and the start of the 5th century (dated by the presence of archaic bucchero), the first phase of the twin temples to the start of the 5th century and the second phase of the temples to the 4th century, dedicated by Camilus. Ioppolo's chronology: the first phase was a period of alluviation, then the second phase had a sacrificial ditch with traces of carbon and animal bones and dates to a pre-temple phase at the end of the 7th century B.C.E.; the construction of the altar and the archaic temple date to the mid 6th century; the destruction and leveling of the area in relation to a period of abandonment followed this. In the next phase, the area was raised by 30,000m³ of earth and associated Apennine and other imported ceramics. Gjerstad's stratum 14C in the NE area of the podium corresponds to Ioppolo's stratum I IIV E at the front of the temple. Virgili: a purely geological phase was the start, followed by a phase before the temple; then came periods of frequentation of the temple, marked by votive finds and occurring episodically throughout the whole of the 6th century B.C.E. – the first phase between 550/540 and 530/520, the second phase between 530/520 and the start of the 5th century B.C.E. (based on the relief with the procession, see below); then came the destruction and leveling of the archaic temple in the 1st half of the 5th century; following this was the burying (with earth and material that date from the bronze age to the end of the 6th century B.C.E.) of early structures and finally came the imperial phase of the *tabernae*.

⁹ Four levels of occupation are documented for this phase, according to Ioppolo 1989a:29.

a sturdier building constructed with beams of wood and covered by some sort of roof (suggested by the many fragments of roof tiles found). The ceramic from this phase included fragments of red-brown impasto ware, of Italic-Cornithian ceramic, of archaic bucchero, and of coarseware. Directly in front of the structure was a beaten earth surface with pieces of burnt red tufa, carbon, ash from animals, bones from sheep, goat and cattle, and numerous fragments of ceramic dishes (of the type common in ritual ceremony) (Figure 4). According to Ioppolo (and many others who follow him), this area was a designated sacrificial area, a suggestion reinforced by the construction of the later archaic altar directly over it (see Chapter 4). In this so-called sacrificial ditch, the oldest attested Etruscan epigraph in Rome reading *uqnu(s)* was found inscribed on an impasto fragment (Holloway 1994:70).¹⁰

Archaic Temples at S. Omobono

In the second quarter of the 6th century (perhaps during the period of Servius Tullius), the first archaic sanctuary complex consisting of a temple (constructed in blocks of tufa), paved forecourt, altar (2.3m from the steps of the temple), and ritual well-head was constructed (Figure 5).¹¹ Evidence for the superstructure of the altar of this phase comes only from molded fragments that are attributed to a later 6th century reconstruction of this altar done in the same tufa as the altar's foundation (Cifani 2008:167; Colonna

¹⁰ Holloway connects this name to that of a mythological figure attested to in Virgil (*Aeneid* X 198) as the son of the river god Tiber. A total of four archaic Etruscan graffiti have been found in Rome (as of 1994 when Holloway wrote): two additional graffiti from S. Omobono and one found in the Forum at the foot of the Capitoline (Colonna 1987: 55-66) (see page 46 of this chapter).

¹¹ Evidence for the archaic temples are recorded by excavations during the 1950s-70s: trenches A-B (1959) at the NW corner of the podium; trenches II and IV (1962-64, by Ioppolo) near the southern side; trench I (1974-76) and sections VII and IX (1977 and 1979) near the northern side of the podium.

1991:53) (See Chapter 5 for reconstructions and hypotheses about this archaic altar's orientation and placement). Ioppolo (1998:171) suggests that there may have been an ancient well connected to this early altar that remained in its original position and was not re-oriented in the later Republican phases of the sanctuary. Evidence of a stratum of alluvial clay to the west of the temple (which bears no relation to the strata adjacent to it) may suggest a possible *temenos* enclosing the temple and its altar (Ioppolo 1989b: 36). Alternatively, Colonna (1991:53) finds evidence for a wall which may have functioned as a kind of *temenos* set against the east edge of the stairs of the second temple that runs south, following the orientation of the edifice (Colonna 1991:57) (Figure 6).¹²

The actual temple structure has been identified by sections on the western side of the podium (partially destroyed), the northwest corner of the podium, from a block of tufa that corresponds to the northern, central part of the temple, and from parts of the back of the podium. According to Ioppolo (1998:171), the temple was oriented NNE; however, closer examination and precise measurements, as I will show in depth in Chapter 5, argues that this early temple was oriented at a right angle to the 109° orientation of the archaic altar. The temple can be reconstructed as square in plan, measuring 10.6m per side, raised on a foundation of virgin soil, with a high podium (typical of later Italic temples), 1.7m high, constructed in *opus quadratum* of red tufa. The podium was composed of six rows of tufa blocks with each block having a height varying between 25 and 27cm), and there was a single cella in antis separated by *alae*. This temple was articulated by two moldings: a torus in the higher part and a horizontal band (“fascia”)

¹² Colonna sees evidence for this wall in the pattern of destruction of the area of the steps of the temple (extending to the west to the meeting of the steps and the foundation of the altar) and on the opposite side (to the east), the destruction was interrupted by a sturdy wall of three joins.

projecting from the lower part (Cifani 2008:167). The front consisted of a staircase of seven tufa steps. On the first of these steps, a Latin inscription, OUDIOS, written right to left on a bucchero cup, was found (trench IV E) (Holloway 1994:71; Virgili 1989:58). This first temple was probably destroyed by a fire.

The second phase of the archaic temple occurred between the 2nd quarter of the 6th century and 540 B.C.E. (perhaps during the period of Tarquinius Superbus). The orientation remains the same as that of the previous temple (See Chapter 5). This phase was characterized by a refashioning, raising and enlarging of the podium and walls of the cella (Figure 7). An extension to the original podium was made in the same reddish tufa in *opus quadratum* (with blocks about 27cm high). The podium was articulated with a molding composed, from top to bottom, of a torus, a reverse S-curve (“gola rovesica”) and a horizontal band (“fascia”) projecting above the buried part of the foundation.¹³ The absence of molding at the back of the podium suggests a possible extension of the building towards the Capitoline. The dimensions of this new temple were 11.2 x 13.2m (close to the Vitruvian canon) and 7.5 high (1.6m above the previous podium). The columns of this temple may have had terracotta capitals,¹⁴ which would have had crowned fluted column shafts of wood (Adornato 2003: 825ff; Holloway 1994: 75). The temple can be reconstructed as having four columns in the pronaos and a central, single cella.

¹³ The molding seen here is typical of the molding used in monumental altars (for example, at Lavinium, altars VIII and XIII). Shoe (1965:22,84).

¹⁴ Perhaps of a form similar to an Aeolic capital seen, for example, in the treasury of Massilia at Delphi. Ioppolo (1998:170) states that the tiles from the roof of the temple have an Ionic character.

Before the temple were four steps, wider than the façade of the temple and incorporating the foundation for the altar (Cifani 2008: 68; Colonna 1991:53). Colonna states that in this second phase of the archaic temple, the altar and its platform are incorporated into the actual building of the temple in a central forecourt, placed between two symmetric wings of the stairs at the level of the stylobate (a drainage canal runs along the level of the stylobate) (Colonna 1991:52, 51-59, Fig 2a-b) (Figure 6).¹⁵ Corresponding to and characterizing this altar foundation is a level for sacrificial deposits, consisting of a modest beaten earth floor with fragments of red tufa (perhaps of the type common on the Capitoline) and numerous fragments of decorated ceramics (Ioppolo 1998:171).

Architectural Decoration

The dating of the acroterial, terracotta statues of Minerva and Hercules, found adjacent to the temple,¹⁶ has been much debated (Adornato 2003 (summary and bibliography); Ampolo 1981; Coarelli 1981; Cristofani 1981; 1990; Sommella Mura 1977; 1981). The Minerva-Hercules group rests on a semi-circular base with a decorated beak molding and is generally taken to be an acroterial group belonging to the 2nd phase of the archaic temple and dated on stylistic grounds to the 3rd quarter of the 6th century B.C.E. (Adornato 2003:819) (Figure 8). Along with the various assignments of dates are

¹⁵ Colonna proposes two phases of construction of the archaic temple and one phase of intervention following the destruction: 1) a square temple of 10.3m on each side, a podium of 1.7m high with stairs in front and an altar at 2.3m distance; 2) a rectangular temple of 11.2m x 13.2m on a podium 1.2m high with a wide staircase in front and a central forecourt; 3) a leveling of the area contained to the east by a wall oriented with respect to the temple.

¹⁶ In Gjerstad's strata C13-14 (which equals Ioppolo's II D 7-10 and IV E 7-10); both pertain to the second phase of the archaic temple.

various interpretations of what the scene represents: it is interpreted as the scene showing the apotheosis of Hercules to Olympus in the presence of Minerva (Sommella Mura 1977); a scene of *hierogamia* (Hercules embracing the goddess) (Torelli 1981); a depiction of Hercules and Fortuna Virilis (at first Minerva) (Cristofani 1977:2-7); a depiction of Hercules with an armed Aphrodite or Venus (Coarelli 1981b:35-38). The statuary group finds a parallel in a similar sculptural pair (of the same date) from the Portonaccio sanctuary at Veii and stylistic parallels as well from Pyrgi (Adornato 2003:828; Colonna 1987b; Cristofani 1977). Other architectonic fragments were found under the apse of the medieval church of S.Omobono, along the western side of the temple, and in front of the temple by the altar. Among these was a plaque of two large opposite-facing lions or panthers crouching (Figure 9). This group may have embellished the arch above the architrave as part of a pedimental group (Holloway 1994:76). In reconstructing this depiction, the lions would have likely been facing a central figure, perhaps a Gorgon (Adornato 2003:818).¹⁷ The frontal felines find parallels with the Tomb of the Panthers at Tarquinia, for example, dating to the 1st quarter of the 6th century B.C.E., or with the illustrations on bronze reliefs (in particular in the area of Perugia) (Cristofani 1990). The closest parallel, however, comes from the Temple of Artemis on Corfu from the beginning of the 6th century B.C.E. (Adornato 2003: 819, 822). Another decorative terracotta likely dated to the 2nd phase of the temple as well, that is, to the final quarter of the 6th century, is a plaque that depicts a procession moving to the right of a two-horse and a three-horse chariot, led by Hermes, a scene similar in type to the Veii-

¹⁷ Cristofani (1990), addressing the issues of the dating of the architectonic decoration, states that the decorative program might pertain to only one of the 2 phases of the archaic temple (to the 2nd phase).

Rome-Velletri style¹⁸ (Adornato 2003:821, 817-818 for discussion and bibliography; Castagnoli 1981:115-123; Coarelli 1988:220; Cristofani 1990 31-37; Sommella Mura 1977: 62-128) (Figure 10). The same subject can be seen on a cornice at Veii and Velletri, as well as at Rome on frieze fragments from the Palatine, Forum, Esquiline, and Capitoline (Holloway 1994:75).

The material evidence that relates to both of these early archaic phases of the site attests to the commercial, economic network of trading immediately outside the *temenos* walls – for example, Euboian, Corinthian, Laconian, Ionic ceramics dating to the mid-6th century B.C.E. (See Chapter 3). At S. Omobono, the presence of votive deposits at the northwest corner of the podium, along the eastern side of the temple, and in the front of the temple next to the altar, supports the belief that these votives may have functioned as a hypothetical *temenos*. The locations of these deposits correspond to the placement of votive deposits at Largo Argentina and Ardea which serve to delimit the sacred space (cf Bouma 1996) (See Chapter 4). At the back of the temple (from the 1977-79 excavations), for example, the deposits (under 40cm of beaten earth surface) consist of material of various dates, variety, and quality (the most ancient dating to the final decades of the 7th century B.C.E. and the most recent to the 2nd or 3rd quarter of the 6th century B.C.E.).¹⁹ The latest material in this deposit provides a *terminus ante quem* for the later phase of the archaic temple. The most ancient finds are a globular Corinthian aryballos and Etruscan bucchero fragments in typical Greek forms, an impasto amphora, a kantheros, and a

¹⁸ However, the frieze from S. Omobono reflects an inversion of the figure of the bull and of the strigillated band, and depicts both female and male figures being carried.

¹⁹ The other deposits in the sanctuary reveal cookware, miniature vases, bucchero pottery, imported Greek ceramics and Corinthian-Etrusco ceramics (NW corner); architectonic terracotta decorations (eastern side); animal bones and vegetal remains (front of temple near altar).

number of miniature, impasto vases (Adornato 2003:814). This deposit layer also exhibits material of the Romano-Latinal type dating to the 6th century²⁰ – miniature vases, bucchero vessels (in forms used exclusively for cult) votives, bone and ivory objects, decorated pendants, and hammered bronze figurines (Adornato 2003: 814-815) (Figure 11). In addition to material of a local type, many Etrusco-Corinthian ceramics in miniature (particularly aryballoi and alabastra) were also found. In addition, at the rear of the podium, an Etruscan inscription was found on the back of a *tessera hospitalis* (a token of guest friendship made between aristocratic families of different cities) to “Araz silqetenas spurianas” (Adornato 2003:814; Pallottino 1979:319-325). According to Colonna (1981; 1988:467) this inscription refers to a man named Spurianas (or Spurinas) from Tarquinia and the other perhaps to a man named Araz of Sulcis from Sardinia; this inscription underscores the connections between Etruria and S. Omobono.

Republican Phases of the Sanctuary

In the beginning of the 5th century, after a probable fire that destroyed the 2nd archaic temple and after a flooding of the Tiber, the ground level was raised by about 5m above the preceding level of the archaic temple and Temple B was rebuilt, this time with a twin temple to its west (Figure 12). 30,000m³ of earth (with material dating from the 16th -6th century B.C.E. included within the fill) was used to raise the ground level. The orientation of Temple B was shifted to face exactly south. These temples were built on a single foundation (in *opus quadratum* of peperino tufa, one of the most ancient examples

²⁰ Similar forms have been found in votive deposits at the Capitoline, at S. Maria della Vittoria on the Quirinal and by the Lapis Niger in the Roman Forum.

of use of this stone in Roman construction) measuring 47.5m per side; the twin temples are of Italic type, *in antis sine postico*. The temples are symmetrical with identical measurements and, according to Deggrassi, even share a dedication day (1963: 13.2 468-69). The entrance to the sanctuary was made through a portal to the rear of the two temples, opening onto Vicus Iugarius.²¹ This early 5th century phase is characterized by the cappellaccio paving (Virgili 1988) and is dated by the ceramic (particularly Attic ware and Black Figure) found in the fill in the cavity of the foundation of the podium wall of Temple B (Cifani 2008:167; Virgili 1977:26-28).

These two temples were again reconstructed after the sack of Veii in 395 B.C.E. According to literary sources, before he left for Veii, Camilus made a promise to dedicate and reconstruct the temple to Mater Matuta in Rome (Livy 5.19.6, 5.23.7). During this phase, the area was paved with Aeneine and Monteverde tufa. The podia were constructed in *opus quadratum* of a gray tufa (Cifani 2008:172), and the upper part of the cella in unworked clay (Cifani 2008: 172). With these reconstructed temples came the two peperino U-shaped altars in the forecourts of the temples (Figure 13). Even if, as is likely, the altars were constructed *ex novo* in this phase, it is reasonable to assume that the altars of the earlier, 5th century phase of the temples would have been in the same location, on direct axis with the temple.²² Castagnoli (1962:148) comments that, according to a principle of conservation observed in the reconstruction of altars, it is not improbable that

²¹ In the course of the 5th century B.C.E., a number of new temples are constructed in the city of Rome (to Ceres, Liber and Libera, Mercury, Saturn, Castor and Pollux).

²² According to Ioppolo (1998:173), the Republican altar of Temple B is about 1.2m off the medial axis of the temple. Ioppolo makes some extended observational claims and inferences relating to the significance of this obliquity in orientation. As I will show in Chapter 5 the archaic altar at S. Omobono is oriented roughly south-southeast (109° east of north) and the Republican altar shifts its orientations about 19° to face directly east.

the form and structure of these 4th century altars would have been modeled on those more ancient. The repetitive relationship between the 4th century altars and their predecessors at S. Omobono is consistent with the conservation of form seen so prominently in the different altars at Lavinium over the three centuries of their construction (Shoe 1965:104) (See Chapter 5 for examples of preservation in altar placement and in orientation).

Our reconstruction of the temples comes from their final Republican construction phase, following the fire in the area in 213 B.C.E., after which the whole area was paved in Monteverde tufa (over Grotto Oscura tufa); however, the basic layout of the sanctuary seems to have remained unchanged throughout the many reconstructions during the Republican period (Figure 12). Each of the twin temples, in its final phase, can be reconstructed as consisting of a small cella with a deep pronaos; cella and pronaos each enclosed by tufa walls open only in the front with a pair of columns in line with the cella walls. The form of these temples was atypical of Republican Roman structures and had more in common perhaps with the temples of the Ara della Regina at Tarquinia, the Tuscan-style temple at Fiesole, and the Portonaccio Temple at Veii (Richardson 1990:36; Stamper 2005:42).

Additional Monuments in the Sanctuary

The other monuments in the sanctuary contribute to its sacred character. In 264 B.C.E, Marcus Fulvius Flaccus, after conquering Volsinii, dedicated a peperino, circular donarium, perhaps supporting a bronze statuette that he seized from the Etruscan sanctuary of Volumnae (Pisani-Santorio: 1982 56) (Figure 14). On the surface of the donarium are traces of the imprint of the feet of a statue (which can be reconstructed as

belonging to a statue about 104 cm high);²³ The monument is composed of an interior crown of peperino tufa (formed of 6 circular blocks of peperino), encircling a core made of cappellaccio tufa. This donarium may have also functioned in part as a reliquary, a use suggested by coins found in a cavity under this structure (placed in axial alignment with orientation of the *area sacra* as a whole) (Ioppolo 1964:79) (See Chapter 3). The outer blocks of the monument are thought to display an inscription, preserved in four fragments reconstructed as “M. FOLV [IO(S) G. F. COS] OL //D(ONO) [or D(DEDET)] VOLSI[NIO] CAP[TO]” (Torelli:1968).²⁴ In addition to this donarium, according to Livy (33. 27.3-5), in 195 B.C.E. there were two arches dedicated by Stertinius which held golden statues. (Castagnoli 1984:7n.32).

Within the precinct, on the northeast corner of each altar, is a well. These square wells (with circular openings) are 1.63m per side, 12cm wide, and raised 2 cm above the pavement about 90cm high and 102 cm square at their base (Figure 15). At the top surface of these monuments, there are traces of chiseling identical to those on the altars themselves. The well in front of Temple B may have been connected to the ritual of the Matralia, occurring at a time of year when there is a scarcity of water.²⁵ Ioppolo (1998:171) states that the well in front of Temple B was already in use during the early

²³ Torelli links this possible statue to the one Pliny refers to as the *statuae tripedaneae* (NH XXXIV 24). Torelli (1968:74) compares this structure to that of the donario of Sp. Carvillo *cos* 293B.C.E., with a statue of Jupiter higher than the statue of Cavilio at the feet of the god.

²⁴ The 4 fragments are: 1. M. FOLV, 2. OL, 3. D. VOLSI, 4. CAP. Ioppolo (1964) sees this inscription as belonging to another monument: the well in front of the altar of Temple A. Ioppolo (1964: 88) reconstructs the south side of the monument as bearing the inscription “M. FUL. CAP. OLI”; the west side “D. VOLSI” (inserted between the altar and the monument itself); the right side of the monument has the three letters “VIO”; on the north side, there is no inscription.

²⁵ Simon (1990:62); Edlund-Berry (2006: 175). The *terra firma* on the low ridge immediately bordering the marshy Velabrum, before that area was reclaimed by the construction of the Cloaca Maxima, was a perfect site for rites that would require a ceremonial supply of water in the drought season.

archaic period (at this time, it would have been found directly to the west of the altar belonging to the early temple). Ioppolo also claims (1998:171) that the square well is thus placed obliquely with respect to the rigorously orthogonal orientation of the area as a whole and that this asymmetry suggests that the positioning of this well must replicate that of a much more ancient well, existing from the very first, pre-monumental phase of the sanctuary (See Chapter 5 for a discussion about the orientations of the monuments in this sanctuary from this early period). In addition, another water source within the sanctuary – a rectilinear cistern – is oriented north-south and is aligned with the position of the aqueducts of the rest of the city (Figure 16). The rectilinear cistern, dating to around 390B.C.E., measures 27.71 meters long, 2.41 meters wide, and between 2 and 2.3 meters high (Virgili:1988) and has a capacity of 700m³ of water (80,000 liters). The cistern is a barrel-vaulted construction of Aeneine tufa, its interior lined with *cacciopesto* plaster. This cistern is on an axis parallel to that of the temples, situated between the two buildings perhaps to collect the rainwater from the roofs of the two temples. A well was also found at the southern end of this cistern in connection with a small basin for decanting water and may have connected the republican drain of Velabrum to the Cloaca Maxima (Virgili 1988).

Lavinium

Within a confined, designated place, over the course of three centuries, from the sixth to fourth century B.C.E., a series of thirteen altars was constructed at Lavinium. Situated about 27km south of Rome, the city of Lavinium lies on a plain about 4km from

the sea (Figure 17).²⁶ Its proximity to the sea made Lavinium a center of exchange and connected the city to the world of Aegean trade; the harbor's progressive silting up was one of the causes of the slow decay of the city. A brief history of the site is as follows: as early as the Bronze Age, a small group of dwellings was clustered on what would later be called the acropolis of the city; beginning in the Iron Age, Lavinium reveals signs of even more nucleated settlements; remains of huts were found in the strata below the area later occupied by the thirteen altars as well as diffused throughout the surrounding plain. Along the southwestern slope of the acropolis, an assortment of tombs has been excavated (about 70 from the Iron Age, the 10th-7th centuries B.C.E.) of various forms (tumuli, cremation, inhumation) (Castagnoli 1981: 162).

By the middle of the 7th century B.C.E., the town of Lavinium occupied the whole plain and the huts of the previous period were subsequently replaced by brick houses. Defensive walls (constructed with large pieces of cappellaccio) were built to protect the more elevated zone (reconstructed and strengthened in the following century). During the 7th century, the complete occupation of the plain of Lavinium, an area of about 30 hectares, corresponding to the first archaeological signs of cult in the area. During the 6th century, the city grew to the south and to the west, extra-mural sanctuaries populating the rural landscape. And in the second quarter of the 6th century B.C.E., clear evidence for cult practices can be seen at Lavinium: to the south of the city center lie the Sanctuary of the Thirteen Altars, the sanctuary near the church of Santa Maria della Vigne or "Madonnella," and the *heroon* of Aeneas; further south, by the mouth of the Fosso di Pratica, is the sanctuary of Numicus (or the so-called sanctuary to Sol-

²⁶ The information about the site of Lavinium is taken from Castagnoli (1972).

Indiges)²⁷; to the east, the sanctuary of Minerva, and still further east is the sanctuary of Solforata.²⁸ Literary sources attest to the presence of Venus, the Penates and Vesta, Indiges, Juppiter, Juno, Juturna, Anna Perenna, Liber, and Athena at Lavinium, but do not give topographical details on the locations of the shrines for these divinities.²⁹ During this period, in the 6th century, Lavinium reached its maximum development, both urban and economic. Excavations have revealed buildings for production activities, monumental spaces, and infrastructure for public use: a forum with a building for workshops, another for thermal baths, and a complicated system of drains and waterworks. In this phase of occupation, there were two main systems of communication: to the north, a road connecting the city to the Alban Hills, and to the south a road to the sea, passing three out of the five extraurban sanctuaries (the Sanctuary of the Thirteen Altars, the sanctuary of Minerva and the *heroon* of Aeneas). A second road system paralleled the coast linking the city with Ostia to the northeast and with Ardea to the southwest.

Nearby Structures and Natural Terrain: Tumulus and Northeast Edifice

One hundred meters to the east of the site of the Thirteen Altars stood a seventh-century B.C.E. tumulus, a form not known to occur elsewhere in the region (Figure 18). This unique Lavinian tomb structure followed contemporary Etruscan models, like those at Tarquinia or Cerveteri (Pallattino 1968; Romanelli 1951). The original tumulus – it

²⁷ Alessandro Jaia (*forthcoming*) has many recent publications on the excavations at this site.

²⁸ The names given to these sanctuaries, of course, are modern.

²⁹ See Castagnoli (1972:71-75) for a full list of literary sources on divinities in Lavinium.

was substantially altered some 300 years later – consisted of an earth barrow 18 m in diameter, surrounded by an external wall. Inside the structure was the rectangular grave of an individual of some importance, as evidenced by the rich deposit of grave goods found in the excavation of the site. The objects date to as early as the sixth century B.C.E. (*oinochoe* made of heavy bucchero, for example), indicating that the tomb was the locus for some form of cult from this early date (Sommella 1971). The tumulus, no doubt a monumental incentive to locate the altars in its vicinity, at a later time came to be revered as the tomb of the legendary Aeneas (Castagnoli 1981; Sommella 1971). Dionysius of Halicarnassus describes Aeneas's tomb in Lavinium. In a passage about the battle between the Latins and Rutulians, the Latins, having lost Aeneas's body, decide to build a *heroon* with an inscription "of the god father *Indiges* that guides the flood of the Numic river..."³⁰ The mention of this dedicatory inscription has led to hypotheses connecting the tomb to the *Pater Deus Indiges*, an impersonal deity connected to the founder of a family (Cornell 1995). Related hypotheses have the tumulus acquiring this connection to the legendary Trojan hero in the 4th century B.C.E., when the Roman hegemony of Latium made necessary the association of the Roman founder hero to a preexisting and more ancient local divinity, receiving cult in this tumulus as *Deus Pater Indiges*. The developing mythological significance of the tumulus presumably encouraged its reconfiguration in the fourth century B.C.E. into a small building with a cella and pronaos (Figure 19). The new structure's monumentality and the presence of a large number of votives mark this building as a sacralized burial site, a *heroon*. During this renovation, the portion of the barrow facing the road to the sea was removed, a small

³⁰ Dionysius of Halicarnassus 1.64.

inaccessible cella was constructed in the inner room, closed by a false door with two wings made of tufa, and another room was constructed, closed by two tufa shutters in *opus quadratum* to support the pressure of the barrow and to mark the delimiting of the floor area (Sommella 1971).

The structure, visible from the ancient city center 300 m to the north, must have stood out within the landscape of Lavinium. Its conspicuous presence and its relation to the neighboring site of the earliest altars suggest a dialogue between these two complexes, extending some share of their sacrality to the whole of the area between the natural bounds of the *heroon* and the sanctuary. The major road separating the tumulus from the line of Thirteen Altars, a feature of the urban infrastructure serving as a virtual *temenos* to the sanctuary of the altars, visually distinguishes the city within the walls from the landscape without and, within this world of nature beyond the city, the sanctuary of the living from the tombs of the dead. The altars are not only connected to the tumulus, but also topographically to other tombs, to an inhumation perhaps of an infant under the earliest altar IX, and to a protohistoric tomb directly to the south of altar I (Castagnoli 1975:13). The presence of these tombs in the area of the Sanctuary of the Thirteen Altars should not necessarily be read as evidence for an intimate relationship between the altars and the cult of the dead, but rather as an indication of the sacrality embedded in the immediately surrounding terrain.

Shortly following the construction of the first altars at the end of the sixth century B.C.E. – and in fact often viewed as nearly contemporary building projects – directly to the northeast, a large rectangular edifice was erected in cappellaccio tufa and sandstone, roughly 25 m by 15 m, having the same orientation as the altars (Figure 20). This

building most likely did not have a specific cult function apart from its orientation with respect to the altars, but rather seems to have had some utilitarian purpose.³¹ This function is inferred from the remains of a large hearth on the south side of the building, which may have been used for the fabrication of votives for use at the sanctuary (Figure 21). The building was destroyed by a fire in the mid-fifth century B.C.E. and subsequently reconstructed. During this second building phase, a structure consisting of two contiguous hearths, one hearth larger than the other, was set up (Castagnoli 1981:169). After the fire, the ground level of the area surrounding the sanctuary was raised and the terrain leveled. The ground on which the Thirteen Altars stood did not need to be raised since the monuments already rested on high ground.

The choice of location for the sanctuary seems likely to have been related to the earlier habitation on the site and to its topographic situation directly outside the city, near a confluence of streams, in a direct line between the acropolis and the coast. Natural features often determine a sacred space, lending agency to the landscape, taking on a “special significance by virtue of their geographical location” (Bradley 2000:11) (See Chapter 2). At Lavinium, a stream ran along the north side of the sanctuary and was later converted to a canal, allowing the southward expansion of building in the area. The main road connecting the center of Lavinium to the sea runs along the southeast edge of the sanctuary. No *temenos* has been found for the sanctuary; these preexisting natural and architecturally topographical features can be seen to have formed the boundaries of the *area sacra*. This northern canal, however, eventually dried up and perhaps was used more

³¹ Panella (2005:35) links this building to a service building at the Heraion at Foce del Sele outside of Paestum.

for drainage, as a *compluvium*. Another drainage canal, probably also a successor to an earlier stream, ran north to south, along the east face of the line of altars; the canal turned the north corner of altar XIII at an obtuse angle, and perhaps joined the canal, running east-west, directly to the north of altar XIII. The canal would have brought water from the nearby hills to the city and afterwards would have passed the eastern face of the altars. The western side of the canal has a smooth, sloping profile which would have carried away the ritual water that had been poured onto the front platforms of the altars (Castagnoli 1972:75, 28). Evidence for this drainage canal is most visible between altars V and VI, and between XII and XIII.

Sanctuary of the Thirteen Altars: Style and Form

In this topographically and monumentally charged landscape, the first of the Thirteen Altars, altar XIII, was constructed in the first half of the sixth century B.C.E. (Figure 22). In form, the altars are Greek in style (for example, compare the altars at Samos, Sardis, Apollo and Artemis at Cyrene, Agrigento, Delos, Thasos, and Camiros). There are a few examples of this type of U-shaped altar in Italy (and the type is discussed in the *Tabula Iguvinae* and the *Tavola di Agnone B*) (Devoto 1938:240ff; Poultney 1959: entries on “asa”). Examples of this U-shaped altar form within Central Italy can be found at Marzabotto, Veii, S. Omobono, and Ardea (Figure 23). The Greek model is often a parallelepiped (i.e a three-dimension figure formed by six parallelograms), with a rigorously unarticulated vertical profile. Italic versions, on the other hand, abolish this verticality and instead sweep up from a foundation and return to a cornice, each intensely embellished (Castagnoli 1962: 159). Therefore, while in plan the Lavinian altars may be

influenced by similar 6th century altars in Greece, in elevation they are completely original, with molding and detail specific to central Italy and Etruria (Figure 24). On the Lavinian altars, the effect of the molding on a viewer varies depending on his point of view; the moldings in the front and in the back are the most impressive.

The row form of multiple altars is also more common in the Greek world (for example, at Olympia, Agrigento, and at the sanctuary to Hera at Paestum). In Italy, a number of series of altars are known through literary sources: 14 listed in the Tavola di Agnone B I; CIL VI 453 records a series of 3 altars (*vicum trium altarum*); CIL VI 9884 records 6 altars (*ab sex aris*); Pliny tells of the multiple altars of the *arae Muciaae* (NH II.211); at Narbona, there are 7 altars (CIL XII 4503): *septe(m) aris*). Archaeologically, rows of altars have been found at the Sacred Area of the Republican Temples at Ostia (see below), at Posta di Mesa, and at Macchiagrande (Figure 25) (See Chapter 6 for a discussion of how these iterations of altars might affect the experience of sacrifice).³²

The Lavinian altars are constructed in cappellaccio tufa and a yellow tufa: cappellaccio in the foundation of the platform and in the inner parts of the altar and the yellow tufa in the platform and in the architectonic decoration of the altars (Castagnoli 1975:89). It seems as though the altars were constructed in accordance with a standard related to the Roman foot (1 foot=.294m). The dimensions of the altars appear to be in exact feet or exact ½ feet (8 feet:VIII (upper altar), 9 feet: VII, X, XI, XII, 10 feet: VI, 11 feet: V, 13 feet: IV). There is some doubt, however, as to whether or not the most ancient

³² The cippi pisaurenses (CIL I .368-81; Degraasi ILLRP I.13-26) have also been frequently listed among the examples for multiple altars in Central Italy. I choose not to cite them as explicit examples of altars since it is not clear they were used for such purposes and they are of a pyramid shape, a form uncommon in Italic altars. Coarelli (2000:200) states that these cippi were found on the site of an ancient sacred locus, with votive deposits from 350-200 B.C.E.. See Harvey (2006:117-137) and Di Luca (2004).

altars used the Roman foot as a mode of measurement. More likely, it seems as though the original altars VIII and XIII used the shorter Italic foot (about 27 cm) (Castagnoli 1975:90). It should be noted that the height of the oldest altar, XIII, precisely 3 Italic feet, matches exactly the height of the podium of the second, 6th century temple at S. Omobono (Castagnoli 1993:209).

Phases of Construction

Considered a later phase of the building program that began with altar XIII, a pair of adjoining altars, VIII and IX, which have the same orientation as the first altar, was constructed a short distance south of altar XIII (Castagnoli 1975) (Figure 26). In form, dimension, and detail, the first, sixth-century versions of altars XIII and VIII seem to correspond closely to each other architecturally while the contemporary altar IX seems to be a more elaborate variation. The design of the slightly later altar VIII echoes that of the first altar, altar XIII. Each altar rises on its own individual platform and its inverted echinus rests directly on the platform without any intermediary molding. Altar IX, which at a later phase is made to share a platform with altars X-XII, has a more ornate profile: the altar rises from platform to echinus through a half-round molding, plinth, and small torus. The entrance at the front of the altar accommodates this increase in height with the addition of two steps leading up to the plinth level. Altar IX was constructed above an older altar.³³ This so-called “archaic” altar has the same orientation as the later altars, has traces of red paint on its surface, but was made from more common materials which were

³³ This altar has parallels in form to those at S.Omobono sanctuary in Rome; see, Castagnoli (1975:126). The significance of this placement will be discussed in a later chapter.

later reused (along with a beaten earth surface) for the foundations of altar IX (Castagnoli 1975:122) (Figure 27). Perhaps altars XIII and VIII should be linked as well to this older, “archaic” altar, suggesting that the early sixth-century three-altar complex respects or amplifies in some specific way an earlier ritual function of the site (Castagnoli 1975:145) (See Chapter 6). However, this “archaic” altar is at such a level lower than altars XIII, VIII, and IX that this hypothesis remains purely speculative. But whatever the precise relationship between altars XIII, VIII, and IX and the earlier archaic altar may have been, it is clear that all subsequent altar construction at the sanctuary seems to respect and reinforce the importance of this earliest altar in architecture, in orientation, and in the concentration of votive deposits around the site of the archaic altar, even in subsequent periods.

In the next phase of construction, around 450 B.C.E., a line of five more altars (I, II, III, IV, and V) was added, similar in dimension to the earlier three altars but at a slightly different orientation. These later altars, related in design, display new developments in style as well as recall the form of the earlier structures. For example, the curved bases of altars I, III, and V all recall that of altar VIII. Altars I and II have projecting fillets directly above their plinths instead of a torus like that found on altar IX. Closest to the sixth-century altars and the last built in this sequence, altar V rests, most conservatively, directly on its platform, in the manner of altars VIII and XIII (Castagnoli 1975). A study of the platforms and the joins between the altars of this group establishes a chronology of construction: altar IV as the first of the group, then III, then altars II and I, and finally altar V (Castagnoli 1975:105).

After the second half of the fifth century but before the end of the fourth century B.C.E., two additional altars were added (VI and VII), sharing a platform. These altars return to the orientation of the earliest altars (XIII, VIII, IX, and the “archaic” altar below IX), altar VI meeting altar V at an angle of 4.2° (Figure 28) (See Chapter 5). Altars VI and VII are similar in form – each has two steps and decorative moldings on its echinus base (Shoe 1965: 101). The inclusion of a shared platform between altars VI and VII imposes some sort of regularization onto the complex as a whole, connecting the seven altars on the east side of the complex (I-VII) by means of an extended platform sequence.

And finally, at the end of the fourth century B.C.E., coinciding with the reconfiguration of the seventh-century tumulus into the *heroon*, three more altars were inserted between altar IX and altar XIII, all on a single platform and sharing the orientation of the earlier altars. Altars X, XI, and XII are similar in form, each having two steps in the center and each possessing substantially curved bases with elaborate molding. Altar X has a decorative molding where the plinth meets the platform and an elaborate echinus resting on a small torus. Altars XI and XII, considerably larger than altar X and identical to each other in form, are perfectly aligned and recall the style of altar VII, with an elaborate crown molding and echinus. Also in this phase, the original altar IX was reconstructed and perhaps altar XIII was abandoned.

Recent excavations in the area, to the north of the row of altars, have revealed what might be a fourteenth altar (and perhaps also a fifteenth altar) (Panella 2005) (Figure 29). The proposed “14th altar,” although not in line with the row of the other thirteen altars, can now be said to have the same orientation as the original three altars (72°); the in situ fragments of this structure may be the left *antae* of a U-Shaped altar. The less likely “15th

altar” is at a markedly different orientation from that of any of the other altars in the sanctuary (the axes of the structure’s remaining fragments are turned 36.1 ° from the axes of the original three altars, altars VIII, IX, and XIII) and in form presents almost no discernible resemblance to the Lavinian U-shaped altars (Figure 30). These two recently excavated structures need to be investigated in greater detail.

In the 2nd century B.C.E., the city of Lavinium, along with the cult sties, was abandoned and the row of altars ritually buried. The remains of some residential buildings attest to the reoccupation of the city center in the Imperial period but the presence of tombs from the 2nd-3rd century C.E. not very far from the site of the thirteen altars suggests that the sanctuary was no longer in use at this time (Castagnoli 1975:4). In the Imperial period, epigraphic evidence attests to continuing official Roman participation in Lavinian cults; for example, one such inscription records a visit of Marcus Aurelius to Lavinium, probably in relation to the sacrifice to the Penates (Castagnoli 1981:162). And Latin authors from the early Empire attest that magistrates would travel to Lavinium once a year at the start of their terms to make sacrifices to Vesta and to the Penates and to celebrate the renewal of the treaty between Rome and Lavinium of 338 B.C.E. (Livy 8.11.15; and for the sacrifices at Lavinium in the time of Romulus, see Livy 1.14.2; Plutarch *Rom* 23; Dionysius of Halicarnassus 2.52.3).³⁴ Perhaps the earliest literary record of sacrifice at Lavinium might be found in a passage in Cato (*Origines* 1.188); here, the author states that the oxen that should have been

³⁴ It is unclear whether or not the ceremony of renewal of the treaty coincided with the annual sacrifices to the Penates. No ancient source links the two events. Wissowa (1912:518) and Alfoldi (1965:262-3) link the two ceremonies, assuming that it is unlikely that the Roman magistrates would travel to Lavinium twice a year and argue that both ceremonies were more likely held at the same time. Dubourdieu (1989:360-361) is uncertain as to whether or not these were in fact two separate ceremonies. See Polo (2011:104-108), Scheid (1981:168-171); Dubourdieu (1989:339-361) for more information.

sacrificed at Lavinium escaped into the forest. A later author, Valerius Maximus (I.6.7), also alludes to the animals escaping into the forest, stating that the chickens, the animals intended to be sacrificed at Lavinium, had fled.

Ardea

The small city of ancient Ardea, situated about 30 kilometers south of Rome, close to the Tyrrhenian Sea, is thought to have been a busy port throughout antiquity. A principal urban center in the coastal basin of the Alban Hills, it interacted with Etruria, Greece, Gaul, Asia Minor, Magna Graecia, Spain, and Carthage as well with its Latin neighbors (Di Mario 2007). The continuing importance of the port is demonstrated by the finds of amphorae that span the period from the 4th century B.C.E. to the 4th century C.E.. Ardea's interaction with both neighboring towns and cultures farther afield is attested by the objects excavated throughout the site: numerous objects manufactured at Caere have been found at Ardea (for example, a bronze curse tablet that names Vel Uthras, a man also attested to on materials from Caere itself); a Punic inscription (with the name Magone), other amphora from Punic Sicily, and inscriptions in Punic letters on lids of two vases of Ardean production, all dating to the 4th-3rd century B.C.E., were also found (Di Mario 2007:17-18).

Ancient authors stress the importance of the location of Ardea as a port city. In the first Roman-Carthaginian treaty in 508 B.C.E., Polybius reports (III.24) that "Carthage would not harm the people of Ardea, Antium, Laurentium, Circeii, and Terracina, nor any other of the Latins who are not subject." Livy (1.57) also emphasizes the fact that Ardea is in an optimal geographic position, defended by high ground, placed

on important road networks and close to the sea. Ardea is linked to other nearby port cities: it's likely that the predecessors of the Via Severiana passed very close to Fosso dell'Incastro between Ardea and Lavinium, linking Ardea to Ostia, Lavinium, and to Anzio. Fenelli (2003:195 n.32) attests that there were paving stones in many places along the coast, even more than are known along the coastal route of the Via Severiana and ancient authors (Virgil *Aeneid* VI.770; Ovid *Met.* 15.723-728) attest to such a coastal route between Anzio and Pomezia, from a place called Castrum Inui to a sanctuary dedicated to Aphrodite (the Aphrodisium) (Figure 31).

The fortified inner urban core of ancient Ardea is a complex of topographically distinct areas (Figure 32): the acropolis, at the southernmost end of the city; to the north, the Civitavecchia which, in the extended sense of the toponym, consists of the areas of the Casarinaccio valley, the flat plateau of the Civitavecchia proper rising to the north of the valley, and the tufa plain, the Colle della Noce, rising to the east of the valley. An imposing embankment, bordering the Civitavecchia on the north side, separates the city proper from the adjacent extra-urban plain, Casalazzara, in neighboring Aprilia. During the Iron Age, habitation at Ardea is characterized by a single cluster of huts in a fortified settlement; contemporary Lavinium, in contrast, consisted of two separately fortified settlements (Fenelli 2003:191).³⁵ Surrounding the urban center are valleys, hills, streams, and water-filled ditches ("fossi"). The ancient city of Ardea itself is situated between two water sources: Fosso della Mola and Fosso dell'Acquabona (which flows seaward a little to the south of Ardea into Fosso del'Incastro and now, in modern times, into Fosso Grande). These water courses would have offered good defenses and communications

³⁵ The settlement closest to the sea was likely abandoned at Lavinium in the later archaic period.

both inland and to the sea, providing the ancient community with opportunities for commerce and other kinds of social interaction as well as support for agricultural activities.

Archaeology attests to at least four primary sanctuaries at Ardea (three urban and one extraurban) and literary sources enumerate the presence of a variety of different deities at Ardea.³⁶ Monumental religious structures are found on the Acropolis with its 5th century B.C.E. temple (excavated in 1930) in Tuscan style, with three cellae and a double pronaos; at Colle della Noce, a 5th century B.C.E. Tuscan temple with three cellae; at Casarinaccio, with a poorly preserved 5th century B.C.E. urban temple (Ceccarelli 2008); and beyond the city walls at Fosso dell’Incastro, discussed extensively

³⁶ Aphrodisium, *Venus*: Strabo (V.3.5C) mentions two federal sanctuaries to Venus, one in Lavinium and one in the territory of Ardea. Pliny (NH III.56) and Pomponio Mela (II.4.71) also comment on a sanctuary to Venus to the south of Ardea, situated between Ardea and Anzio. *Inuo (and Pan and Faunus)*: The god Inuus is connected to Ardea by many ancient authors (Virgil, *Aen.* VI.773, Ovid *Met.* 15.725, Martial IV.60.1, Statius *Silv.* VIII.356ff.). Some authors link the god Inuus to Pan and Faunus (Servius *Ad Aen.* VI.775). Macrobius (*Sat.* 22, 2-7) identifies Inuus with the god Sol Indignes. The authors locate the cult of Inuus somewhere along the coast between Ardea and Lavinium but the exact location is unknown. *Castor and Pollux*: Servius (*Ad Aen.* I.44) attests to a temple to Castor and Pollux that held a number of representations of Capaneo, the mythological Greek hero. The cult of Castor and Pollux is originally Greek and the presence of these gods in Ardea underscores the city’s role in a large-scale Mediterranean cultural network. Excavations have linked the temple in Colle delle Noce in Civitavecchia to Castor and Pollux. The temple dates from the early 5th century B.C.E. to the late Republican period. *Natio*: According to Cicero (*de Nat. Deor.* III.47), the cult of Natio, goddess of childbirth, was worshipped in a number of shrines, the sites of sacrifices during ritual processions, scattered throughout the territory of Ardea. These shrines have not been placed topographically within the Ardean landscape but Cicero does stress that they were located in fields. *Pilumno*: Virgil (*Aen.* IX.3) mentions a sacred wood dedicated to Pilumno, a goddess also linked to the ritual of childbirth, in the area of Ardea and connected to Turnus. In addition, an inscription testifying to the presence of Pilumno at Lavinium has been found (CIL XIV. 2065). *Juno*: Pliny (NH XXXV.115), Livy (XXII.1.90), and Virgil (VII.415) mention a temple to Juno Regina in Ardea. Livy reports sacrifices to Juno Regina in the Forum at Ardea in the area known in modern scholarship as Civitavecchia. But excavations have linked the temple on the Acropolis to Juno Regina. This temple dates from the late 6th-5th century B.C.E. to the 1st century B.C.E.; *Hercules*: Livy (XXXII.9.2) also mentions a sanctuary to Hercules. Some attribute the temple in Civitavecchia to Hercules based on an inscription found there (CIL I. 2889); *Other Deities*: Pliny (NH XXXV.17) also mentions the existence of other temples or shrines to unnamed cults. These shrines, according to Pliny, held marvelous paintings. Nothing more is known about their locations.

below.³⁷ Other sanctuaries in the area have been identified on the basis of votive terracottas: two extra-urban sanctuaries (at Campo del Fico and Banditella) and six rural sanctuaries (Pescarella, Valle Olivia, Campoleone, Santa Paloma, Valle Caia, and Tor S. Lorenzo) (Melis and Quilici Gigli 1982:2-26).

The Sanctuary at Fosso dell’Incastro: Temple A

Situated along the Via Littoriana, between Ostia and Anzio, 380 meters from the nearby sea, sits the Ardean sanctuary of Fosso dell’Incastro (divided into “Area A” and “Area B”). The sacred complex at Fosso dell’Incastro was sited near the mouth of the waterway, between a lagoon and the sea, in a location subject to flooding. Entrance to the sanctuary is through a gate in the fortified walls (constructed in *opus quadrata* tufa with a width of 5.6m and a length of 14.5m), which would have been crowned by an arch and flanked by piers of about 1.1m- 1.7m thick (thus reducing the width of the entrance to around 3.6m). From this entrance, segments of a cobblestone road have been found. The fortification wall, constructed in *opus quadratum* (1.85m thick), was most likely built in the 4th century B.C.E. (Figure 33). Perhaps the construction of this wall coincides with the increasing presence of foreign peoples in the vicinity of Ardea that began in the 4th century (or even as early as the 5th century).³⁸

Area A of Fosso dell’Incastro can be reached through the gate in the fortified wall. A path composed of packed and pressed tufa fragments leads to a paved area

³⁷ All of these 5th century B.C.E. temples have an orientation of NE-SW.

³⁸ For example, the attacks of the Volsci in the 5th century B.C.E., the Gallic invasion of the Colli Albani in the mid 4th century, the incursion of the Volsci at Anzio in 340 B.C.E., or the Sanniti war in the late 4th century B.C.E..

surrounding two Republican temples (“A” with its own altar and “B”), two monumental altars (in modern scholarship both associated with Temple B), and a later, Imperial shrine to Asclepius (Figure 34). Temple A was first constructed in the second half of the 3rd century B.C.E.. After the temple’s initial phase, the temple was reconstructed in the 2nd century B.C.E.³⁹ and again at the end of the Republic or beginning of the Imperial period.⁴⁰ Temple A in its initial phase was oriented NE-SW, was composed of a single cella *in antis* (3.6m wide, 5.44m long, corresponding to 12 x 18 Roman feet), hypothetically reconstructed as having two columns at its front (Figure 35).⁴¹ There are signs of hinges for a door in the front of the cella. The back wall of the temple directly abutted the *temenos* wall, which itself was most likely constructed in the 2nd-1st century B.C.E.. The walls of the podium rest directly on a row of tufa foundation blocks; the back podium, however, rests on a terrain composed of various mixed pieces of tufa.

Inside the podium, placed roughly in the center, is a vertically-elongated tufa block with the letter “V” inscribed on its upper surface (Figure 36). This structure recalls the form of monumental stelae (for example near the Temple of Nettuno at Paestum, or the “argoi lithoi” at Metaponto with the names of a divinity inscribed on them) (Di Mario 2007:74; Torelli 1988:62). Perhaps even a parallel can also be drawn with the cippus in the cella of Temple A at S. Omobono (which is under current excavation). The material excavated from the area at the block’s foundation within Temple A at Ardea (such as fragments of terracotta architectonic decoration, a painted relief of two horses, a section

³⁹ Documented by architectonic decoration that parallels those from the front of Via di San Gregorio on the Celian.

⁴⁰ This final phase attested to by antefixes, open-worked cornices, and blocks of restoration.

⁴¹ The superior cornice of Temple A at Ardea recalls that of Temple C at Largo Argentina.

of a decorative frieze with depictions of horses and horsemen) dates to the last decades of the 6th century B.C.E. and therefore reveals the most ancient phase of the site. Also, near this vertical block, at the same level as its base, an opening for a hearth was discovered which contained fragments of bucchero (the type found in Cerveteri, southern Etruria, and in Rome, and dated to the first quarter of the 6th century B.C.E.). These finds serve to tie the hearth to the production of a local bucchero.

In the 2nd century B.C.E., the length of the podium was shortened along its inner side. This alteration perhaps led to a change in the orientation of the temple slightly to the southwest and a consequential repositioning of the temple's stairs slightly to the northeast (i.e., opposite to the direction of the shift of the podium). In this second-century phase, a portico of four Tuscan peperino columns was constructed along the southern side of the podium. Immediately before the east side of this portico, a well was found with a circular opening. This structure contained pottery dating to the mid 2nd century C.E. and thus provides a possible *terminus ante quem* for the refashioning of the well and for the duration of its use.

Before the five steps of the temple is a tufa-paved rectangular area (with a width of 5.75m and length between 3 and 3.12 m), delimited by two tufa plinths (each 14cm high) which run alongside the stairs. The paving of this area occurred in the same phase as the re-orientation of the podium (in the 2nd century B.C.E.). On this platform rise a peperino altar, a travertine monolithic well almost on the edge of the paved area (with evidence of sacral use), and a square tufa block with traces of plastering which could have been a base for a donarium (Figure 37) (See Chapter 3). The lower part of the altar (length 88.5cm, width 101cm, and height 47.5 cm) is still *in situ* while its upper part

(height around 50cm), perhaps removed intentionally, sits upended between the base of the altar and the sacred well (Figure 38). The altar is oriented with its side parallel to the stairs of the temple, at an azimuthal direction of 46.1° (See Chapter 5). The lower part of the altar has a molding composed of a high plinth, a beak, an echinus and a reversed s-curve (“gola”) (this part in particular is of an archaic type). The upper part has a more complex profile composed of a high abacus, a border (“listello”), a torus of different proportions and a wide reversed s-curve (“gola rovescia”) (Di Mario 2007: 70). The type of the altar finds parallels with the altar of Verminus (see below for discussion of altar of Temple C at Largo Argentina) and also with the altar found on the Palatine, dated to 124 B.C.E.. Both of these parallel types are hourglass shaped and date to the second century B.C.E..

The perfectly square well, with travertine exterior (its sides 93cm), with a cylindrical interior, is on direct axis with the median of the temple; its circular opening has traces of bronze clamps with which to attach the cover. The excavations of its interior produced only a little material which pertains to the period of abandonment of the area in the 2nd century C.E. (some animal bones were uncovered as well) (Di Mario 2007:73). It has been suggested that this well might be a type of monumental *thesaurus* to collect offerings of money (compare, for example, the well at Sora, and the well in front of Temple B at Largo Argentina) (Di Mario 2007:72-73; Scheid 1994) (See Chapter 3). The well rests on a stratum of soil which is composed of a large quantity of carbon, fragments of middle-Republic ceramics, pieces of roof tile, and a few animal bones (from young animals) with traces of butchering and of fire.

The greatest part of the architectural decoration (dating to the 2nd century B.C.E.) was found at the base of the stairs of Temple A (whose lower steps were already partly buried). One can surmise that perhaps this decoration was intentionally removed and deposited at the base of the stairs (a similar burying of architectonic sacred decoration can be seen at Largo Argentina, S. Omobono, and at Satricum. Cf. Bouma 1996). In this same stratum, a quantity (not of such considerable size) of animal bones was discovered.⁴² The greater part of the bones belongs to cattle aged 15-30 months and shows traces of butchering. Perhaps these are remains from a sacrifice, or from a ritual having to do with the destruction of the sacred structure.

The Sanctuary at Fosso dell'Incastro: Temple B

Within the same area, Temple B stands, at a higher position than the paved area in its front, on a wide foundation which rises above the surrounding terrain (Figure 39). The temple, oriented WSW-ENE (see Chapter 5 for a discussion of the orientations of the altars belonging to Temple B), is about 15m wide and is approached by a staircase of five stairs. The southern side of the podium runs along a rectangular cistern built in *opus quadratum* tufa, which has an opening of 3m in width and a length of about 30m, with two wells for ventilation at its top, 1.1m in diameter each. The temple shows numerous phases of use. The first two phases, clearly sacred in character, are represented by two superimposed pavements separated by 20cm of soil: the lower pavement is reddish tufa, the upper, tufa of a yellow color (and of a more solid and compact consistency). This

⁴² 40 bovine bones, 21 pig, 7 sheep or goat, 2 horse bones, 1 hircus goat, 1 tesudo, 1 dog, 1 bird (Di Mario 2007:73).

same lower paving is also found under the front piazza (a place identified, according to Varro, as a *delubrum*⁴³) on top of which the two, later peperino altars stand (dating to the 4th or 3rd century B.C.E. See below) (Di Mario 2007:78) (Figure 40). Material associated with this earlier paving (in red tufa) (such as terracotta architectonics, impasto ceramics, and bucchero nero) dates to the 6th century B.C.E. and attests to the earliest, archaic phase of the sanctuary.

Following this earliest phase, at the start of the 5th century B.C.E., the temple was reconfigured and grew in dimensions; this phase is documented by changes in decorative style and material craftsmanship. The material finds dating to the time period of this phase clearly show interaction between Ardea and the Etruscan, Magna Graecia, and Campanian cultures (for example, ceramics such as a gray bucchero cup with a short graffito inscription, architectonic terracottas, frontal simas, and open-worked cornices). A following, intermediary phase dating to the second half of the 5th century is recorded by architectonic fragments and pieces of ceramics (for example, a piece of vernice nera with a Greek inscription). The next major, monumental phase occurred in the 4th-3rd centuries B.C.E., corresponding to the completion of the fortified wall around the whole of Area A. Fragments of architectonic terracottas similar to those of previous phases were found. At this time, the temple was repaved and the piazza in front of the temple on which two peperino altars were constructed was refashioned and paved.

A votive deposit, with material dating from the 4th-3rd century, was found immediately to the south of the entrance gate with fragments of ceramics as well as

⁴³ Macrobius *Sat.* III.4.2; Serv. *Aen.* II.225. Castagnoli 1984:4 calls a *delubrum* a paved area directly connected to a temple.

material from the early construction of Temple B (Di Mario 2007: 63). The finds suggest that the roof of Temple B might have been decorated with Silenian antefixes alternating with other representations of Juno Sospita. An aspect of the molding on an additional monumental altar (one not associated with Temple B or Temple A), not found in its original position, but found near a structure related to the port (interpreted as a dock or a pier), situated at the extreme eastern edge of the so called “area B,” particularly documents the 4th century phases of the sanctuary as a whole. This tufa altar, with an angular cornerstone, has a foundation molding crowned with an echinus and a beak (“becco di civetta”), very similar in style to altar X at Lavinium; while the cornerstone itself has a profile similar to those seen in altars I and II at Lavinium (Di Mario 2007: 80-81).

The two peperino altars in the center of the piazza are of different forms (one U-shaped, in antis measuring a total length of 4.2m, a width of 2.28m on the left anta, 1.23m on the right anta, and the space between the two antae measures 1.78m wide; the other rectangular with a width of 1.85m and a length of 3.2m) and neither is aligned with the façade of Temple B (Figure 41). The U-shaped altar is oriented to an azimuth of 122.7°; the rectangular altar is oriented to an azimuth of 231.9°. (Di Mario: 81; the orientations of the altars are calculated by the author of this dissertation. See Chapter 5) (Figure 42). The two altars, though of different form, have similar moldings: a high cornice at their bases, a beak, a border (“listello”) and an echinus. The profile of the altars, in an archaic character, recalls that of altar XII at Lavinium, as well as those of the altars at S. Omobono. The U-shaped altar, whose upper part (no longer present in full due to use) can be reconstructed as having a continuous profile, from its top to its bottom,

reaching 85cm, characterized by two types of contraposto curves. Each altar rests directly on its own tufa platform, its sides delimited and defined with respect to the surrounding piazza (Figure 43). To date these altars, Di Mario has relied on the fact that in the 4th century peperino was mostly used for inscriptions, decorative elements, altars, and sarcophagi, and that the nearby quarry of peperino in Marino, situated in the Albans hills, was in use by the start of the 3rd century B.C.E. and could have been the likely source for the material of these altars (Di Mario 2007:84-85).

In the Imperial period, a shrine to Asclepius (identified by a marble statue dating to the 2nd century C.E.), oriented in roughly the same direction as Temple B, was constructed over the earlier, Republican cistern to the southeast of Temple B (Figure 44). The first phase of this structure, constructed in *opus reticulatum*, dates from the end of the 1st century B.C.E. to the 1st century C.E. (with architectonic decoration of palmettes and other geometric motifs that finds parallels, for example, at the Capitolium of Cosa and at Lanuvium) (Di Mario 2007:88ff). In the following phase of the shrine, in the 1st century C.E., the architectonic decoration is elaborated (for example, a relief of a Scythian watering a griffin. Such a depiction has also been found at Velletri and Luni, dating to the first quarter of the 1st century C.E.). A travertine altar (measuring 95-70cm, height 32cm) stands directly in front of the shrine. The construction of the shrine most likely coincided with the abandonment of Temple B, and was contemporaneous with the Imperial *tabernae* constructed to the north of Area A in Area B. Roughly contemporary with this later phase of the shrine of Asclepius (2nd- 3rd century C.E.), the area surrounding Temple A seemingly changes function from that of a sacred space to an area characterized by *tabernae* and service buildings.

Ostia

In Ostia, in the so-called Sacred Area of the Republican Temples, three temples of various sizes and of different orientations and a group of four altars were constructed over two centuries, from the 3rd -1st century B.C.E. (Figure 45). This area, originally outside the walls of the *colonia*⁴⁴ and later incorporated within it, is thought to be the oldest cult area in the city (Rieger 2004:225). Originally, the area was bounded by a massive *temenos* wall constructed out of large blocks of tufa; the wall was later refashioned in *opus reticulatum* during the Augustan period, and in brick during the Flavian period (Zevi 1970:102). While outside the walls, the presence of wells within the Sacred Area of the Republican Temples would have provided foreigners and travelers with a place to stop for drinkable water without officially entering the city (Ricciardi 1996 on water and wells, and see below). The early sanctuary was bounded by the Via della Foce and by the Via degli Horrea Epagathiana (forming the eastern-most *pomerium*); both streets are part of an established path around the *castrum*. The existence (attested archaeologically) is known of a third street to the north, passing in front of the Tetrastyle temple; this street, an extension of the via Pomeriale Esterna of the *castrum* leading to the sea, was originally paved with large blocks of tufa and would have also bounded the sanctuary in its early phases (Becatti 1954:106; Mar 1990:145; Pensabene 2007; Ricciardi 1996 111-112) (See Chapter 2).

⁴⁴ It is thought that the *castrum* was not founded until the 4th century; Zevi (1996); Mar (1990:141).

The sanctuary stood at the intersection of two major trade routes: Via Salaria Sabina and Via Salaria Albana (Figure 46).⁴⁵ The location of a temple to Hercules close to a salt trade route corresponds to the placement of the late Republican temple of Hercules at Alba Fucens. At this site, an Imperial inscription from a local *cultores* to *Hercules Salarius* explicitly links Hercules, described as *salarius*, to the salt trade (Torelli 1999:35). Even the Ara Maxima in the Forum Boarium⁴⁶ in Rome is thought to be on a branch of the *Salinae* from the Ostian saltworks (Algreen-Ussing 1985: 65ff; Torelli 1993:104ff; 1999:36). The Hercules Temple at Ostia therefore should also be considered as intimately linked to the production and trade of salt (a product that would most definitely come in handy for the curing and the pickling of meat during a sacrifice) (Aelian *Nat Anim.* V 17).

The triangular space of the Ostian sanctuary consists of the traditionally-named Temple of the Round Altar, the Temple of Hercules, the Tetrastyle Temple, and a group of four altars (Figure 47). The exact dates for the foundations of each temple are unknown and debated (most think that the Temple of the Round Altar is the oldest and the Temple of Hercules the most recent);⁴⁷ but the complex as a whole took its basic form

⁴⁵ The placement of this sanctuary close to the port, on major trade routes, serves to link this sanctuary to those at Lavinium and Ardea.

⁴⁶ See summary of S. Omobono in this chapter for the importance of the saltworks along the Tiber and its connection to the sanctuary in the Forum Boarium.

⁴⁷ As will be discussed again in Chapter 2 these are the various reconstructed dating schema for the sanctuary. Mar: Four altars, Temple of the Round Altar, Tetrastyle Temple, Temple of Hercules; Rieger: Four altars, Tetrastyle Temple, Temple of the Round Altar (these two are contemporary), Temple of Hercules; Zevi: Four Altars, Temple of Round Altar, Tetrastyle Temple and Temple of Hercules are roughly contemporary; Pensabene: Four Altars, Temple of the Round Altar, Tetrastyle Temple, Temple to Hercules; Becatti: four altars, Temple of Hercules, Tetrastyle Temple, Temple of the Round Altar.

at the latest between the 2nd and 1st century B.C.E..⁴⁸ The dating of the temples is subject to question largely due to the absence of publications on the stratigraphy from the excavations in 1938-1942. The 1970 excavations around the Temple of the Round Altar have led to some published stratigraphic details, but these only relate to the first phase of the Temple of the Round Altar (Zevi 1970). Scholars have relied on architectonic characteristics to date the area – for example, the profile of molding on the group of four altars or the construction techniques of the temples (Mar 1990:142).

This sanctuary was and can still be marshy. It is the first sacred area in Ostia which hosts a spring (seven other water sources in Ostia existed in the Republican period) (Ricciardi 1996: 72). Water from this source may have been channeled throughout the sanctuary (even today, this area is the first to flood after a rain storm – not due to bad drainage but rather to a localized high ground water level. The presence of water in this sanctuary is testified to by an inscription to the cult of *Acqua Salvia* (on the altar discussed above), most likely a spring or a source of ground water in this area (Ricciardi 1996:74, note 9 discusses the arguments concerning the *Aqua Salvia* inscription CIL XIV 4280). About 5.5 m in front of the temple of Hercules is a circular tufa well of tufa that dates to around the end of the 2nd century or beginning of the first century B.C.E.; the travertine foundations of the well's head are at the level of the foundation of the temple of Hercules (Figure 67). Entering the sanctuary from the *Via della Foce*, and proceeding toward the altar of Hercules, the altar for the Tetrastyle Temple, or the group of four altars on the northern area, a ritual participant would pass this well. There was also a well

⁴⁸ The dating and construction sequence that dissertation uses follows the consensus in published modern scholarship and is confirmed through conversations with Prof. Maris Arnhold, Universität Bonn.

to the left side of the Temple of Hercules that did not have a proper superstructure but in antiquity was marked by a block of travertine (perhaps this well was abandoned when the level of the area was raised in the Imperial period). In addition, two cisterns from the Flavian and Trajanic period also exploited the area's local water source.

Hall of Four Altars

Dated to the mid-late 3rd century B.C.E. by their molding, the group of four altars in the Sacred Area is the oldest in the sanctuary (Mar 1990:142 qtding Shoe 1965:157) (Figure 48). These small, squat rectangular (almost square) (129 x 102.5 x 57.5cm), peperino altars were originally accessible from all sides and not bounded by their own *temenos* wall. No temple is associated with these altars. The molding of the altars dates to early in the period of use of the cyma reversa and the presence of the half round at the base of the altars closely parallels the molding found on Etruscan monuments (for example, on the tombs at Paestum, cited by Shoe 1965: 157,158,159). These altars sat on a paved tufa surface (Figure 49). They appear to have been constructed as a single project; they are not all in one row but rather 3 are aligned and the fourth is placed at their same orientation at a short distance directly to their south.⁴⁹ In the 2nd century C.E., these altars were enclosed by walls (lined with benches) and a shrine was built to the south of the row of altars (for details about the changes to this space over the five centuries of construction, see Chapter 2).⁵⁰

⁴⁹ It is of course possible that this 4th altar was a slightly later construction phase of this area.

⁵⁰ Meiggs has suggested, based on five various inscriptions dating to the end of the 2nd or early 3rd century C.E, that these four altars were under the authority of the *sodale arulenses*, in a manner similar to the better attested relation between the cult of Hercules and the *sodales Herculani* (evidenced by three

Temple of the Round Altar

The Temple of the Round Altar (so-called due to the Trajanic decorated, round, marble, altar associated with an Imperial phase of the temple) was most likely the earliest temple in the sanctuary (Figure 50). The temple was constructed at the end of the 3rd or beginning of the 2nd century B.C.E., dated by the construction techniques of the blocks of its podium (compared to the construction techniques on contemporary buildings within the *castrum*). Its podium (7.75x5.76m; 1.2m high), faced with stucco, was constructed not of concrete (as is the case with the other temples in the area) but of blocks of tufa. At this early stage, the temple consisted of a small cella and a tetrastyle pronaos. Hardly any architectonic decoration remains for this phase of the temple except for a crown molding of the podium with a reverse s-curve (“gola rovescia”) profile (Pensabene 2007:56-59). Excavations from the northern part of the pronaos reveal a large quantity of black glazed ceramics and amphorae which date to the earliest phase of this temple.⁵¹

There was no frontal access to this temple which was entered instead through a staircase composed of four steps on the right side of the pronaos (each step 1.4m in width) (Figure 51). The irregularity of these stairs and the rough way in which the final step chiseled down the surface of the cornice of the podium suggest that this right-hand staircase was constructed in the second phase of the temple (Pensabene 2007:56). There

inscriptions) (Coarelli 1994:36; Meiggs 1973: 339-340; Rieger 2004:231). Meiggs notes that in four of these inscriptions (and possibly in the fifth) the holders of the *sodales arulenses* priesthood also held a priesthood in the cult of Vulcan (1973:340). During this period, the priesthood of the *sodales arulenses* may have been a normal stage in a public career, a stage that most likely was not instituted until after the mid 2nd century C.E. According to Momigliano (1966:618), the *sodales arulenses* were a group designed to recall a vanished town called Arula, and Meiggs asserts that Arula was the name of a pre-religious center at the mouth of the Tiber (Momigliano following Carcopino 1919: 49-59; Meiggs 1973:340).

⁵¹ For example, a handle of a Rhodian amphora was found with a stamp in Greek that dates to the first decades of the 2nd century B.C.E. (Zevi 1970).

may have also been originally a staircase on the left side of the pronaos that would have been the original mode of access to this temple (Pensabene 2007: 56; Zevi 1970:102). This left-hand entrance would grant direct access from Via della Foce and not from within the sanctuary's walls (see Chapter 2).

The most ancient structure evident in the area in front of the temple is a small platform, most likely of a type designed to hold a rectangular altar, placed at a short distance from the temple. This platform, constructed of two rows of blocks of tufa, on a pavement of *cacciopesto*, is on axis with the temple and perpendicular to its façade. This structure and the temple are thought to have been built as a single construction project (attested by the unworked blocks where the platform meets the façade of the temple) (Zevi 1970:103). The placement of this altar would not have left room between it and the original pronaos for a frontal staircase (hence the staircases from the sides). When this altar was removed, sometime in the last Republican phase of the temple, a new, cylindrical, peperino, stuccoed altar (78cm in diameter) was constructed in its place, though not perfectly central (Pensabene 2007:56; Zevi 1970:105) (Figure 52). Most likely in the Augustan period, this altar was refashioned, the platform enclosed by three travertine blocks with Greek inscriptions,⁵² the blocks thought to originally have come from statue bases (reporting the name of the person who the statue represents, specifying briefly the activities of that person, and relating the name of the sculptor) (Figure 53).

⁵²1. ΠΛΑΤΩΝ Ο ΤΗΣ ΑΡΧΑΙΑΣ/ΚΩΜΩΔΙΑΣ ΠΟΙΗΤΗΣ/ ΛΥΣΙΚΛΗΣ ΕΠΟΙΕΙ ; 2. ΑΝΤΙΣΘΕΝΗΣ ΦΙΑΟΣΟΦΟΣ/ ΦΥΡΟΜΑΧΟΣ ΕΠΟΙΕΙ; 3. ΧΑΡΙΤΗ ΘΕΜΙΣΤΕΥΟΥΣΑ/ ΕΝ ΔΕΛΦΟΙΣ/ ΦΡΑΔΜΝ ΑΡ ΓΕΙΟΣ ΕΠΟΙΕΙ. Phradmon and Phyromachos are known, significant masters in the Hellenistic period. Lysikles is largely unknown.

These reused blocks cannot have been placed later than the Augustan period (Zevi 1970:110).

In the beginning of the Imperial period, the area in front of the temple was refashioned, a tufa stylobate was constructed and a little porch with brick columns was placed 2.2m from the front of the temple running to the north (Figures 54, 50). In this phase, the cylindrical, peperino altar was destroyed (covered over by the frontal extension of the temple's podium) and a new platform was created for a marble altar off-axis with the original podium of the temple (for precise orientations see Chapter 2). In the Flavian period the ground level was raised 1meter, covering this off-axis marble altar. At this point, the temple expanded further, the façade of the temple was replastered, the sides of the podium and the front of the temple were widened, and a new rectangular altar was constructed in the space in front of the pronaos over the earlier rectangular base (Figure 55) (See Chapter 2 for an in-depth discussion of the significance of these shifts in orientation). In this phase, the temple was reconstructed; it became *disytle in antis*, the cella walls were constructed in brick, the exterior porch was destroyed, and the back wall of the temple was replaced by a brick wall (which signaled a new phase of the sanctuary's *temenos*). Also in this period, an edifice with hydraulic and heating systems perhaps used for ritual activity was attached to the temple.⁵³

⁵³ This and the other Imperial edifices throughout the sanctuary may have housed the *cultores Herculi*; but these economic and domestic buildings within the sanctuary do not seem to have negated the sacred function of the area.

Tetrastyle Temple

The subsequent two temple constructions in the area (the Tetrastyle Temple and the Temple of Hercules) are roughly contemporary,⁵⁴ both dating to the end of the second to early 1st centuries B.C.E.. However, it seems the consensus that certain architectural and construction techniques suggest the Tetrastyle Temple is slightly earlier, dating to end of the 2nd or beginning of the 1st century B.C.E.. The Tetrastyle Temple (Figure 56) is similar in technique and dimension to the Temple of Hercules but the podium of the former is constructed in *opus quasi reticulatum* and not in *caementicium* as is the Temple of Hercules (Mar 1990:143); the molding of the Tetrastyle Temple has a slightly more archaic character than that of the Temple of Hercules; and a capital conserved from the Tetrastyle Temple is of a form common at the end of the 2nd century B.C.E. (the façade of the temple includes peperino Corinthian columns as does, for example, Temple B in Largo Argentina). Finally, an inscription of a municipal character on the right anta of the stairs of this temple, – [---] LEIUS L(UCI) F(ILIIUS) [---]ANUS, may refer to C. Apuleius Decianus, the tribune of the plebs in 99 B.C.E. (according to Coarelli 1994:37; also, see Bloch 1953:299 n.65, Cébeillac 1971: 91ff.).

As will be discussed in depth in Chapter 2, the Tetrastyle Temple is oriented to 150°, with respect to the original tufa-paved street (that connected with the *via pomeriale esterna* to the north of the *castrum*), which passed in front of the temple over marshy ground (Figure 57). The temple's altar is placed directly on the paved street itself. This temple is thought to be dedicated to Asclepius, as inferred from the torso of a bearded god found on its steps. Zevi dates this sculpture to the Sullan period but it could also

⁵⁴ Gismondi assigns it the same chronology as that of the Temple of Hercules (100-80 B.C.E.).

perhaps date to as early as the end of the 2nd century B.C.E (Zevi 1976:60). At an extremely close distance to the stairs of the temple (70cm), are the foundations for a rectangular altar (Figure 58). The narrow space between the altar and the temple's stairs suggests that the ritual officiant may not have been facing out, with his back to the temple, but rather would have faced the façade of the temple, standing on the southern side of the altar in order to leave sufficient space for himself and for a large sacrificial animal.

In the Flavian period, with the reconstruction of the Temple of the Round Altar, the area was elevated by approximately ½ meter (Mar 1990:151) and there was a partial burying of the first steps of the podia of the Temple of Hercules and the Tetrastyle Temple. At this time, the altar of the Tetrastyle temple was also, as a result, buried. Along with the subsequent new paving, a new altar was constructed. This large, brick altar was oriented to 150°, like the altar of the Tetrastyle Temple and the group of four altars (Figure 59). According to Mar (1990:152) and Pensabene (2007:51), this altar replaces the buried altar of the Tetrastyle Temple and does not relate to the Temple of Hercules since the latter temple incorporated an altar on its pronaos. The problem, however, with such a hypothesis is that the late 3rd century C.E. altar dedicated to *deo Herculi invicto*⁵⁵ on the pronaos of the Temple of Hercules is of a much later date than the Flavian paving of this area, and thus we cannot assume that the Temple of Hercules was without an altar for two centuries (Figure 60) (Boin 2010). One has to raise the question of whether or not this new large altar could have served both temples in this new

⁵⁵ The full inscription reads: DEO INVICTO HERCULI HOSTILIUS ANTIPATER V. P. PRAEF. ANN. CURAT REI PUBLIC OST.

phase. However, in Republican central Italy, temples do not share altars. Other options include the possibility that there would have been some temporary altar for the Tetrastyle Temple, constructed over the placement of the earlier, buried altar and that the large brick altar was superimposed on the location of an earlier altar to Hercules (on site autopsy reveals at least two phases of construction for this brick altar in the same location); or that the group of four altars, after renovation in the 2nd century C.E., was somehow adapted for use in the cult of either the Tetrastyle Temple or of the Temple of Hercules (though again, these alternatives seem unlikely).

Temple of Hercules

The Temple of Hercules was constructed sometime between 100-80 B.C.E. (Figure 61).⁵⁶ Prostyle hexastyle, the temple is oriented 72°. Its construction overruns the ancient street to its north, which once had functioned as the thoroughfare leading to the harbor's mouth and with which the Tetrastyle Temple is aligned. Furthermore, the drain channel surrounding the podium of the Temple of Hercules directly intersects with the northwest corner of the podium of the Temple of the Round Altar (Pensabene 2007:67). The crown molding of the temple's podium (31x16m) is similar in form to that from the Temple of Veovis in Rome, which dates to 78 B.C.E. (Pensabene 2007:67). The podium was constructed in *caementicium*, paved with slabs of tufa (each 3rd or 4th slab of tufa sits vertically in the concrete). The walls of the cella (15.2m x 11.4m) were constructed in *opus quasi reticulatum*, reinforced at their edges by blocks of volcanic tufa. On the

⁵⁶ Dated by its masonry to the Sullan period. Rieger (2004:225-231); Mar (1990:141-143). In Ostia, in the very first years of the 1st century B.C.E. the use of *opus incertum* was abandoned. This helps to date the Temple of Hercules to after this period.

interior walls of the cella run travertine-covered benches above which was a row of Tuscan columns (with capitals and bases in tufa covered with painted stucco).⁵⁷ In plan and elevation, the temple corresponds closely with Temple D at Largo Argentina, dated most likely to the 2nd century B.C.E. (see below). The pronaos of the temple was articulated with a row of travertine Corinthian columns in a style that belongs to the period of the second triumvirate (Pensabene 2007: 69) (Figure 62).

The exact date of construction is unknown, but scholars have sought some help with this issue from dedications in the area (Cébeillac 1971:40ff.). For example, the block of travertine inscribed C. CA [----]/ P. DO [---]/ EX S[E--]⁵⁸ that may have been part of the temple's frieze, might refer to C. Calpurnius Piso (consul in 67 B.C.E.) and P. Dolabella (praetor in 69 B.C.E.),⁵⁹ or to C. Cartilius (father of Cartilius Poplicola) or C. Canuleius (tribune of the plebs in 98 B.C.E.) and P. Domitus (Bloch 1953:298; Cébeillac 1971: 71-73). In addition, in the mid-1st century B.C.E., C. Cartilius Poplicola (whose statue rests on the podium of the temple, see below) erected a *compitum* in this part of the city, perhaps near the outer part of this sanctuary (Mar 1990:146; CIL XIV 4710). Also, a marble block inscribed P. LIVIUS P. L. HER. DA (transcribed P(ublius) Livius P(ublii) l(ibertus) Her(culi) da(t)), dated to the 2nd century B.C.E., was found in the area in front of the Temple of the Round Altar (Mar 1990:160; Cébeillac 1971:44 states that this block originated elsewhere and was reused during the Augustan or late Flavian period).

⁵⁷ The colonnaded interior is much like that of the Temple of Magna Mater on the Palatine and the Temple of the Dioscoroi at Cori.

⁵⁸ Cébeillac (1971:71-72) reconstructs a third line of the inscription as *ex s(enatus) [c(onsulto)]*.

⁵⁹ According to Bloch 1953.

The original altar for this temple is unknown (both its placement and its superstructure). One can hypothesize perhaps that the large platform and foundation of the later brick Imperial altar in the courtyard are superimposed on an earlier, original Republican altar (see Chapter 2 for details about evidence of an earlier phase of construction at that particular site). However, this altar is not on direct axis with the Temple of Hercules (as discussed above) (Figure 63).⁶⁰ Beccatti (1942) claims that the original altar of Hercules was moved to the mithraeum in the House of Diana, where it was remodeled and reused, a large hole cut directly through the altar, an oak wreath added on the back side together with an inscription to Mithras (Figure 64). This presumed original altar, thought to be dated the 1st century B.C.E., is decorated on all four sides. On one side is the original inscription: AQUA SALVIA/ HERCLI SAC. On this side may also be a depiction of a reclining figure, perhaps Hercules, holding a skyphos, an object used for ritual libations; more allusions to such libations are found on the other two sides (an oinochoe, a patera and another ritual vessel). However, this altar is much too small to be thought to serve as the sacrificial altar to this monumental temple. Furthermore, no parallels to such iconic sacrificial altars from the late 2nd or early 1st century B.C.E. are known (the monumental altars from this period are largely anionic) (see Boin 2010 for a discussion about how certain artifacts “move”).

Other Ritual Aspects of the Sanctuary

The votive dedications found throughout the sanctuary contribute to the sacred character of the site and may provide some clues as to the types of ritual performance

⁶⁰ Of course, as will be discussed in Chapter 5 altars are often off-axis with their temples.

enacted in the space. A marble votive relief from the first half of the 1st century B.C.E., found directly to the east of the Temple of Hercules, depicts three cultic scenes of Hercules as a diviner (Figure 65). The first scene shows fishermen pulling at a net which holds an empty ship, a statue (perhaps of Hercules),⁶¹ a box and three fish; in the second scene, Hercules takes a folded tablet (which has the inscription *[s]ort(es) H(erculis)*) from a box, and hands it to an attendant – this is an oracular response, a *sors*; in the third scene, a priest hands the *sors* to a now missing person, with winged Victory standing to the side. The depiction of Hercules armed is a rare iconographic type which is seen at the start of the 5th century B.C.E. (Becatti 1939:43-46; Rieger 2004:228; Zevi 1976:54-55).⁶² In the image, there is no *sortilegus* who normally would take the *sors*, but instead, a child acts as an attendant to a divinity or priest. Champeaux (1990: 282) suggests that the tablet might concern a prediction of the victory of a naval expedition leaving from Ostia. The relief, donated by the haruspex, Gaius Fulvius Salvis⁶³ (attested to in Cicero *de div* 2.85-87), may provide a reading of the Temple as an oracular shrine, much like the function of the Temple of Hercules in Tibur (as attested in literary sources)⁶⁴ (for oracular shrines in Italy, see Champeaux 1990).⁶⁵ Champeaux states that there is no reason to

⁶¹ Becatti (1939:43) comments on the atypical appearance of a god of war in the nude. He compares this Ostian depiction to those from the 6th century Greek world and 5th century Etruria.

⁶² Boin (2010) suggests that the fisherman who is represented may not be Hercules, but rather a figure holding a hammer (and not a club). Boin claims that this figure is the god Vulcan and that the scene might be representing a myth or event related to Vulcan's importance in Ostia. Boin also reads the inscription not in Latin but in Greek, as: OPT(H) H(ΦΑΙΣΤΟΥ) ("the festival of Hephaistos").

⁶³ See Cébeillac (1971:70-71) for a discussion of the inscription and the name G. Fulvius Salvis.

⁶⁴ Statius *Silvae* 1.3.79, Tibullus 2.5.69-70, and CIL I.1484 from the end of the Republic.

⁶⁵ Champeaux (273) claims that the reading of the *sortes* was undertaken at most sanctuaries in Italy throughout antiquity. See also Wissowa (1912:258-60). Of the best known are the oracles of Fortuna

assume the presence of the oracle is older than the Temple of Hercules at Ostia; rather the two should be viewed as contemporary phenomena (1990:276), dating from a time when Roman religion could create oracles without placing as much importance in them as they previously had. At Ostia, aside from the votive plaque, no other archaeological evidence has been found on the site for oracular practice. For example, nothing at Ostia has been found in line with the wood or bronze tablets which are used for the *sors* and which have been found at Fiesole, Arezzo (see Champeaux: 285-88), and at a sanctuary at Barano (where 17 bronze tablets were found, CIL I. 1439-54). The rectangular tablets depicted in these oracular scenes at Ostia (as well as at Praeneste)⁶⁶ do not necessarily align with the variant-shaped tablets found archaeologically at other sites. Another votive dedication found in the area is the monumental statue to C. Cartilius Poplicola (Figure 66). The statue is of a Lyssipan type and is dated to sometime between 40 and 30 B.C.E. Zevi (1976:56).⁶⁷ The inscription on the base of this statue⁶⁸ shows a correction in the number of times C. Cartilius Poplicola was *duoviri* (corrected *iterum* for *tertio* and adds the cognomen Poplicola, inserted in the correct position determined by a normal onomastic formula). His name is also found on a funerary monument outside the Porta Marina in Ostia (Rieger 2004:230ff). The naval battle depicted on the funerary frieze (prominently

Primigenia at Praeneste (first attested in 241 B.C.E, Val.Max 1.3.2) and at Tibur, where Hercules Victor dispenses the *sortes*. See Reimann:1987 for Praeneste. Livy (21.62.5,8; 22.1.11) also names the *sortes* of Caere and Falerii.

⁶⁶ At Praeneste, an inscription thought to be a *sors* (CIL 14 2863) reveals a similarly shaped tablet to that seen in the Ostian depiction.

⁶⁷ For the prosopography of C. Poplicola see Rieger (2004:228ff.).

⁶⁸ C(AIO) CARTILIO--- /DUOVIRI SE --/ HERCUL (ANO) A(UGUSTALI)---

featuring Cartilius Poplicola) suggests that the dedicator of the nude statue is probably connected with this same war.

Largo Argentina

What we see at the present-day Area Sacra di Largo Argentina in the southern Campus Martius, between the Villa Publica and the Circus Flaminius, is misleading. From the street, we see the forms of three complete temples, and half of a fourth, all from their Imperial phase of construction; these temples rest on a travertine pavement laid after the fire of 80 C.E. during the reign of Domitian (Figure 68). The Republican phases of the site are hidden from public view below this pavement. The boundaries of the later Republican Area Sacra are clearly defined for three of the sides. The northern limit is the wall of the Hecatostylon (with its Imperial refashioning), the western limit corresponds to the eastern wall of the foundation of a rectangular edifice identified as the Curia Pompeii, and the eastern limit is another portico (identified by some as the Porticus Minucia Frumenaria, constructed by the consul M. Minucio Rufo in 110 B.C.E.), which conforms in alignment to the orientations of the temples (that is exactly east) (Torelli 2010:92-93). This eastern boundary is also marked by the natural topography of the area – a canal ran on this eastern limit of the wall in a north-south direction (Coarelli 1981; Marchetti Longhi 1933). The southern limit is less clear.

Phases of the Sanctuary: An Overview

According to Marchetti Longhi, the area had a sacred character as early as the 5th century B.C.E., when the first phases of Temples C, A,⁶⁹ and perhaps D were constructed.⁷⁰ Evidence for these early phases comes from a votive pit found near Temple C with material dating from the 6th-5th centuries B.C.E. (Marchetti Longhi 1960:37-38).⁷¹ Also on this early level, another monument (of unknown form) stood in the area where Temple B would later stand (Marchetti Longhi 1954).

After the area was repaved in the early second century B.C.E. in “saxo quadrato” (the tufa used for the first paving of the Via Appia in 297 B.C.E.), Temples A and C were renovated. Belonging to this phase are the altar of Aulo Postumius Albinus in front of Temple C, located on presumably the same spot as the earlier altar (not found *in situ*), and the altar of Temple A (of which all that remains now *in situ* is the base, sitting on a foundation of tufa blocks. See below for detailed descriptions of both). The only evidence we have for a possible, subsequent intermediary phase of the sanctuary comes from some small fragments of tufa blocks placed in between the lower and upper altars of Temple A (Marchetti Longhi 1954, 1960:14; 1936:108). Around 100 B.C.E., a fire occurred in the area and the ground level was raised; the altar of A. Postumius was deliberately buried, and the area was again covered and re-paved. With this paving, came the new

⁶⁹ We have fragments of the possible altar of this 1st phase of Temple C (see below), constructed in the same material and presumably in the same form as the later altar; we have no direct evidence for an earlier altar on the site of Temple A.

⁷⁰ However, there is no evidence for this early phase of D and most scholars agree that Temple D was first constructed in the 2nd century B.C.E. (Andreani 2005, Zevi 1995) on virgin soil, with a slight raise in the ground level; see below for a full discussion of Temple D.

⁷¹ Marchetti Longhi in his *Giornali di Scavo* 1935:252-253 describes material that is comparable to votives found at the Sanctuary of Demeter and Kore at Agrigento and vases in Etrusco-Campagna ware.

foundations of the third phase of the sanctuary and the construction of Temple B; Temple C, as in its previous and successive phases, remained on its own original foundation, but was slightly altered from its original proportions. The new altar in front of Temple C shifted its orientation (now we see its brick interior; it would have been faced with stone of some kind); the new altar in front of Temple A was of the same dimensions and form as the earlier altar and the new construction even used some of the earlier altar in its material matrix. And finally, in the Imperial Period, the level was raised again with a paving of travertine 0.7m thick (Figure 69).

Temple C

The various phases of the altars of Temple C (briefly mentioned above) necessarily parallel those of the temple. In the phase of the first monumental temple (succeeding the presumed presence of a small temple or shrine on its site), that is to say, at the end of the 4th century or beginning of the 3rd century B.C.E., an altar stood in the center of the tufa-paved, raised platform before the temple's steps. Fragments thought to derive from the upper right side of this earliest, peperino altar were discovered on the first two steps of Temple C and include parts of an inscription in archaic Latin script ([---] CONSOL/ [---] OS HOCE)⁷² that help date this altar to the 1st half of the third century B.C.E. (Degrassi 1949:67ff; Marchetti Longhi 1933: 310; Roma Medio Repubblicana 1977; *Giornali di Scavo* 1934 237, 239; 1930) (Figure 70). The altar, with a cyma reversa

⁷² The L of the inscription has an accentuated hook, to one side, of an archaic form (Roma Medio Repubblicana 1977).

molding and a dado, is thought to have been constructed in the same form as its successor.

This subsequent altar, dedicated to Aulo Postumius, constructed of Aeneine tufa on its base and of Grotto Oscuro tufa on its superstructure, was built on a platform placed directly over the presumed location of the earlier altar (Figure 71). This altar diverges slightly from the median of the temple. This second altar in front of Temple C has been much discussed and its dating debated.⁷³ The inscription on the north long side of the altar reads: A. POSTUMIUS A. F. A. N. ALBINIUS DUOVIR LEGE PLAETORIA REFICIUNDAM COERAVIT. There has been some disagreement as to whether this Aulo Postumius refers to the consul in 180 B.C.E or to a previous consul in 250 B.C.E. (or even, possibly, to a consul from 150 B.C.E.); but the later dating of 180 B.C.E. now seems to be the consensus (Marchetti Longhi 1960:38-41; Richardson 1992; Zevi 1995:137). The Aulo Postumius at Largo Argentina, consul of 180 B.C.E., is associated with the lex Plaetoria.⁷⁴

The altar has been extensively compared to the altar of Verminius (Figure 72), an altar dedicated to the god of cattle found on Via Volturno, just north of the Porta Viminalis in the agger of the Servian Walls (Castagnoli 1962; Marchetti Longhi 1960:39;

⁷³ See for example Münzer (1939: 27-30) who states that the construction of the altars came after a plague that killed men and animals in 175 B.C.E. (according to Iulio Obsequens); Coarelli (1981:13) who thinks that Aulo Postumio refers to the consul in 150 B.C.E.; Zevi (1995:137) for a summary of past arguments.

⁷⁴ This law, separating citizens into people under and over the age of 25, aimed to protect those under 25 against fraud (*dolus*). Those guilty of such a fraud were liable to a *judicium publicum* (Cicero *de nat. deorum* III.3) and their punishment was probably a pecuniary penalty, and a consequential punishment of infamia or loss of political rights. Legal permission was required to make dedications. The lex Plaetoria appears to have been a specific law that enabled A. Postumius to dedicate the altar as opposed to being a more general law that outlined the principles for public dedications (Orlin 1997:171-172). Taking the case of the altar of Largo Argentina and the altar of Verminius as examples, this lex may have allowed duoviri to restore traditional altars (Rawson 1973:161-174).

Richardson 1992). This hourglass-shaped altar made of peperino tufa (in fact, similar in form to the altar of Temple A at Fosso dell’Incastro at Ardea, see above), in a distinctly different form from that in front of Temple C, nevertheless had a similar inscription stating that the duovir A. Postumius Albinus had erected the altar in accordance with the lex Plaetoria. Both a prosopographic study and a marked similarity in the crafting of the letters link these two altars.

In the next phase of the construction of the sanctuary, when the area was repaved with Aeneine tufa around 100 B.C.E., a new altar for Temple C was constructed in the same location as its predecessors. This rectangular altar, with a brick-faced concrete core originally faced with stone (travertine or peperino), is articulated by a lower cornice or molding. This structure changed its orientation, its long side parallel to the front of the temple (Figure 73). It has been stated by Castagnoli (1993:230) that Temple C’s orientation was determined by the orientation of the Saepta, since the altar in this later phase is oriented longitudinally. This altar sat not on a raised platform as had the earlier altars, but rather on a rectangular paving as wide as the front of the temple which served as an architectural link between altar and temple.⁷⁵

Temple A

The first altar of Temple A (dating to the 3rd century B.C.E.) and its subsequent replacement altars all stood in relationship to their contemporary temples in a position analogous to the altars of Temple C. Like the space in front of Temple C, the front of

⁷⁵ In fact all the altars of both Temples A and C rested not on their own platforms, but rather directly on their respective ground levels.

Temple A is a paved platform, 14m long, 12.5 m wide, and raised by four steps on all its sides (Marchetti Longhi 1936:94) (Figure 74). In the first phase of the monumental temple (built in Grotto Oscura in the mid 3rd century B.C.E.), a rectangular altar, on direct axis with the center of the temple, is thought to have stood in the center of this pavement. Almost nothing remains of this altar but it most likely was in the same location as the subsequent two altars (Marchetti Longhi 1960. Tav XVI; *Giornali di Scavo* 1933 213ff). After the tufa paving of the sanctuary in the early 2nd century B.C.E., contemporary with the construction of the altar of A. Postumius in front of Temple C, was the probable second phase of a peperino altar belonging to Temple A (the new temple was constructed in Monteverde tufa) (Figure 75). The foundations and lower molding of this altar remain *in situ* today but nothing remains of its superstructure. Its dimensions and form would have been similar to those of the altar of A. Postumius, with its long axis parallel to the temple podium. The foundation measures 2.5 m long, .75 wide and has a height of .32m. The base of the altar is constructed of four distinct architectonic parts: a high base, a foundation cornice, a long broadside, and a crowning cornice (Marchetti Longhi 1936:103).

The preservation of this altar differs dramatically from that of its contemporary in front of Temple C. The near destruction of the altar of Temple A suggests that this altar was buried neither as a mere consequence of the creation of a new, higher level of paving, nor out of a desire to replace a primitive altar with a newer one; but more likely it was a chance event, not a voluntary destruction, that was responsible for the poor state of the present remains (a voluntary destruction would have resulted in a destruction of the entire monument without preserving the base). It has also been argued that this earlier

altar of Temple A might have been buried ritually, following a fire, as is suggested by the seemingly intentional covering of the altar by two slabs of tufa taken from the platform; under one of these slabs a bronze coin dating to the 3rd century B.C.E. was found (Marchetti Longhi 1936: 95-97; 99-100). Evidence of a fire (traces of ash and residue), uniformly covered the whole extension of the platform (*Giornali di Scavo* 1935:254-257; see below for a discussion of votive deposits associated with this stratum).

With the third phase of construction of Temple A (in Aniene tufa), the construction of Temple B around 100 B.C.E., and new tufa paving, came a third altar for Temple A, placed directly over the altars of the first and second phases, incorporating the earlier altars' structures into its foundation and parts of the previous altar in its construction (Figure 76). As with the altar in front of Temple C, the altar of Temple A remained more or less of the same type and style of previous phases, only altering its proportions to accommodate those of its new temple. (Marchetti Longhi 1936:102). The base of this new altar rests on a layer of cast concrete sandwiched between itself and the base of the previous altar (unlike the third phase of the altar of Temple C which rests directly on the altar of Aulo Postumius below) (Figure 77). This altar is of a slightly different form from the previous one and was evidently only roughly analogous to its contemporary, the altar above the altar of A. Postumius in front of Temple C. The altar in front of Temple A is of greater length than its counterpart and has a more complicated base (Marchetti Longhi 1936:133). The altar of Temple A is aligned with the axis of the temple, is of concrete construction (originally faced in travertine or peperino) and its foundation is an elongated rectangle in plan. The orientation of the third phase of Temple A itself differs slightly from that of its first phase: the axis of the later temple is angled

more west-south-west to east-north-east. This change in orientation disregards the earlier phases of Temple A but is in fact more in line with the orientation of Temple C (Marchetti Longhi 1936:137) (see Chapter 5 for a discussion about changes in temple orientation over time).

Marchetti Longhi (1936: 109-110) suggests that there may have been another altar between the second and third phases of Temple A which has totally vanished except for an impression of the altar and the hypothesis that parts of this monument were reused in the center of the altar of the author's designated third phase altar. If this were the case, if there were an intermediary phase between the clearly documented two altars in front of Temple A, then Temple C must be viewed as spatially independent and with a chronology distinct from Temple A's. In consequence, although the altars in the forecourts of Temples A and C would be contemporaneous, the shared space could not necessarily be thought of as a unified, sacred area. In the early phases of Temples C and A, there is evidence for perimeter walls surrounding each individual temple: traces of a tufa wall run to the south of Temple A, paralleling it, and small traces of a similar wall run to the north of Temple C (Marchetti Longhi 1960: 46-47).

Temple B

While there are only clear original phases for Temple A and Temple C, Marchetti Longhi argues that, in the place where Temple B would later stand, during the first and second phases of Temples A and C, there would have been some sort of sacred monument present since the 5th century B.C.E. (Marchetti Longhi 1954; 1960:57). This author has asserted that in the space in front of this earlier monument there was most

likely an altar that would have been covered at the time of the construction of Temple C in the 3rd century (Marchetti Longhi 1954; *Giornali di Scavo* 1933 222; 221). This paved, open intermediate space, presumably extending only as far as the first step of later Temple B (only the first three steps of the Temple are from the original stairs of the temple), can perhaps be seen as analogous in form and function to those platforms in front of Temples A and C. Marchetti Longhi, noting the later brick altars of the other temples erected in the place of previous religious structures, links the brick altar that currently stands on the upper steps of Temple B with a proposed earlier altar in the same location (Figure 78). To support his hypothesis, Marchetti Longhi notes that the simple row of tufa blocks at the edge of the beaten earth surface present in front of Temple B seems too tenuous to serve as a foundation for even a modest edifice and proposes instead that this kind of floor would have supported not a building but a block on which an altar might rest (Marchetti Longhi 1960: 57). This makes one think not of the existence of an original temple or shrine, but rather of an altar, dedicated originally to a divinity which could later be housed in a temple. Evidence for an earlier altar here is also suggested by a piece of concrete conglomerate (discovered in the first excavation campaign) which could belong to the center of the platform on which this hypothetical altar rose (*Giornali di Scavo* 1933:223). There remains as yet, however, no indisputable evidence for this proposed earlier altar.

What undoubtedly did have a ritual function was the well directly on axis with the center of Temple B and the later brick altar (Figure 79).⁷⁶ The square well with a circular

⁷⁶ This brick altar, incorporated into the temple's stairs, dates to an Imperial rebuilding of the sanctuary.

wellhead, not very deep, is plastered on the interior and was closed (at the time of discovery and excavation in 1931) by a polygonal flint block, badly damaged at some unknown point in time (*Giornali di Scavo* 1933:223). The date of construction of this well is unknown but bronze coins were found at its base that date to the Augustan period and could therefore attest to a period of time when it was either consecrated or re-consecrated.⁷⁷ The 12 coins found in this well, as attested by ancient sources and analogous Italic archaeological contexts from the Roman period, are characteristic of a money offering for religious purposes, a *stips*, or a sacrificial tax, periodically collected by the *sacerdotes* of the temple (Scheid 1994:55-65; cf. the thesaurus-well in front of Temple A at Fosso dell'Incastro at Ardea) (See Chapter 3 for a discussion about the economic ritual function of wells).

Another structure used for ritual purposes and connected to Temple B is the round tufa basin with a drainage canal situated along the angle between the left side of the temple and southern wall of the *temenos* (*Giornali di Scavo* 1933:204). Marchetti Longhi links this basin with sacrificial use (1954:71). Perhaps the plan of this Temple, with an altar in the forecourt, can be linked to a depiction of a temple from the Forma Urbis Severiana showing a Temple of Hercules of the Muses (a round temple) placed in a monumental complex, including a rectangular space within the Porticus Philippi with an altar (or a round fountain) in its center (Marchetti Longhi 1954 :71) (Figure 80).

⁷⁷ In an interesting example of the reflexive duplication connected with altars (perhaps merely a coincidence but an example that nonetheless deserves mention), one of the coins inside this well was a bronze coin of Tiberius with a picture of an altar (and the text PROVENTIAE).

Temple D

Although the depth and clarity of the research devoted to Temple D are scanty in comparison with the study of Temples A and C, the temple may well have had an altar standing in the center of a delimited platform in front of its steps in its original, 2nd century B.C.E. phase, analogous to the spaces in front of Temples A and C (Marchetti Longhi 1954:100, 104; *Giornali di Scavo* 1935) (Figure 81). The construction of Via Florida in the 1950s exacerbated the problem of evidence for Temple D. According to Marchetti Longhi (*Giornali di Scavo* 1935), the 1935 excavations in front of Temple D revealed some very partial remains of a brick altar on the level of travertine paving, analogous to the brick altars in front of Temples C and B on axis with the temple and in alignment with the altar of Temple C above the altar of Aulo Postumius. However, at the level of the most ancient phases of the altars of Temples C and A, Marchetti Longhi did not find a foundation level for Temple D (which would have been analogous to those of the platforms in front of A and C). Zevi too (1995:138) states that the trenches dug in front of the stairs of Temple D do not seem to reveal the presence of a platform that would be similar to those in front of Temples A and C (since the excavations were only partial, there is no secure conclusion). Zevi further states that the absence of an altar in front of Temple D might be explained by the fact that the earliest phase of Temple D was constructed after the general paving of the entire area by Aulo Postumius, therefore after the contemporaneous construction of the altars in front of Temples A and C (1995:139). Among scholars, there is some debate about the date of Temple D. Zevi dates the currently standing Temple D to after 100 B.C.E, based on its construction technique and its elevation. But the excavations in front of the stairs, revealing additional stairs at a

further depth, attest to a more ancient phase descending lower than the tufa paving on which the present Temple D stands (*Giornali di Scavo* 1930:7). Coarelli states (1981:18) that it is likely that the first phase of Temple D was constructed on virgin soil, the same level as the original Temples C and A. According to Castagnoli (1946), the first phase of Temple D stood on a level which corresponds to a period right after the construction of the platform in front of Temple C with the altar of Aulo Postumius (thus, after 180 B.C.E.). Further published investigation of this supposed altar of Temple D is lacking.

In addition to the temples within the area sacra, there was a seemingly complex system of drains. In addition to the above mentioned drain at the eastern limit of the space, one runs obliquely under the altar of Temple C (*Giornali di Scavo* 1934:230),⁷⁸ another on the southern side of Temple C, a third may have ran west-east in front of Temples B and C, yet another along the Via Florida (see Marchetti Longhi 1954:114ff for a full discussion). Furthermore, between Temple A and Temple B was an edifice that most likely served a religious function (perhaps the seat of the *sacerdotes* or a religious corporation or a school) and was already in construction during the late Republic (Coarelli 1981:23). Also, between Temples C and D were a number of structures. The other structures between the temples mostly date to the Imperial period and thus are outside the scope of this study of the character of the area during the Late Republic (see Coarelli 1981:23ff).

⁷⁸ The drain that passes under the altar of Temple C ends at a drain that follows the eastern front of the sanctuary.

Votive Deposits in Largo Argentina

A discussion of select votives found at the sanctuary will be addressed in Chapter 3. What follows is a brief overview of the assemblage.⁷⁹ The votive deposits found around Temple C remain somewhat ill-defined (as compared to, for example, those found around Temple A, see below). In Marchetti Longhi's published reports, the excavator does not explicitly mention a votive deposit connected to Temple C. However, in his *Giornali di Scavo* there are numerous mentions of accumulations of material (possibly votive deposits) (*Giornali di Scavo* 1934, p 231ff; for example under the first stair of the altar's platform). The largest concentration of votive material for this temple comes from around the platform of the Temple, along the northern limit. Among the terracotta statuettes, miniature vases, fragments of *vernice nera* pottery, and two small jars with images of Hercules sacrificing, were some miniature altars (*arulae*) which will be the focus of Chapter 3 (Roma Medio Repubblicana 1973:131 (n.152), 132 (n.156), 83 (n.62); *Giornali di Scavo* 1929:114; 1933 p 192; *Giornali di Scavo* 1930:123ff, 131 ff; *Giornali di Scavo* 1933: 200, 212; *Giornali di Scavo* 1935: 252-253; *Giornali di Scavo* 1941:339). An accumulation of material along the borders of the podium of Temple C is most likely the product of a ritual activity itself (Andreani 2005:116; for good compranda, see

⁷⁹ The holdings of votive deposits from Temple A and Temple C include 16 statuettes, 5 miniature vases, 22 pieces of looms (dating to the 3rd-1st centuries B.C.E.), 2 spindles, 11 *arulae*, over 500 miniature ointment jars, fragments of another 50 statuettes, as well as numerous *vernice nera* or *terra sigiliata* pieces from vases in open form (Figure 83). In addition, statuettes representing Venus, nude, with Mercury, and other material evidence of female offerers have been found. Twenty-nine of the statuette fragments, along with miniature vases and two hundred ointment jars, were found on the platform in front of Temple A, quite near the altar (Andreani 2005). In the storerooms in which these votives are held, Marchetti Longhi seems to have marked and sorted certain materials into three groups "t.A," "t.C," and "t.D" (Andreani 2005:119). A part of a bust of a man, "t.A," a fragmented female bust "t.C," and a unique statue of an animal "t.D." Since the miniature altars from the area, the *arulae* and the ointment jars will be discussed in detail in Chapter 3 I will not survey them here.

Bouma 1996 vol. 1: 242-247); a ritual offering near a *temenos* may have served to delimit the space of each of the four, individual temples in Largo Argentina (Marchetti Longhi 1930; Marchetti Longhi 1960: 51, 65-66).⁸⁰ One can even hypothesize that perhaps the absence of clear blocks and divisions between the temples at Largo Argentina can be explained instead by the presence of ditches designated to be used for votive deposits (Andreani 2005:116) (Figure 82).

As suggested by practices at Satricum, it appears as though an aspect of cult activity was to treat parts of a ruined temple as votives (also see the votive deposits at Temple A at Ardea). For example, at the cult place of S. Cecelia in Anagni, from the first half of the 5th century B.C.E., fragments of storage vessels and roof tiles were used to surround and protect votive deposits (Bouma 1996 Vol.1:242); at the Temple of Juno Sospita at Lanuvium, when a new temple was built above a previous temple in the mid-Republic, the architectural terracottas of the previous temple were collected in a votive deposit (Bouma 1996 Vol.1:244). These examples support Bouma's hypothesis that "after a partial destruction of the sanctuary, [when] it was decided to build a new temple, pieces of the still standing parts of the former temple were taken down with care" and carefully buried (Bouma 1996 Vol 1:244; see also the Temple B deposit at Ardea discussed above). Perhaps this abundance of votive material at Largo Argentina, if intentionally deposited and then buried, corresponds to the unquestionable evidence for the ritual burying of the thirteen altars at Lavinium. At this site (discussed in chapter 6),

⁸⁰ For example, the acrolith found between Temples B and C, that was covered by a votive deposit of cookware.

when the altars were no longer in use, numerous votives were scattered over the altars and their platforms and then buried.⁸¹

With the altar of the second phase of Temple A at a level lower than the re-filling of the tufa pavement above (that is, to the phase connected with the lower foundation of a rectangular altar that would have been contemporary with that of Aulo Postumius), Marchetti Longhi connects a votive deposit found on the platform (Bouma 1996 Vol. III: 91; Marchetti Longhi 1936; Roma Medio Repubblicana 1977). This votive deposit was found within the stratum of ashes which uniformly covered the platform in front of Temple A (especially along its edges and around the altar) (see above for discussion of the destruction of the altar). The traces of fire found here on the platform were not completely diffused throughout the whole area and thus Marchetti Longhi suggests that the evidence of fire, along with the accumulation of votive material above this layer of ash and sand, indicate ritual activity (1936:96-97). In fact, the types of votive material excavated here near Temple A (see Chapter 3) – containers for offerings of liquid or food, dating to the mid-Republic – are often found in votive contexts throughout Central Italy in association with ash and carbon residue (Bouma 1996). Although many ceramics were found, almost no animal bone was excavated from this stratum; this absence could either correlate with the particular type of ritual practice that occurred at this altar or, more likely, result from excavation methods in the 1930s.⁸² But in Marchetti Longhi's effort to argue that this votive deposit is related to a ritual burying of the altar (1936: 99-

⁸¹ See also a similar deposit at the Temple of Vesta, Bartoli (1901); Bouma (1996 Vol III: 75); or the example of Falerii, Comella (1986:189-190), Bouma (1996 Vol III:49-51).

⁸² See Bouma (1996 Vol.1:217ff., especially 231-232). Here he discusses an example of cookware mixed with carbon. Bouma believes the ashes found on the platform of the altar of Temple A at Largo Argentina to be related to a fire.

100), the potential significance of another nearby votive deposit, also at the level of this altar, which might counter his argument, goes unrecognized. This votive deposit, as recorded in his *Giornali di Scavo*, was found between the walls of the podium (particularly the southern wall) and the wall of tufa which delimits the area sacra (*Giornali di Scavo* 1935:250-251, 255ff., where Marchetti Longhi notes a large deposit of miniature vases and votive material on the steps of the platform; *Giornali di Scavo* 1937:267 ff., in particular 281ff; *Giornali di Scavo* 1939:290).

Conclusion

From natural topography to foundations and masonry to architectonic sculpture and votives, this chapter has surveyed chronologically the existing research on the material setting of the Republican phases of the monuments at each of the five primary sites that may serve as the basis for an archaeological study of Republican sacrifice in later chapters. While not exhaustive in scope, these nevertheless detailed summaries of the sanctuaries and their topographic and architectural situations will have provided the necessary factual foundation for extended description, in-depth comparative examination, and a mutually reinforcing variety of interpretation. The subsequent chapters, each informed by a different theoretical approach to the assembled data and centered on a particular thematic paradigm, will rely on and repeatedly refer to the complexly-related material, architectural, and construction-specific details presented here.

CHAPTER 2

Organization and Negotiation of Sacred Space

Sanctuaries are active spaces. Whether radically new construction or modulated development over successive phases, additions and changes to temples, and altars have to be incorporated into an already religiously-charged, built landscape. These alterations of sacred monumental space need to justify their claims to a place for themselves within (or manifest a reason for expanding the boundaries of) a well-established, clearly defined and architecturally integrated sacred area. Whether rebuilding, renovation, enlargement, or the introduction of brand-new accommodations for a late arriving cult, the updating of a sacred monumental space does not require a corresponding supplanting of the forms, functions, uses, or character of the rituals associated with its neighbors or predecessors. Rather, these reconfigurations of a sanctuary's topography can be seen to complement the diversity of the religious groupings and activities occurring within the space, enhancing the overall religious landscape and the sacred status of the area. The monuments in the space themselves and the ways in which they are experienced over time in the ritual of sacrifice are what craft the character and form of sacrifice for the sanctuary's different religious communities and visitors.

At the same time, however, these active material interventions challenge and redefine the established religious significance of the architectural character and the

bounds of the sanctuary. At the Sacred Area of the Republican Temples at Ostia, there occurred just such an incremental development and eventual crowding of temples and altars within a confined, monumental setting, along with, as will be seen, a concomitant augmentation of the sacred character of the sanctuary and a periodic renegotiation of the space by its occupants – material, human, and divine – both among themselves and with the surrounding community. Over the course of two centuries, from the 3rd to the early 1st century B.C.E., a row of four, independent altars, and three temples of various sizes, at divergent orientations, and constructed in different materials and styles (each with its own altar), were erected (**Figure 1**). Thought be the oldest cult site in Ostia (Rieger 2004:225), marked as sacred by the earliest religious structures on the site (the group of 4 altars), enclosed by a built *temenos* constructed of tufa blocks, this small, cramped, triangular sanctuary repeatedly served as a highly privileged location for sacred construction despite, or perhaps due to, the limitations of its size.

This chapter investigates the negotiation of sacred space: the interactions among the architectural constituents of the space, the built environment, and ritual performance. To some extent, any sanctuary could serve as a spring board for raising some pivotal issues concerning the character of sacred spaces. The rich complexity of the sacred area at Ostia was not unique. Such a clustering of buildings, a multiplicity of differently oriented and unaligned altars and temples crowded into one area can be seen in sanctuaries throughout Italy.¹ And to a large extent, the issues addressed and problematized in this chapter can and will be revisited repeatedly (through different lenses) throughout the other chapters. But perhaps, arguably, it is the very absence of

¹ For example, Fosso dell’Incastro at Ardea, the sanctuary of Isis at Pompeii, or the sanctuary at Pyrgi.

concrete, archaeological reports of the Sacred Area of the Republican Temples at Ostia, the incomplete publication record of the site,² the overwhelming presence of Imperial building construction projects and additions within this sanctuary that paradoxically make this particular site an especially attractive candidate for a case study; with this sanctuary, we can actually probe some of these larger questions about the role played by an Imperial era sanctuary's Republican origins. While these types of questions may be seemingly more answerable for sites with detailed stratigraphic reports and lists of finds and find spots, or sites characterized by an absence of reconstruction and renovation, by engaging with a sanctuary lacking in such evidence, by using a site in which the standing architecture and monuments are our only evidence largely, we are forced to rely almost entirely on the remains of what would have met the eye of an ordinary resident of or visitor to Republican Ostia. In other words, if we want to take a grounded and layered approach to the question of sacred space and its relationship over time to ritual, we need to use the space itself – its layout, its infrastructure, its building phases, its connection to neighboring temples, secular monuments, and its relationship to the surrounding city. But if it is true that the organization of a sacred space and spatial design are, as one space syntax theorist puts it, “configurational, therefore nondiscursive,” unsuitable to description “at anything like the level of complexity at which we create it and experience it in the real world,” then we are faced with the challenge of how to study and understand

² The dating of the temples is subject to question largely due to the absence of publications on the stratigraphy from the excavations in 1938-1942. The 1970 excavations around the Temple of the Round Altar resulted in the publication of some stratigraphic details, but these only relate to the first phase of the Temple of the Round Altar (Zevi 1970). Scholars have relied on architectonic characteristics to date the area – for example, the profile of molding on the group of four altars or the construction techniques of the temples (Mar 1990: 142). Pensabene (2007) has most recently published a revised dating based on both construction techniques and decoration.

the significance for ritual of specific, complex, architecturally-planned spaces (Hiller 1998:39). Such a focus on the monuments themselves, such questioning of their interaction and the ways in which they inform ritual, is not limited to this chapter but will resound in different ways and through distinct examples throughout the entirety of this dissertation.

The presence of multiple temples and altars problematizes the simple and useful notion of a sacred space as centered architecturally about the principal foci of ritual: a single temple and its altar. Many complex Latial sanctuaries – S. Omobono, Lavinium, Largo Argentina – can indeed be understood as authoritatively managed, symmetric iterations of this basic organizational scheme (See Chapter 1 for a discussion of the architecture and construction of each of these sanctuaries). On the other hand, some sanctuaries, that at Ardea for example, share with the Sacred Area of the Republican Temples at Ostia the fortuitous and pragmatic character of a busy, cramped and competitive marketplace (if we can use such a term to describe a sacred space). These different configurations of sacred space forces us to ask what it was that distinguished a site for its community – was it the monuments, the setting, the ornament? This chapter will be arranged around some very general questions suggested by the highly particular layout of the Ostian sanctuary. Though the approach taken here will be grounded in the case study of this specific sanctuary, it should be noted that these issues, through viewed through different theoretical or thematic lenses, will be revisited repeatedly in the chapters that follow as they pertain to each of the other sanctuaries examined in this larger project.

This chapter is not intended as an attempt in any way to give the “experiential” aspect of Roman sacrifice. Such an attempt would undoubtedly miss the larger point I hope to make in this project – there is no one experience, no one universal pattern of sacrifice. Besides, such an endeavor relies on the reception of representations in texts and images of human actions, ideas, and beliefs, receptions that we cannot access and evaluate either archaeologically, or through present physical experience.³ In addition, often these representations tend to be centered around a system of beliefs, a reliance on liturgy and doctrine that the experience-based approach of this chapter (and of the entire dissertation) argues against. On the other hand, this chapter will attempt to situate sacrifice at the Ostian sanctuary in its proper setting, providing a model for an emplacement of ritual performance that will emphatically allow us to single out fundamental questions about the nature of the sacrality of the space itself and its active, determining role. In the consideration and study of the sacred space at the Sacred Area of the Republican Temples at Ostia, it is not, of course, only the architecture of the sanctuary but also the community-at-large and the ritual audience that necessarily come into play: they too, just like the built landscape, are parties to the negotiation of the space. In what follows, though, it is primarily the architectural layout of the space and not the various perspectives of officiants, worshipers, and passers-by that, I will argue, provides will be the key to understanding what informs and what is informed by the ritual, what lends a certain element of authority to the space itself.

³ For the multivocality and multilocality of place, see Rodman 2003, particularly page 213.

The Locative: Definitions of “space” and “place”

Before probing some of the main issues concerning sacred space, a note on definitions, terminology, and the choice of particular vocabulary is necessary. In recent years, there has been much scholarly work done on conceptions of place, space, place-making (most notably in disciplines such as landscape archaeology, cultural anthropology, ecology and evolution, psychology, and philosophy) (Casey 2008:45; Moser and Feldman 2014).⁴ Theorists of place conceive of ‘place’ and ‘space’ as two fundamentally different categories of reality: space, in the usage that follows from the early modern and modern scientific sense of the term, is homogeneous, directionless, unchangeable, and physically neutral; whereas place results from a concentration of concrete human activity in the world (Casey 2001:404; Casey 2008:45). In other words, space is general and uniform and exists purely in its passive capacity as a location for things and sensations, whereas place is the particular outcome of *actions* in a location. I use space, as discussed and defined by Edward Casey, as a “neutral, pre-given medium, a tabula rasa onto which the particularities of culture and history come to be inscribed” (Casey 1996:14).⁵ I follow Casey as he views place in the context of a lived experience, a

⁴ One of the earliest models of the theorization of place was articulated by Y-F Tuan in *Space and Place* (1977), a work which stresses the experiential features of place in its “subjective” and “lived” aspects.

⁵ I would introduce a further distinction within Casey’s concept of space: to Casey’s neutral space – much like the space of geometry – I would add the concept of physical space, a space with testable, culturally invariant, non-material yet physical properties. A geometrically “neutral” space in Casey’s sense may, for example, at a given moment in time, be described as having certain exceptional physical qualities of light, heat, sound, humidity, breeze, odor, etc. regardless of what these phenomenal circumstances might “mean” culturally. As with Casey’s imposition of a geometric concept of space, the making of such physical observations is itself culture bound, but, once made, these determinations have a useful cross cultural applicability and independence that fit in neatly with Casey’s model of a culturally “neutral” space. I would add as well that this geometric consideration of space is also essential to applications of the theory of “space syntax” (see note 13 below) which views space as “not simply a geometric shape but a set of

“plenary presence permeated with culturally constituted institutions and practices,” for “there is no knowing or sensing a place except by being in that place...*lived bodies belong to places*” (Casey 1996: 46, 18, 24). Localized places, considered in a network of relations, also interact with the general topography, considered in a network of relations, as each place in a landscape “embodies the whole at a particular nexus within it” (Ingold 1993:155). In this chapter and those to follow, I often discuss the spatial or the temporal, two aspects of experience I see as encompassed by place: “*space and time come together in place*. Indeed they arise from the experience of place itself” (Casey 1996:36); places are “*spatio-temporal events*” (Massey 2005:130). Hiller and Netto (2001:13.7) similarly link space and social systems, seeing them as “dual” systems “made up of *material events* which take place in space-time,...and *informational entities* such as the codes and conventions which seem to govern these material events locally.” This formulation of space and its generation of “material events” usefully applies to viewing Republican Roman sacrifice as an experience, as an event, inseparable from its material setting and its associated material objects.

So what of “sacred space?” In this chapter, when I am speaking of the sacrificial acts that occur in the Sacred Area of the Republican Temples at Ostia, I will use the term place in the sense of a setting for actions, people, events, rituals. But when I am addressing the layout of the sanctuary, its complex of buildings and their succession over time, the boundaries of the temples, or the precise placement of the altar, I will use the

geometric potentials each of which has its own natural geometry and relates to some aspect of how human beings function” (Hiller 1998:38). Hiller’s understanding of space as a “shape” intimately connected to “how human beings function” is closely related to this dissertation’s overarching idea that Roman sacrifice needs to be studied as a materialized experience, set in a particular “geometric” space, grounded in the physical world and not an abstract manifestation of a system of beliefs, religious teachings, or doctrines.

more inclusive term, space, and in this connection, “sacred space.” The active role of the setting of the sanctuary lends a certain authority, a determining role, and agency to the place itself. The architecture, layout, setting, and monuments of the Sacred Area of the Republican Temples are intimately and intrinsically embedded in the ritual performances that occur within the space. The space is repeatedly both active and activated, defined by and defining the sacrifice that is architecturally situated.

Multiple Altars! Signposting the Sacred

Upon entering the Sacred Area of the Republican Temples at Ostia off of the via della Foce, a sacrificial procession in the late Republican or early Imperial eras would have encountered an architecturally crowded sanctuary hosting as many as seven altars (**Figure 2**).⁶ Sacrifice would not be occurring simultaneously at each of these altars; rather each altar would have been recognized as serving principally as the stage for its own characteristic and elaborate annual sacrifice held annually on one specific, dedicated day in the ritual calendar.⁷ During the other days of the year, although the monumental altars may not have been used for the slaughter of large animals, it is perfectly conceivable that they would have been visited by individuals donating terracotta votives or even perhaps making vegetal offerings or liquid libations. Therefore, at the Sacred

⁶ For the period after the construction of the Temple of Hercules (built in the beginning of the 1st century B.C.E.), there would have been seven active altars in the sanctuary; this number of course depends on the era of construction. The details of the phases of the sanctuary will be discussed below.

⁷ We could think here of the multiple altars at all of the sanctuaries studied in this project, particularly the three altars at Fosso dell’Incastro at Ardea or the row of thirteen altars at the Sanctuary of the Thirteen Altars at Lavinium. We might also question whether or not large, communal sacrifices could happen throughout the year, offering a much more continuous use of the space (suggested by Valérie Huet, personal communication, May 2013).

Area of the Republican Temples, we should not imagine anything as complex as the festival, famously documented, that occurred at the very different sanctuary of Zeus at Olympia, where a sacrificial procession regularly visited and made offerings at each of the sanctuary's altars on the same day. At this Greek sanctuary, Pausanias describes (V, 13-15) a monthly sacrificial procession that progressed according to a highly detailed ceremony in which a bloodless sacrifice was offered at 70 altars both within and outside the Altis (**Figure 3**).⁸ Pausanias's description follows the very particular order of the procession and its series of sacrifices, highlighting the structure inherent in the processional movements, the rituals themselves and, most importantly for what concerns us here, the precise ordering of the setting for these sacrifices. For example, this specific structuring of the topography can be seen throughout Pausanias' description in the reoccurring emphasis on signaling various entrances (such as the entrance to the stadium, the processional entrance to the Altis, the entrance to the Wedge, a room to the right of the entrance of the town hall, etc.). Such a repeated attention to the entrances as foci of the procession – as reference points and topographic nodes for locations of altars and as key markers for the progression of sacrifice – helps to place the ritual in a specific geographic and architectural context, reinforcing the co-constituent relationship between place and sacrifice. The resulting mapped “communicative connection” (to use Mylonopoulos' phrase 2006:107-108) that is created between each act of sacrifice and

⁸ V.14.4:

ἐπακολουθήσει δὲ ὁ λόγος μοι τῇ ἐς αὐτοῦςτάξει, καθ' ἣντινα Ἑλεῖοι θύειν ἐπὶ τῶν βωμῶν νομίζουσι (My narrative will follow in dealing with them the order in which the Eleans are wont to sacrifice on the altars). Translation and Greek text taken from <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0160%3Abook%3D5%3Achapter%3D14>

each material, built altar at Olympia helps to monumentalize and reestablish, on a continuous monthly pattern, the surrounding built and natural landscape in which these very rituals reoccur.

At the sanctuary at Ostia, a similar type of “communicative connection” between the various altars served to confirm the sacred topography of the space. This ongoing dialogue between the sacred monuments was developed not through the simultaneous use, in time, of each of the altars, but rather, more architecturally, in space, through their specific placement, their spatial interaction, and their arrangement. The altars and the architecture of the sanctuary were the intrinsic backdrop and setting to any of the sacrifices that may have been occurring at any of the altars within the sanctuary, the context in space through which ritual actions in time acquired their ability to signify.⁹ This agency attached to the altars, the settings for sacrifice, can be seen as the determining factor in the character of both the sanctuary and the ritual.¹⁰ The calculated order and precision characteristic of the monthly sacrifice at the seventy, strategically-located altars in Olympia, tied so closely to architectural cues from the built environment, are manifest, albeit in important and different ways, in the variety and multiplicity of the altars at the Sacred Area of the Republican Temples at Ostia. Through both the “passive” presence of the altars and temples as backdrops to a larger spectacle, as structures

⁹ I am not suggesting here that the significance of ritual is static. All that I am asserting is that material context is an essential component in the mechanism of ritual signification.

¹⁰ Humphrey and Laidlaw (1994:111), discussing the Jain *pūjā* ritual, argue that the authoritative figures visibly present in rituals of a liturgical tradition, issuing and orchestrating instructions and actions, contribute a prescribed action and quality to the ritual. But I would argue that rituals without such figures or liturgy, without such “overt regulating instruction,” can nonetheless be prescribed by a different sort of agency. Such would be the case with the Republican sanctuaries examined in this dissertation; here, the materials and sacred settings can be seen as the “overt regulating instruction.”

forming a stage for a ritual, and through their function as more “active” participants in the enactment of the animal sacrifice, the monuments themselves heighten the experience of sacrifice for both audience and practitioners, collectively defining and asserting the “sacred.”

Strict Organization of Sacred Space

As will be emphasized repeatedly throughout the following chapters, rituals must closely follow a detailed and specific formula, a specific procedure, a specific recipe (Pliny NH XXVII.10-11; Cato *De Agricultura* 141; CIL VI.2107 for the sacrifice of the Arval Brothers; see also Scheid 2005b for details about this particular sacrifice).¹¹ Romans were noted to be particularly strict about observing the proprieties of these issues of form. If something went wrong within a Roman ritual (if, for example, the bull did not go willingly to the altar), then the ritual had to start again from the beginning, repeating the procedure entirely; an *instauration* (or a single correction) had to be made to an error in the procedure or form (an *emendation*) (Ando 2010: 62-63). The explicit specificity of the rules governing ritual practice must implicitly entail correspondingly specific guidelines for the action’s material emplacement, assigning an important role to the setting. The material analog of the meticulous execution of ritual procedures can be seen in the precise ordering and structuring of ritual space; for only in a permanently maintained sanctuary complex, in a materially-organized physical space, can the repeated rhythms of sacrificial ritual performance, these “motor tasks,” establish the integrated

¹¹ See also, Dumezil (1970: Vol 1.83-88); Wissowa (1902:329-334). Plutarch’s *Numa* XIV.2, *Moralia* 270C, and *Coriolanus* 25 describe the repetition of a Roman sacrifice that did not go well. Humphery and Laidlaw (1994:116) emphasize a similar order and sequence inherent in Jain ritual.

visual patterning of movements in material space necessary to give ritual acts their coherence as formal elements in a “drama”-like structure, their ability to serve as “slots” for ontological assignments in an interpretive narrative of the ritual.¹²

A careful ordering of space for the purposes of isolating ritual from contaminating contact with the “profane” can be seen as well in the sanctuaries of Rome and Latium. Taking McCauley’s statement (2014: 157) about domestic settings and applying it to sanctuaries, “imposing some order on objects in a domestic environment is a good means for ascertaining whether someone has violated that space.” Physically marked off from external intrusions by a monumental *temenos* (though at times, as at The Sanctuary of the Thirteen Altars at Lavinium, the sacred border may be formed by streams or other features in the natural landscape), a sanctuary is the result of deliberate design, with each of its structures negotiated into the space and coordinated with one another with a special concern for isolating and controlling sacred interactions. The order and structure of the space seem deliberately and compellingly to craft and shape the character of the enacted ritual. Such order in sacred space ensures a heightened awareness of the space and, consequently, an implicit segregation and quarantining of the *area sacra*. The sacrality of the sanctuaries studied in this project (and, to some extent, as well, in other sacred spaces throughout the ancient world) is characterized by the intentional and inviolable ordering

¹² The image used here of rhythm-pattern bipolarity in the modeling of the structure of drama is adapted from Northrop Frye (1957). A recent survey of the well-known intimate connections of ritual to drama can be found in Csapo and Miller, 2007. Where Frye (1957: 250) saw in dramatic performance an “external mimesis, or outward representation of sound and [visual] imagery,” I see in ritual performance, correspondingly, a representation of repetitive action in material and physical space.

of the space itself;¹³ the monuments are not haphazardly joined together over time, but rather each additional structure is carefully incorporated into the complex layout and hierarchy of the sacred environment.¹⁴

Why here? Why now? Right here. Right now.

With or without the precision and ritual involved in augural practice, the location of a sanctuary was not arbitrary. Specific sites were chosen and demarcated as sacred through a variety of different means and there is not one specific, universalizing answer for why sanctuaries were sited at particular locations; but all sanctuaries can be seen as, to some extent, determined and characterized by the availability and limitations of local resources (whether amount of space or land, presence and accessibility of particular species of animals or building materials, or proximity to water sources or other significant features of the landscape). Many scholars, ancient and modern, have connected the initial placement of sanctuaries of specific deities with particular natural or

¹³ Another theoretical approach (not pursued in depth here in this chapter nor in later chapters, since it does touch on but is not essential to the topic of this project) that could be applied to the study of sacred space should be mentioned here – the field of space syntax. A recent study by Stöger (2011) analyzes Ostia using this model (see 41ff. for a summary of space syntax approaches and bibliography). Space Syntax refers to a theoretical framework and technique initiated by Bill Hillier and Julienne Hanson at University College of London in the 1970s. Space Syntax can be applied to understand and describe configured spaces and to anchor all human activity in spatial geometry (configured spaces are defined as the sets of relations within a spatial complex and the ways in which relations take into account other relations). The theory is used to examine spatial complexes (buildings, cities, etc.), their form and their function, and their structural properties. Space syntax emphasizes the distinct parts of an area which make up the whole. Such an approach focuses on space as an essential part of all human activity, on the configurations of spaces and how they gain social significances (Stöger 2011:42).

¹⁴ Within such a structured, demarcated space, any violation of symmetry is registered unconsciously. Cognitive science scholars have emphasized the role that symmetries play in the ordering or design of the physical setting. Studies have shown that the human visual system is most drawn to vertical symmetries (rather than horizontal or diagonal symmetry). For more, see Ferguson 2000, McCauley 2014, Wenderoth 1994.

other topographic characteristics.¹⁵ For example, Cole (1994:201) argues that sanctuaries in Greece were selected according to the function of the divinity, certain demands or characteristics of ritual, and larger social and communal organizational concerns. Along similar lines, Edlund-Berry states that sanctuaries were located in places with specific reference to the city (points of entrance or exit, for example) or in places with particular natural characteristics (caves, hilltops, proximity to water, slopes of mountains); she states that rural sanctuaries were located based on the “mysterious forces of nature” (1987:29). And Vitruvius (1.7.1) comments on the definitive location of sanctuaries to particular gods in certain parts of the city.¹⁶ Just as sacrifice is a site specific practice, a ritual that can be fully efficacious only if situated in a precise location, so too, then, must the study of localized ritual action address the question of a sanctuary’s particular topographic and natural context.

An understanding of the precise placement of the Sacred Area of the Republican Temples at Ostia at the period of its initial building will, to some extent, be tied to the urban infrastructure of the city, the course of the Tiber river, the points of access to and from the city, the highly trafficked trade routes running through the city, the natural and geologic resources of the area, and the orientation of the city center (**Figure 4**). The uniqueness of this sanctuary, its location and its layout, is noted by Mar (1991:88-89

¹⁵ Alcock and Osborne (1994); Cole (1994); Dunant (2009); Edlund-Berry (1987).

¹⁶ *Divisis angiporis et plateis constitutis arearum electio ad opportunitatem et usum communem civitatis est explicanda aedibus sacris, foro reliquisque locis communibus. Et si erunt moenia secundum mare, area ubi forum constituatur, eligenda proxime portum, sin autem mediterraneo, in oppido medio. Aedibus vero sacris, quorum deorum maxime in tutela civitas videtur esse, et Iovi et Iunoni et Minervae, in excelsissimo loco unde moenium maxima pars conspiciatur, areae distribuuntur. Mercurio autem in foro, aut etiam ut Isidi et Serapi in emporio; Apollini Patrique Libero secundum theatrum; Herculi, in quibus civitatibus non sunt gymnasia neque amphitheatra, ad circum: Marti extra urbem sed ad campum; itemque Veneri ad portum.*

discussed in Stöger 2011: 16) as one of two areas in Ostia in which signs of regular patterns of land division or boundaries are not respected and where the rules or patterns observed throughout the rest of urban areas of Ostia were not followed. This transgressive interplay between the topography of the sacred site and the “profane,” secular, civic space of the city is present not only in the earliest phase of the sanctuary; in fact, the site’s intimate dialectic relationship to the monuments, orientation, and layout of the entire city of Ostia is reiterated in the sanctuary’s successive building phases, additional temples, altars, or sacred structures complementing not only each other but also particular aspects of the evolving urban topography of the city. In the development of the sanctuary itself, with each augmenting of the architectural space, can be seen a clear, deliberate effort to integrate new construction within the *temenos* into a continuing dialogue with the surrounding urban and natural topography of Ostia.

The Sacred Area of the Republican Temples at Ostia was originally outside the walls of the *colonia*¹⁷ and only later incorporated within the city proper (**Figure 5**). In the beginning of the 1st century B.C.E., the sanctuary can be seen as responding to changes in the growing city of Ostia and changes in the city’s infrastructure.¹⁸ The *castrum* was losing its character as a military city and Ostia was becoming more of an urban center with its own local government, becoming more of a commercial harbor rather than strictly a naval base with an increasing number of imports (especially corn) (Meiggs 1973:27; Stöger 2011:iii). During the Sullan period and perhaps slightly before, new

¹⁷ It is thought that the *castrum* was not founded until the 4th century; Zevi (1996), Mar (1990:141).

¹⁸ For discussion and detailed history of Ostia in the 1st century B.C.E., see Gallina Zevi and Humphrey (2004); Gallina Zevi and Claridge (1996); Rieger (2004).

walls were constructed and the city's population and territory had expanded to almost 30 times the size it had been in the 4th century B.C.E. (Meiggs 1973: 34). At this time, more lavish atrium and peristyle houses were being constructed (for example, the house of Jupiter the Thunderer). The Sacred Area of the Republican Temples must be considered in light of these social and political changes. For example, six boundary stones were aligned along the north side of the eastern half of the Decumanus of the city, originating from a point just outside the eastern gate of the city (called today Porta Romana) and continuing westward for about 600 meters (until a location just south of where the Grandi Horrea stand today). All the *cippi* have the same inscription, dated to around 150- 80 B.C.E., and are thought to have been erected by the praetor Caninius.¹⁹ These stones relate that the land between the eastern half of the Decumanus and the Tiber was public property, likely to be used for commercial purposes. At the westernmost of these markers, directly to the south of the Grandi Horrea (Regio II, IX), another boundary stone was added, stating that the western part of the city, extending to the Tiber, had become private property; it read “privatum ad Tiberim usque ad aquam” (Mar 1991:88-89; Meiggs 1973:32) (**Figure 6**). If the Sacred Area of the Republican Temples was in fact included in the area alluded to in this westernmost inscription (since it is located between the boundary marker and the Tiber), the sanctuary would then most likely have initially been considered public property, property of the merchantmen, traders, sailors, as well as the local community of Ostia, the sacred area only perhaps becoming private in the late 2nd or early 1st century B.C.E..

¹⁹ CIL XIV 4702, ILLRP 479: Caninius C.f. pr(aetor) urb(anus) de sen(atus) sent(entia) poplic(um) ioudic(avit). Brennan (2001:817) dates it to after 120 B.C.E..

In all of its phases, whether considered within the city walls or outside them, the sanctuary was intimately linked both to the city and to its harbor. Its topographic location was a determining factor in everything from the orientation of the temples and the altars, to the placement of the *temenos* walls, to the entrances of the temples, to the passageways within and into the space, to the infrastructure in place for sacrifice, to the continuous expansions of and additions to the space.

Roads

In the formative phase of the Sacred Area of the Republican Temples at Ostia, three major public thoroughfares framed a small, triangular plot, a conspicuous topographical disjunction in the nice regularities of the city's physical communications, an awkward and repeated reminder that the city's relations to the physical and social 'other' world – to its harbors and to the routes of its lucrative salt trade eastward, up the Tiber and southward, down the coast – were not unproblematic (**Figure 7**). Ostia's Decumanus (the via Ostiense), was the principal channel of movement through the orderly world of the city, the continuation, after passing through the *castrum*'s eastern gate, of the well-trodden road inland from and to Rome and the communities further up the Tiber. The Decumanus made its seaward exit from the gridded urban decorum of the *castrum* through the city's western gate (this western leg, from gate to harbor, is now called via della Foce) and immediately met the outside world at an abrupt bend in the original coast road. A later extension to meet the via della Foce of a street running parallel to the Decumanus along the ancient city's northern wall (now called via Pomeriale Esterna) formed a right angle with a street running along the western wall (now the via degli

Horrea Epagathiana), the three streets creating a topographically anomalous triangular area immediately adjoining the rectangularly-gridded *castrum* (**Figure 8**). Therefore, all traffic moving between harbor and city would have passed along one of the three sides of this topographically distinct area when entering or leaving the *castrum*. Furthermore, the sanctuary stood at the intersection of two major trade routes: via Salaria Sabina and via Salaria Albana. These roads, used as major routes for salt trade (and later for milk, wool, and meat), connected the hinterlands of the Sabine and Alban mountains with the mouth of the Tiber. Centuries later, this intersection point, where a compital shrine is thought to have been constructed (perhaps in the 1st century B.C.E.), was to be the western gate of the *castrum* (**Figure 9**).²⁰ This shrine would have acted as a marker both of religious protection at a prominent cross roads and of a geographical focal point, a “cardinal point from which a vast visual field can be commanded (Stöger 2011: 224).

Monuments within the space and their topographic considerations:

It is necessary to examine the monuments within the Sacred Area of the Republican Temples at Ostia at each of their initial phases of construction, to see not how they had interacted and fit in with each other (that will be discussed in a later part of this chapter), but rather to explore why and how exactly they were located where they were within the sanctuary. Such an investigation will help to shed some light on the overall relationship of this sacred space in to the city of Ostia. As discussed in depth in

²⁰ The shrine, now below modern-day street level, is in the form of a narrow, rectangular room with two additional rooms (constructed at a later period), one a basin, with a curved outer wall against the west side. When the street level was raised several times in antiquity, this shrine was preserved. Information taken from <http://ostia-antica.org/regio1/forum/bivio.htm>.

Chapter 1, the group of four altars are the first monuments constructed in the space, built on a large tufa paved area (**Figure 10**). These free-standing structures are located not in the very center of the triangular space but off to the side, very close to the northeastern corner of the sanctuary. Tellingly, the altars are exactly lined up to parallel the original northern boundary of the sanctuary – the western extension of the *via Pomeriale Esterna*, at 0.70 s.l.m.,²¹ paved with large blocks of tufa (**Figure 11**). This street would have passed right in front of the position of the later Tetrastyle temple and a couple of centuries later, the altar of that temple would be placed directly on this road – see below for a discussion about the importance of this street as a boundary to the sanctuary. This street, now vanished, was the third leg of the triangle that bound the sanctuary together (Becatti 1954:106; Mar 1990:145; Pensabene 2007; Ricciardi 1996: 111-112). This grouping of altars seems to confer a conciliatory sacrality on the space by their very iteration and by their placement at the right-angled corner of the sanctuary, at the intersection of the two properly meeting of the three roads that formed the *temenos*, and in a location that faced the entrance to the sanctuary,²² regularizing the viewpoint of the interior at the oblique meeting of the *Decumanus* and the *via della Foce*.

Boundaries or walls of sanctuaries (such as the corner location of the four altars) or boundaries of individual temples within sanctuaries are themselves sacred and respected; they were often the locations for depositions of votives or discarded architectonic ornament from earlier temple constructions (see Chapter 3 with *Fosso dell'*

²¹ See Ricciardi (1996:74-75 note). Ricciardi quotes Dotoressa V. Santa Maria Scrinari for the measurement of elevation.

²² We can perhaps presume this was the entrance to the space from its function as such in later periods.

Incastro, Ardea and Largo Argentina providing particularly good examples of this practice). The northeast corner of the Sacred Area of the Republican Temples is the area's only properly right-angled corner; it is formed by the normative meeting of two streets running along the boundaries of the *castrum*, thus linking the activities of the liminal and uncanonically bounded triangular sanctuary to the regularities of the adjoining city and its rectangular street grid.

While every temple within the *castrum* seems to be oriented similarly, at a right angle to the line of the Decumanus, notionally north-south,²³ the sacred monuments constructed within the Sacred Area of the Republican Temples avoid imitating this strict conformity of orientation while nonetheless, quoting and alluding to the layout and street system of the *castrum*. As I have shown, the orientation of the alignment group of four altars was also related to Ostia's road system. Based on a few topographic considerations and on trends or norms observed more generally in sanctuary construction at the time in the region, it seems likely that the four altars would have faced southwards, towards the via della Foce. The four early altars would have been oriented to the same azimuth of 150° (60° south of east) as would the sacred structures within the *castrum*, such as the later Capitol, for example. I base this suggestion first on the placement of the later, Imperial addition of the shrine opposite the southern faces of the altars, indicating that the direction of worship (at least in this later period) was southwards towards the shrine and, presumably, the sanctuary entrance (**Figure 12**). As will be discussed in depth in Chapter 5, altars almost never shift their orientation over time and a complete 180° rotation in

²³ Actually, the temples are oriented closer to about 30° NW-SE of proper North-South. The Decumanus runs eastward at an azimuth of about 59 degrees (Google Earth).

orientation (even if 300 years later) would be very unlikely. In further support of this argument for a southward orientation of this grouping of monuments is the almost complete absence of altars that face north in this period in Rome and Latium (see Chapter 5 as well as the charts in Castagnoli 1993; Prayon 1991, 1997 who show the overwhelming prevalence for temples and altars to be oriented to the southern half of the compass).

As with the location of the group of four altars, the juxtaposition of sacred monument with one of the prominent streets bounding the sanctuary can also clearly be seen in the placement of the temple from the next phase of construction in the sanctuary: the Temple of the Round Altar (**Figure 13**). Like the group of altars, this temple too is situated in a corner formed by two of the streets (the *via della Foce* and the *via Pomeriale Esterna*). If the entrance to the sanctuary was in fact off the *via della Foce* at this early period, as it was in the Imperial-era phase of the sanctuary, then just like the row of altars, this temple had its façade facing the direction of the area's entrance. In addition, the temple is facing the direction of the *castrum* beyond the *temenos* walls. The temple aligns itself with the *via della Foce*, with the southernmost side of its podium abutting the street itself (**Figure 14**). The Temple of the Round Altar is placed to interact with the road from the harbor, the *via della Foce*, at a point of decision just before the street forks either to enter the city and connect with the routes upriver or to turn at the gate, away from the city, and head south along the coast. There was no frontal access to this temple which was entered instead through a staircase composed of four steps on the right side of the *pronaos* (each step 1.4m in width) (**Figure 15**). Pensabene (2007) has pointed out that the final step on this right hand staircase chiseled down the surface of the cornice of

the podium, suggesting that this set of stairs was constructed in the second phase of the temple (see Chapter 1 for a full discussion of the phases of this temple). Thus, there may have also been originally a staircase on the left side of the pronaos (as evidenced by two large blocks of tufa found protruding from the wall and by the absence of crown molding on the podium) that would have been the original mode of access to this temple (Pensabene 2007: 56; Zevi 1970:102) (**Figure 16**). If stairs did in fact lead from the via della Foce to this temple, then the connection becomes even stronger between this particular temple and the major trade routes leading from the Tiber mouth to the major cities and sites in Latium.

The temple, respecting the alignment of via della Foce, is oriented almost exactly to the east (89°). While in the early phases of construction of this temple there was no frontal access to the temple itself, there was nevertheless an altar in the temple's forecourt. A small platform sits, at a short distance, in the area in front of the temple, most likely of a type designed to hold a rectangular altar. This platform, constructed of two rows of blocks of tufa, on a pavement of *cacciopesto*, is on axis with the temple and perpendicular to its façade. The platform resembles the tufa paving on which the row of four altars stands (**Figure 17**). This early altar, its platform, and the temple are thought to have been built as a single construction project (attested by the unworked blocks where the platform meets the façade of the temple) (Zevi 1970:103). The placement of this altar was placed too close to the temple for it to have left room enough between itself and the original pronaos for a frontal staircase (hence the staircases from the sides). The seaward turn of the via della Foce, away from the direction of the original coast road was, perhaps not coincidentally, almost exactly due west. Although the topographical rather than the

geographical alignment of this street was no doubt the primary consideration in the orientation of the temple, the happenstance of the road's neat east-west cardinality would not have escaped the notice of the temple's builders. Even without a frontal staircase and central access point to the temple, the altar's set location due east would be important; as Vitruvius writes in his famous dictum (IV.5.1),²⁴ altars should be on direct axis with their temples and face due east, in other words, *more or less* toward the rising sun, in accord with ritual procedures (see Chapter 5).

Arguably, the cardinal orientation of this temple can be seen as an important contributing factor in determining its location within the sanctuary, ascribing a determining role to the setting of a sacrifice. For the temple both to face both due east and the sanctuary entrance and for it to be linked to the principal thoroughfare leading into the city and its trade routes from the harbor, there was no other possible location within the sanctuary for its construction. As the first actual temple built in the space, the Temple of the Round Altar asserts its importance not by the grandeur of its design or of its construction materials, but rather through its acute grafting of local topographical meaning onto a universalizing regional trend. Coinciding with the more or less common orientation of temples throughout Rome and Latium in the late 3rd- early 2nd century B.C.E. (for example, the temples at Largo Argentina), the placement of this temple, and perhaps, even more importantly, its altar, to face an azimuth of exactly 90°, presents the

²⁴ *Regiones autem, quas debent spectare aedes sacrae deorum immortalium, sic erunt constituendae, uti, si nulla ratio impedierit liberaque fuerit potestas, aedis signumque quod erit in cella conlocatum, spectet ad vespertinam caeli regionem, uti, qui adierint ad aram immolantes aut sacrificia facientes, spectent ad partem caeli orientis et simulacrum, quod erit in aede, et ita vota suscipientes contueantur aedem et orientem caelum ipsaque simulacra videantur exorientia contueri supplicantes et sacrificantes, quod aras omnes deorum necesse esse videatur ad orientem spectare.*

somewhat conservative space of the Sacred Area of the Republican Temples at Ostia in a surprising new light – as a forward-looking, noteworthy party to the growing fashion in the Roman world for eastward-facing temples (a model that would become increasingly popular in the later Republic and Imperial period).

At some point after the construction of the Temple of the Round Altar and before the construction of the Tetrastyle Temple, the *temenos* of the sanctuary expanded to the north (**Figure 18**). The tufa paving on which the four altars rest was extended to the north, covering the ancient road sometime before the construction of the Tetrastyle Temple. Pick marks in one corner block of this tufa podium suggest the cutting of a foundation trench for the construction of the podium of the Tetrastyle Temple (**Figure 19**). The street, extending from the northern wall of the *castrum*, which originally bound the sanctuary, passing directly behind and in line with the group of four altars, was destroyed and the limits of the sanctuary expanded to the via di Amore e Psyche. The Tetrastyle Temple has its back directly abutting this street. The obliteration of the original boundary of the sanctuary, however, was memorialized in a way – the altar of the temple was constructed directly on the path of and in line with the ancient street (**Figure 20**).

The incredibly close and unorthodox proximity of this altar to the stairs of the temple (about 70 cm) is striking; altars are usually placed at a much greater distance from the base of the stairs (if for no other reason than to accommodate the ritual officiants and audience) (**Figure 21**). The deliberate placement of this altar directly over the ancient road privileges the preservation of the most ancient character of the sanctuary even at the cost of what must have been disturbing alterations in traditional ritual performance practices. The altar is making an active statement, is emphatically determining the

character of the enacted ritual. Just as the two earlier sacred complexes within the sanctuary smoothed over the troubling transition evoked by the crucial placement of an awkward node in the city's street system, the altar of this newly added temple was superimposed on, memorialized, and smoothed over the eradication of the ancient road that represented the regularizing, right-angle closure of the triangle, the leg that determined the placement of the four altars and the sanctification of the Area. This placement underscores the continuing significance for this sanctuary of the memory of Ostia's ancient streets and infrastructure. On further evidence, it may turn out, on further evidence not, as would appear at first sight, that the street was obliterated to make room for the temple, but rather the other way around – the street may have vanished in some larger urban renewal project, with the temple inserted as a compensatory gesture.

Not only does the Tetrastyle Temple insert itself into the most ancient character of the sanctuary through its altar's placement on the ancient *temenos* street, but the temple also follows the altar through conserving and maintaining the orientation of the first series of sacred monuments in the zone – the group of four altars which, in their turn, followed the line of the street that now existed only in memory. The Tetrastyle Temple and its altar are oriented to 150°, exactly at the same azimuth as the row of altars, the north and south walls of the *castrum*, and its *Decumanus* (**Figure 22**). It is important, however, to highlight the fact that although the altar of the Tetrastyle Temple and the row of four altars are all oriented in the same direction, these structures are not in direct line with each other: the southernmost extent of the altar of the Tetrastyle Temple is located at a short but still noticeable distance from the northernmost extents of the row of four altars (**Figure 23**). Furthermore, at this period, the entrance to the sanctuary was certainly off of

via della Foce and thus the Tetrastyle Temple would be almost in line with the point of access to the space. In the changing urban setting of 1st century B.C.E. Ostia, the Tetrastyle Temple respects and alludes to, but does not supplant, the most ancient character of the sanctuary.

The last temple constructed in the Area was also located in such a way as to refer to the sanctuary's most ancient boundaries. The Temple to Hercules, nearly contemporary with the Tetrastyle Temple, was constructed directly over the vanished ancient roadway that formed the triangle's original northern border, with the buried street lying almost in line with the diagonal of the podium of the temple (**Figure 24**). The flank of the Temple to Hercules, then, does not directly abut the ancient roadway (as the flank of the Temple of the Round Altar abuts the via della Foce), but rather is oriented to face the via degli Horrea Epagathiana, and, beyond, the city center.²⁵

As the placement of the altar of the Tetrastyle Temple respects the orientation and placement of the group of four altars without intruding on their space, so too can the altar of the Temple of Hercules be seen to allude to these earlier structures, their setting, and their directionality. The placement, materials, and orientation of the earliest altar of the Temple of Hercules are not entirely clear. The later brick altar in front of the temple's façade dates to the late 1st century C.E., constructed after the Flavian repaving of the area (**Figure 25**).²⁶ It is perfectly conceivable and reasonable to assume that this later altar

²⁵ While it may be merely a coincidence, the axis of the Temple to Hercules, 78°, directly faces the altar in the forecourt of the Capitulum in the center of Ostia. For more on the Capitulum, see Pensabene (2007:250ff.).

²⁶ Pensabene (2007:59) states that in the end of the 1st century B.C.E., in the Flavian period of the sanctuary (most likely in the Domitianic period to be precise), the streets around the sanctuary were raised 1.5m and the ground level of the sanctuary itself was raised 0.5 m. Mar (1990:149-150). According to Mar

was placed on the location of and at the same orientation as the original, Republican altar. As will be discussed in depth in Chapters 5 and 6, when new altars were constructed, they were almost always located at the exact position and orientation of their predecessors, a preservation of placement that can be seen, for example, in the series of successive altar constructions at Largo Argentina (as well as the Lapis Niger or S. Omobono).

The altar in the forecourt of the Temple of Hercules, while not oriented in the same direction as its temple, most likely preserves the placement of the earliest altar. The skewing of axial alignment between the two monuments is insufficient cause for arguing against the assignment of the present altar to the Temple of Hercules (see note 27). As will be discussed in Chapter 5, altars do not necessarily have to be in exact axial alignment with their temples, but rather their orientations may be determined by other spatial, topographical, natural, or celestial considerations. In the Sacred Area of the Republican Temples at Ostia, the altar of the Temple of Hercules was located and oriented in such a way as to conserve the sacred character of the earliest structures on the site. The altar was placed centrally in the temple forecourt but oriented about 16° off-axis with the temple, with its long side turned away from the façade of the temple, its southward orientation not in the direction of the temple but instead about 150°, the same direction as the altar of the Tetrastyle Temple and the group of four altars (**Figure 26**).

(1990:152) and Pensabene (2007:51), this altar replaces the buried altar of the Tetrastyle temple (buried after the area was elevated by approximately ½ meter in the Flavian period (Mar 1990:151) and does not relate to the Temple of Hercules since the latter temple incorporated an altar on its pronaos. The problem, however, with such a hypothesis is that the late 3rd century C.E. altar dedicated to *deo Herculi invicto* on the pronaos of the Temple of Hercules is of a much later date (Boin 2010) than the Flavian paving of this area, and thus we cannot assume that the Temple of Hercules was without an altar for two centuries. See Chapter 1 for a discussion. An earlier phase of the altar, perhaps constructed after the late 1st century C.E. repaving of the area and before the Flavian repaving, can be seen in the lower courses of the foundation of the in-situ altar.

The altar, therefore, at no small cost in architectural aesthetics, disregards the orientation of the Temple of Hercules in favor of the authority of the orientation of the earliest sacred structures on the site. In addition, the large altar is set 5 meters from the southernmost side of the Tetrastyle Temple's altar, almost (but not exactly) in direct line with the earlier structure (**Figure 27**).

Natural Features

The Sacred Area of the Republican Temples at Ostia was, for the most part, defined and, in some ways, determined by the roads that formed its boundaries. But the significant natural features of the landscape in the immediate vicinity also played important contributing roles. Landscape serves not only as background context for material constructions but natural topography itself could determine the selection of sites for the placement of sacred monuments. Richard Bradley (2000) comments on the importance of natural features in determining a sacred space, lending agency to the landscape, adding layers of meaning to the space beyond the monumental architecture. Following Bradley (2000:35), the importance and significance of natural places are demonstrated through evidence of continuous human attention to the natural singularities of the place; such specialized repeated attention can clearly be seen at the Sacred Area of the Republican Temples at Ostia.

At this sanctuary, the presence of water was the principal natural feature lending sacrality to the space. For Bradley (2000:35), running water was especially significant in

the selection of a sacred site²⁷ and sites with natural water sources would have undoubtedly “borne a religious significance” to the minds of the Greeks or Romans initially selecting the sacred space (Dunant 2009:295).²⁸ Water could equally be integrated into a sanctuary’s topographic setting or into the ritual or myth associated with the site or divinity. In Greece, for example, numerous hand basins (*perirrhanteria*) located in sanctuaries highlight the importance of this act of purification in ritual. Beyond these more infrastructural, practical uses, water could also have a symbolic significance within religious practice,²⁹ with water acting as a “religious tool” (Dunant 2009:294). This is not to suggest that all water was inherently sacred; there were distinct preliminary practices, in particular rituals, that could imbue water with religious significance (Feldman 2011:197).³⁰

As an essential component of ritual performance, water was used both for the purification before the sacrifice and for the cleaning up after the slaughter was complete. McCauley (2014:160) argues that the people themselves are the potential contaminants to the space and that “inducing participants’ awareness of some sacred object or space

²⁷ Pliny *NH* XXXI.

²⁸ For the divine nature of running water, see Lucretius 5.945-52. See Holland (1961:8-20) for a discussion of the power inherent in running water. Here, the author comments on the “resident spirit” (9) residing in moving water.

²⁹ See Feldman 2014 who argues that the incorporation of the Selinus River into the Sanctuary of the Red Hall at Pergamon was a deliberate mechanism for evoking the Nile River at a sanctuary dedicated to the Egyptian gods.

³⁰ Although of a very different time and very different religious context, I quote here Tertullian’s (*de baptism 4*) comments on Christian baptism to show issues raised by sacralized water: “Consequently it makes no matter whether one is washed in the sea or in a pond, a river or a fountain, a cistern or a tub: and there is no difference between those whom John baptized in Jordan and those whom Peter baptized in the Tiber - unless perhaps that eunuch whom Philip baptized in casual water in the course of his journeyings obtained a greater, or a less, amount of salvation. Therefore, in consequence of that ancient original privilege, all waters, when God is invoked, acquire the sacred significance of conveying sanctity...” (Translation by Ernest Evans 1964).

creates the need to purify participants ritually. The danger is that they might contaminate the holy artifact or the sacred place.”³¹ Not only people and animals had to be purified by water but, in some rituals, so too did artifacts, spaces, buildings, cemeteries, fields (McCauley 2014:159). If ritual participants must perform actions in such precisely prescribed ways in order to avoid contact with pollutants associated with the physical environment, then it follows that the setting itself should be appropriately purified and precisely structured.³²

Cognitive scientists note that most religious rituals require some sort of cleansing, purification or prophylactic delimiting of space in order to ensure the proper enactment of religious practice. Such inclinations can be seen in a passage in Livy (1.45.6). Here, the author comments on how the Romans dismissed a Sabine bringing a sacrificial cow to the altar of the Temple of Diana because it was a “polluted sacrifice” (*inceste sacrificium*), subsequently ordering the stranger to go and clean himself in the flowing waters of the Tiber (*quin tu ante vivo perfunderis flumine? Infima valle prae fluit Tiberis*).³³ While the Sabine is cleansing himself in the Tiber, the Romans themselves sacrifice the cow (this time however Livy uses the word *immolat* for sacrifice instead of the previous use of

³¹ According to Liénard and Boyer (2006), this need for purity is consistent with the behaviors modeled by the “hazard precaution theory,” responses to a specific set of cues activated in a ritual setting, calling instinctively for precautionary action. For the hazard precaution system to be activated in the context of a well-defined occasion of ritual, the ritual needs to have detailed prescriptions; a determined danger will be implied if there is a failure of exact performance.

³² See Douglas (1966).

³³ A similar story is also related in Valerius Maximus 7.3.1 where before slaughtering the victim, the Sabine must wash himself in the nearby river.

sacrificium). In another passage (27.37.10), Livy describes a sacrifice likewise on the Aventine as being *pure que et caste* (pure and chaste).³⁴

Moving from scholars' theories which argue from ethnographic evidence that our avoidance of pollutants may govern rituals to the archaeological manifestations of such a claim, I want to allude here to the other actual examples of water infrastructure within the sanctuary of the Thirteen Altars at Lavinium, Fosso dell'Incastro at Ardea, Largo Argentina, and S. Omobono that would have served as the practical and technical support for the practice of sacrifice. These natural resources associated with this infrastructure may perhaps themselves have been determining factors in shaping the material character of the sanctuary and the kind of sacrifice performed within the space. For example, at each of the sanctuaries examined in this project, evidence of wells, cisterns, or drainage canals can be found.³⁵ These structures and natural topographic features provide water for both the preparation of the sacrifice, ensuring the purification of both the participants and the space, and for the later clean-up when ritual slaughter is completed – a clear example of ritual infrastructure built into the material design and landscaping of sanctuaries.

Drinkable water was not necessarily a problem in Ostia – ground water existed just below the subsoil. From the 3rd century B.C.E. to the end of the Republic, many

³⁴ *Sabinusque, ut prima apta dies sacrificio visa est, bovem Romam actam deducit adfanum Dianae et ante aram statuit. ibi antistes Romanus, cum eum magnitudo victumaecelebrata fama movisset, memor responsi Sabinum ita adloquitur: 'quidnam tu, hospes, paras?' inquit inceste sacrificium Dianae facere? quin tu ante vivo perfunderis flumine? infima valle prae-fluit Tiberis'. religione tactus hospes, ...*

³⁵ At Ardea there is a well next to the altar of Temple A; at Lavinium there is a stream that passes the east face of the row of altars; at Largo Argentina there is a well to the south of the altar of Temple B; at S. Omobono there are wells on the northeast corners of each of the two altars as well as a large cistern running centrally through the space. See below for a discussion of the water infrastructure at the Sacred Area of the Republican Temples at Ostia.

wells, both public and private, were constructed in Ostia inside and outside the pomerium of the *castrum*, and there was a single underground distribution system for supplying drinkable water (Ricciardi 1996: 72) (**Figure 28**). In general, however, the soil of Ostia was not suited to springs. But a spring with drinkable water existed near the triple intersection just beyond point that was to become the west gate (and perhaps an important consideration in the selection of this particular location as the place for the coast road to make its bend seaward); perhaps this spring explains the later assignment of the name Aqua Salvia to a cult attested in an inscription likely from the area (Ricciardi 1996:74, note 9 discusses the arguments concerning the Aqua Salvia inscription CIL XIV 4280)(see also Chapter 1 for a discussion on the altar from which this inscription came).³⁶ This spring would have been accessed by means of a well-head, whose substructure is still visible on the site today (**Figure 29**). However, as McCauley (2014:161) observes, water in sacred spaces was not used for quenching thirst but primarily for cleansing. This Ostian water source's special character as a rare natural spring rather than a man-made well would have conferred privileged status along with potential religious significance and could have easily itself, as a natural resource, played a role in the original designation of this site as sacred.³⁷ Not all sources of drinkable water were considered equal; there

³⁶ Different water sources had distinct characteristics and qualities. See Pausanias 1.26.5, 3.24.7, 3.24.9 and Plutarch *Lysimachus* 28.4. Springs were separate from rivers in the minds of Greeks and Romans.

³⁷ At the sanctuary of Artemis at Brauron, the site developed around a spring and a cave-like cleft. Votives have been excavated in the vicinity of the spring which itself remained largely unmodified over the centuries of construction in the sanctuary (Dunant 2009:281-283). Springs played a large role in the cult at healing sanctuaries in Greece (for example, the Round Spring at Asclepion in Athens, the proximity of the river to the sanctuary of Pankrates, or the sanctuary to Hercules Pankrates, on the banks of the Ilissos, and the spring at the Amphiarraion at Oropos, a sanctuary later connected with Asclepius). It is tempting here to mention the tentative assignation of the Tetrastyle Temple at Ostia to Asclepius and the dedication to Hercules of the last temple constructed in the Sacred Area of the Republican Temples in relation to the presence of the spring in this sanctuary.

were distinctions of quality which were tied to their specific sites and these localized water resources became focal points for sanctuaries (Dunant 2009: 295, 298). Pliny the Younger (*Epistles* 8.8.6), commenting on the legal conventions for dealing with water that might have sacred associations, states that sources or tributaries of a spring could be considered sacred (whereas the lower courses of this spring might be profane): *Is terminus sacri profanique: in superiore parte navigare tantum, infra etiam natare concessum*.³⁸

This spring at Ostia was not the only available source of water in the sanctuary area; there was also a well (in front of the Temple of Hercules, slightly to the left side) and two cisterns (to the right and left of the Temple of Hercules, which are both Trajanic in date but may have been preceded by earlier cisterns).³⁹ The oval, tufa well was discovered without a superstructure, but originally there was a block of travertine that was lost when the ground level of the area was raised. The well, dated to the end of the 2nd- early 1st century B.C.E., reached a height equal to that of the original foundation of the Temple of Hercules, and was very similar in form and material to wells found within the walls of the *castrum* (Ricciardi 1996:74). In addition to the well and cisterns in the sanctuary, along the passageway between the Temple of Hercules and the Tetrastyle Temple (the route of the buried, ancient street that originally passed directly in front of the Tetrastyle Temple), it is thought that a large dolia was inserted within the street itself to collect water drained from the roof of the temple (later replaced by a large terracotta

³⁸ See Holland (1961:9). A passage from Ausonius (*Opusc.* 11.20.30) emphasizes the sense of the sacred and mystery applied to the unseen sources of water: *salve, fons, ignote ortu, sacer, alme, perennis*.

³⁹ For the cisterns, see Ricciardi (1996:111-113).

jar with a square mouth, now entrenched in a wall which formed the foundation of the Trajanic edifice in the northwestern area of the sanctuary) (**Figure 30**) (Ricciardi 1996: 74-75). While the cisterns date to the Imperial period and are therefore of little direct use in an investigation of the motives underlying the sacralization of this area, these receptacles nonetheless argue for the continuous attention to water in the sanctuary over the centuries of construction.

The ancient, centrally-located well-head of the spring in the Sacred Area of the Republican Temples, situated directly in front of and to the left of a visitor entering the sanctuary, would have been the first structure encountered within the space. A sacrificial procession, presumably, would have entered the sanctuary off of the via della Foce, proceeding past the Aqua Salvia before gathering around any of the altars in the space (**Figure 31**). It is a fairly safe conjecture that water from this spring was used in the purification of the ritual participants (or even sprinkled on the animals) before the sacrifice occurred and that, following the slaughter, the water would have been used to help clean away the blood of the animal. In its proximity to all of the altars in the sanctuary, the position of this monument, no doubt one of the most ancient structures (if not the most ancient structure) in the sanctuary, served as an important organizational marker for the overall architectural layout of the space and perhaps played an important part in determining the character of the sacrifice: it was directly on the route to the row of four altars, to the Tetrastyle Temple's altar, and to the Temple of Hercules' altar. The well-head would have even been encountered in the movement to the altar in front of the Temple of the Round Altar since a sacrificial procession with a large animal would

certainly not have used the small entrance off the via della Foce that led directly into the podium of the Temple of the Round Altar (**Figure 31**).

The location of the ancient spring within the Sacred Area of the Republican Temples at Ostia, outside the walls of the original city, recalls the spring outside the Porta Fontinalis in the Servian walls of Rome or the fountain of Juturna on the Palatine. Pre-sacralization, this spring at Ostia's gateside triangular area would have offered drinkable water to travelers to or from city, harbor, or coast; as a way station, rest stop, or destination, the spring would have attracted attention and directed traffic. In both its rarity within the larger city of Ostia and in its strategic location for travelers along major trade routes, the spring both ameliorates the disjunctive character of the triangular area and, at the same time can supply an eminently sacralizable source of the kind of water necessary for ritual purification thus marking the unique and reverence-worthy character of the site of the soon-to-be Sacred Area of the Republican Temples.⁴⁰

Internal Boundaries. Interactions among distinct sacred structures.

Having examined the exterior boundaries of the Sacred Area of the Republican Temples, with particular attention to the topographic and civic significance of the roads that enclosed the triangular area and its spring, and the interaction of these gateside extramural features with the urban center, we must now question how distinct zones

⁴⁰ It must be mentioned briefly that the sanctuary not only hosted a natural spring but also was strategically placed to optimize access and reference to the Tiber. As mentioned above, the via della Foce is the primary route from the city center to the harbor at the mouth of the Tiber. Placed just off this main thoroughfare, the Sacred Area of the Republican Temples might also be thought to implicitly evoke the Tiber through its architectural layout. The via Pomeriale esterna that originally bounded the sanctuary, the street that passes directly in front of the later Tetrastyle Temple, might have been deliberately constructed to parallel the bank of the Tiber.

within the encompassing space of the Sacred Area were themselves determined and negotiated. As will be shown, the boundaries separating each temple are not very well defined, but what are sharply distinguished are the monuments themselves. McCauley (2014:160) notes that boundaries did not necessarily need to be marked by physical barriers but could be implicated by changes in height, by changes in light and darkness, by changes in colors, or “less directly by diverting pathways around some space or by stations for guards.” The temples, altars, wells, and ancillary structures of the Sacred Area of the Republican Temples at Ostia not only interacted with the outside world, respecting and helping define the official boundaries of the sanctuary, but they also imposed their presence on one another, mutually interacting, reconciling topographical and architectural conflicts, negotiating seemingly invisible boundaries within the sanctuary and distinguishing and demarcating common areas and the separate spaces proper to each temple or altar. However materially clustered or humanly crowded the space, there would have been distinct zones of religious activity each with its own well-defined space. Heidegger further emphasizes the function of boundaries as defining event places; for “events *transform* spaces...[they] transform a network of interconnected structures” (Beck 2007:835-836). Heidegger (1971:154), drawing on the Greek word *horismos*, defines a boundary as a horizon and views boundaries not as barriers but rather loci “from which something begins its presencing.”

Boundaries within a sanctuary might be more fluid than we might expect, off-hand, with respect to a place where ritual activities are governed by strict rules of propriety in architecture. Despite the seemingly rigid, monumental boundaries demarcating the sacred area’s separation from the profane world, within the all-

encompassing sacrality of the Area bounded by the *temenos*, the idea and conception of something like “property lines” extending out into the sanctuary beyond the actual monuments belonging to the various gods and their cults should be called into question. In view of the significant and hospitable absence of material impediment to cross-cultic communication perhaps it is the ritual itself, through continual interaction with its architectural setting, that accomplishes, by observing a reverent and tactful respect for sacred distinctions of placement and movement, the necessary delineation of the space into its functional components.⁴¹

Perhaps physically constructed boundaries are even more notional than previously theorized – confirmations rather than indicators of limits. Tim Ingold, in “Temporality of Landscape” (1993:156), proposes an ambient, unrestricted natural landscape which may allow for the embedding of a boundary but only “in relation to the activities of the people (or animals) for whom it is recognized or experienced as such.” This model fits nicely with McCauley’s formulation mentioned above, the distinct spaces within the sanctuary are defined not by monuments or physical constructions, but rather by the ritual activities associated with or grouped with the religious structures of the temple or altar; for “different spatial configurations created different patterns of co-presence amongst people through their effect on movement” (Hiller and Netto 2001:13.1-13.2). Arguably, it is the ritual participants’ and audience members’ movements, actions localized around the altar in the forecourt of the temple –or, in the case of this sanctuary, the common forecourt – the ritual procession, the animal slaughter, the cooking and eating of the animal – that

⁴¹ See Bafna 2003 for a discussion of boundaries and the social logic and structure that is created by different types of boundaries.

serve to focus or organize the sacred space. Ritual and religious structures together are what define and categorize the space.

If we are to follow Ingold and regard the interior of the Sacred Area of the Republican Temples as a sanctuary with multiple and variable boundaries, with limits continually being redefined by the action of sacrifice, then in some sense it is the ritual calendar itself and not the sanctuary's architectural layout that helps to provide some sort of structure or boundaries, however movable along with their respective feasts, to the actual topographic space. Within this triangular sanctuary, a space without rigid separations between the functional zones of its temples, and in which the interaction between the different religious structures is heightened (as will be discussed below), the sacred area becomes more of a shared space (a "time share" if we may be permitted to use a modern term), with different ritual activities occurring at each of the different temples or altars on different days in the annual cycle of the ritual calendar.⁴² The altars then do not close themselves off from but rather lend their space to their neighboring monuments. A ritual participant would be aware of the crowded, architecturally-clustered surroundings, of the other activities occurring within the sanctuary, but would at the same time be focusing on one event. The imposition of rigidly defined zones surrounding each temple or altar sharing this one tightly confined space would be counterproductive. Cyclically-changing ritual asserts its own inherent performance boundaries, correspondingly adjusting and re-emplacing, on a regular basis, the notional space of the sacred area.

⁴² It is also possible that sacrifices (animal or bloodless) could be occurring simultaneously at each of the separate altars. This increased activity would heighten the sacrality of the area and further serve to reinforce the implied boundaries between the separate sacred zones within the sanctuary.

Ingold's experiential model focuses our attention on the variability and multiple perspectives accompanying a ritual sacrifice: each individual (officiant, attendants, audience) apprehends the space (or, since we are talking about ritual, embodied actions here, "place") differently and conceives the limits of the sacred in his/her own way (see Rodman 2003 for a discussion of multivocality and multilocality in specific settings). These multiple perspectives inherent in ritual underscore the need for the approach that is taken throughout this dissertation; the practice of sacrifice needs to be studied with fresh eyes, approaching ritual not in the usual way, as an expression of beliefs, but with a set of theoretical tools that will help us to conceive of sacrifice as an experience, an event provoking a number of different reactions and understandings. The view of the variability of spatial conception is supported as well in Doreen Massey's *For Space*. Here she argues that boundaries are constantly being penetrated, a transgression that emphasizes the fluidity of space. Massey sees places as "open...as a particular constellation within the wider topographies of space" whose boundaries are "selective filtering systems; their meaning and effect are constantly renegotiated. And they are persistently transgressed" (2005:130, 131). It was not only the ritual officiants or the attendants who in this view would aggressively demarcate the sacred space but also the sacrificial audience, their audiovisual experience of the slaughter, the "visual absorption," determined by their placement and proximity to the altar (Mylonopoulos 2006:93).

Following Massey's claim for the fluidity of space, we must ask how this abstract theoretical model can help us understand the monumental structures and their relations within the space. During the successive building campaigns, the three temples and altars within this sanctuary are constructed in such a way as to complement and allude to one

another, to maintain their separation yet encroach upon and even make material contact with their neighboring monuments. Over the two centuries of renovation and expansion within the sanctuary, however much they might be refashioned or developed the most ancient temples and altars remain in continual use. Both materially and institutionally corporative, the sanctuary manifests in its architecture the constant renegotiation and redefining of boundaries entailed through the performance of sacrifice. The memory of this repeated interactive material reconfiguration of the various temples and altars signals the empowerment of the overall architecture of the complex to defy rigidly conventional concepts of separation and to set its own flexible terms for the interpretation and use of the space; for as Richard Bradley states (1993:129) “monuments feed off the associations, not only of places, but also of other monuments. Monuments are enhanced and rebuilt; they are reinterpreted and changed; and new constructions are created around old ones.”

Exemplifying Massey’s “fluidity of space,” the temples and altars in the Sacred Area of the Republican Temples interact with each other in orientation as well as in their layout and construction details. As mentioned above, the group of four altars and, subsequently, the temple and altar of the Tetrastyle Temple, and finally the altar of the Temple of Hercules are all oriented in the same direction, at 150°, echoing the seemingly standardized orientation of the temples of the *castrum* (**Figure 32**). This compelling, preservationist and yet not absolutely determining motivation in the selection of an altar’s alignment (the temples of the Round Altar and of Hercules are exceptions) can perhaps be read, moreover, as a means of reconciling potential distinctions and divisions among the different structures, creating literal and symbolic parallels in the contemporary space,

and evoking the memory of past constructions and their rituals. Each monument is its own physical structure, in its own specific location; but in similarity of orientation, the various altars are all in some ways interrelated, in communication with each other, blurring boundaries.

The undoing of boundaries, the renegotiation of the distinct individuality of spaces, is perhaps most apparent with the construction of the final temple in the sanctuary – the Temple of Hercules. When the Temple of Hercules was constructed in the early 1st century B.C.E. its podium was surrounded by a drain channel that directly intersected with the northwest corner of the podium of the Temple of the Round Altar (Pensabene 2007:67) (**Figure 33**). The Temple of Hercules appears to respect and functionally engage with the area of the sanctuary fronting the earlier temples and altars, sharing quite equitably with its predecessors the privileged space that, both before and after the new temple's construction, would have served as common forecourt. At the same time, the aggressive new-comer seems to absorb for its podium with its drain channel most of the remaining, less ritually active area of the sanctuary north of the Temple of the Round Altar and west of the Tetrastyle Temple.⁴³ The physical contact of flank and corner between the two western temples (the Temple of the Round Altar and the Temple of Hercules) challenges the idea of a strict zoning of the space between separate temples in a sanctuary; the structures, meeting at an angle of about 11°, communicate not at their point of contact but through their architectural participation in the activities occurring around

⁴³ Perhaps we can assume the likelihood of such practical considerations as the existence of surrounding structures, predecessors of the Trajanic buildings presently on the site (especially structures south of via Cupid and Psyche, the new notional *temenos* created by the construction of the Tetrastyle Temple) limiting the extent of Temple of Hercules and thus determining its orientation goes a long way in explaining the off-axis skewing of the temple's altar – its tuning away from the seemingly meaningless alignment of its temple and its turning toward the orientation of its fellow altars.

them (**Figure 34**). The open triangular wedge-like sliver of space between the flanks of the two temples defined by their overlapping podia granted access – presumably even accommodating ritual processions – to the Temple to the Round Altar by its right-hand staircase (most likely still extant at the time of the initial construction of the Temple of Hercules) (**Figure 35**); here, space clearly imposed its authority over the procedure and appearance of ritual.

The Temple of Hercules not only merges its functional podium space with that of the Temple of the Round Altar but its altar, in its orientation, actively asserts its close ties with the altars of the Tetrastyle Temple, the group of four altars, and their common forecourt. As mentioned in passing above, the construction of the altar in the forecourt of the Temple of Hercules, almost in a direct line with the altar of the Tetrastyle Temple, could be read as a physical encroachment by the big new temple-altar complex upon the ritual area of its elder neighbors. However, such a placement, both by respecting the orientation of the earlier altar and by setting itself slightly out of line with the Tetrastyle Temple's altar could, conversely, be understood as a means of respectfully joining and participating in but not supplanting the sacrality of the earlier altar.⁴⁴ The central placement of this altar in the common forecourt suggests as well the absence of a strictly defined pre-existing zone encompassing the altar of the Tetrastyle Temple (**Figure 36**).

When the altar of the Temple of Hercules was the stage for sacrifice, the Tetrastyle

Temple's altar was merely part of the surrounding sacred background architecture and

⁴⁴ See note 26. Mar (1990:152) and Pensabene (2007:51) actually argue that this altar is a late replacement of the altar of the Tetrastyle temple buried after the Flavian repaving of the area and does not relate to the Temple of Hercules. However, the question must then be raised as to where the altar belonging to the Temple of Hercules was located (since Mar argues, based on the placement of a later 3rd century C.E. altar dedicated to *deo Herculi invicto*, that the Hercules altar was relocated from the forecourt to the pronaos of the Temple).

not a competitor for the space or for ritual attention (and, of course, vice versa, for the sacrifice occurring at the altar of the Tetrastyle Temple) (**Figure 37**). Perhaps we should see the multiple altars in the central space of this sanctuary as material transmitters of past experience, resonating with one another, amplifying the memory of ritual and the sanctity of the space.

Ritual as Boundaries: Actors and Audience. Mapping the Space

Following Ingold and Heidegger who see boundaries as defined by ritual activity, as “event places,” it cannot be that the material center and focal point of the sacrifice, the altar upon which the animal is slaughtered, determines the spatial extent of the events occurring at the sanctuary’s various altars. The sacrificial procession must in some way respect, or even create, these implicit, fluid indicators of distinct sacred zones within a larger, bounded space of a sanctuary.⁴⁵ For places draw their “unique significance” from the “relational context of people’s engagement” with that particular place (Ingold 1993: 155). Accordingly, we need to consider the interdependence of ritual and its setting, how each informs the other, how the determining authority of the space can only be understood in the context of the enacted ritual. In some sense then, the sanctuary acquires its character from the ritual itself, “places come into being through praxis” (Rodman 2003:207). If the sacrificial procession and the slaughter of the animal on the focal altar served to delimit sacred boundaries and helped to determine how and physically where the sacrificial audience would experience and participate in the ritual, then perhaps we should begin viewing these temples and altars less as material structures that, in their

⁴⁵ For processions, see Bernstein 2006.

aggregate, *are* the sanctuary but rather see them as forming the material context and reminder of the ritual actions, present and past, that generate the space. As Mylonopoulos argues (2006:107), the rituals themselves are what is “necessary for the mental and, at the same time, spatial comprehension of the sacred space.” The architectural structuring of the sanctuary becomes, then, the material manifestation of ritual action, while the action itself can be thought of as taking on the role of a “formulaic spatiality” impressing itself upon and structuring the material sanctuary (Parkin 1992:17).⁴⁶

If Roman sacrificial processions did have these kinds of internal arrangements then the act of moving through a particular space in a specific way with a defined order becomes a means to impose structure both on to the climatic act of sacrifice as well as on to the space in which the ritual is performed; ritualized movement should be considered the “‘strong force’ that holds the urban system together” (Hiller 2001:02.2). Perhaps then it is the ritual participants themselves, and not just the supporting architecture, that serve

⁴⁶ The calculated ordering of the architecture of the sanctuary was complemented by the inherent order and “inner logic” characteristic of Greek and Roman sacrificial processions (Mylonopoulos 2006:72). It should be mentioned here that we are reliant on the visual and textual depictions of processions for details about their orderings, procedures and other characteristics. For Roman processions see Ryberg (1955:191ff., particularly for a discussion of late Republic and early Imperial depictions of sacrificial procession) and *ThesCRA Vol. 1* 2004: 33ff.. Ryberg (1955: 191) comments that the procession of priests and worshipers was particularly conservative, formalized, and regular, whereas the procession of victims could be less ordered. For some examples of literary passages on Roman processions and the order inherent in these rituals, see Pliny *Panygrics* 23.3; Plutarch *Aem.* 32.3 (for the triumph of Aemilius Paulus). For sacrificial processions, see Lucan 7.165-166; Plutarch *Aem.* 33.2. Also from extant Greek evidence (depictions on 6th century Attic black figure vases as well as epigraphic and literary testimony), it is clear that sacrificial processions had a prescribed manner and structure. For example, see the inscription from Messenian Andania (*IG V 1*, 1390.28-34). Depictions on Greek vase paintings as well as on Roman reliefs or altar show processions that are made up of a leader of the group, a group of altar attendants with sacrificial animals, musicians, and other attendants (Mylonopoulos 2006: 73). For example, a depiction on an Attic black figure band cup from the Niarchos Collection in Paris dating to 560-550 B.C.E.. For examples on Roman altars or reliefs, see the Altar of Aheneobarbus (**Figure 38**), the Borghese Altar, or the Cancelleria frieze, discussed in Ryberg 1955.

as a “living medium of communication, when they [the ritual participants] connect points of crystallisation of the cult by means of the ritual *kinesis*, in order to confirm the religious topography of a city, a region or even a sanctuary” (Mylonopoulos 2006:108). This conception of ritual processions and place-choreographed movement as actions that help to define sacred space exemplifies Edward Casey’s insistence on the interaction among body, place, and motion, in his argument that “culture is carried into places by bodies” (Casey 1996: 34).

The entire procedure of Roman sacrifice necessitated order. If the boundaries between the various temples within the Sacred Area of the Republican Temples at Ostia were in fact fluid as argued above, emanating differently from different altars at different annual sacrifices, then control over the extent of the area thus encompassed would have had to be achieved through other means – the ordered channeling of ritual movements. The overall architecture of the Sacred Area of the Republican Temples orchestrated the large-scale movements of the ritual participants during a sacrifice in an extremely precise way. The different cult monuments in the area were themselves mutually connected and engaged in a type of communication, a conversation reflected in the flexible management of processional traffic and in the manipulation and diversifying of the experience of space.

Sacrifice and Processions in the Sacred Area of the Republican Temples

Although informed and impacted by neighboring structures and by the overall setting and plan of the sanctuary, the procession to and the spectacle of animal sacrifice centered around a particular altar would have taken a distinct form and character for each

individual monument. During the earliest phases of the Sacred Area of the Republican Temples at Ostia, when only the row of four altars and the Temple of the Round Altar shared the then uncluttered space, the sacrifice occurring in one of these areas would not have necessarily affected the other sacred region (**Figure 39**). Placed at a reasonably comfortable distance, in opposite corners of the sanctuary, the separate groupings of altars would have easily co-existed and would not have been competing for the attention of the ritual spectators. The notional boundaries of each sacred area within the larger sanctuary would not be challenged by others within the space, but rather their extents were more determined and defined by the close proximity of the streets that bound the entire sanctuary and determined the placement of the two complexes (the via degli Horrea Epagathiana and the via Pomeria Esterna for the group of four altars and the via della Foce for the Temple of the Round Altar). The Temple of the Round Altar would remain in its original isolation from the open area in the east of the sanctuary – distinct, self-contained, and fairly unaffected by the successive constructions of the other altars in the “forecourt” space.⁴⁷

But with the construction of the Tetrastyle Temple, followed soon after by the Temple of Hercules, a sacrifice at the group of four altars would certainly have taken into account the presence of the new, neighboring cult monuments. With the addition of the Tetrastyle Temple and its altar, a sacrificial procession to the group of four altars entering the sanctuary off of the via della Foce, passing the well of the Aqua Salvia, would have had to move past the altar of the Tetrastyle Temple on the left (**Figure 40**); at a slightly

⁴⁷ It is intriguing to consider the possibility that during the phase of the sanctuary when only the Temple of the Round Altar and the group of 4 altars shared the space there was actually a temenos dividing the sanctuary and it could therefore be thought of as two separate sacred spaces.

later period, with the construction of the Temple of Hercules and its altar, such a procession would have to maneuver past either the right or left side of the altar of the Temple of Hercules and then past the altar of the Tetrastyle Temple (**Figure 41**). These two altars would have undoubtedly suggested the topographic limits of the sacred area surrounding the group of four altars, while simultaneously restricting the available area for the sacrificial audience. The Tetrastyle Temple's altar would have determined the northern and western limits of the area of the four altars; the altar of the Temple of Hercules would have marked the southern and western limits. The eastern limit was determined by the *via degli Horrea Epagathiana*. The available space for the sacrificial audience would have been cramped, and given the squat appearance and modest dimensions of the altars (129 x 102.5 x 57.5cm), it would be quite difficult to view the actual act of slaughter from even a short distance away (**Figure 42**). Perhaps, therefore, we should imagine that these altars were the site of sacrifice of smaller animals, such as chickens,⁴⁸ other birds or rodents, and, or even of bloodless vegetal sacrifices, and not the larger, more common cows, sheep, or pigs of grander, communal sacrifices.⁴⁹

Just as the other altars delimit the area available for the spectacle of sacrifice around the group of four altars, so too would the Temple of Hercules' altar and the group of four altars mark the available ritual "arena" (to use Catherine Bell's term) for both spectators and the officiants attending a sacrifice at the Tetrastyle Temple. These architectural features would bound the space and simultaneously impact and heighten the

⁴⁸ In Roman custom, roosters or chickens could be sacrificed as well as serve in divinatory rites (Pliny *NH* 10.49).

⁴⁹ Given the absence of faunal data from these altars, all this must, unfortunately, remain pure speculation. But given the only quasi-monumental dimensions of the four altars, it seems reasonable to state that these were not the locations of large animal slaughter.

experience of the animal sacrifice. Before the construction of the Temple of Hercules and its altar, the Tetrastyle Temple and its altar would be directly in sight of someone entering the sanctuary off the via della Foce. With the east bounded by the group of four altars, the ritual participants and audience could fill the considerable open spaces of the sanctuary to the south and to the west of the altar.

The monumental altar of this temple, visible to spectators in the central court from a number of vantage points was most likely the stage for the slaughter of a large animal, a caprine, pig, or, even, a cow.⁵⁰ And if the four altars to the east of the Tetrastyle Temple's altar really were the stage for smaller scale offerings, then their proximity to the later temple's larger altar would not have been interpreted as signaling competition for the attention of the visitors to the sanctuary. Perhaps the very juxtaposition of altars satisfying complementary needs – one the destination and focus of large communal animal slaughter, the other designed for smaller, more personalized animal or bloodless sacrifice – served to amplify the religious functionality of the area, representing architecturally, the multiplicity of ways to experience the sacred.

With the construction of the last major temple in the Sacred Area of the Republican Temples, the Temple of Hercules, the sacred area surrounding the altar of the Tetrastyle Temple is dramatically redefined (**Figure 43**). The southern boundary surrounding the Tetrastyle Temple's altar is now limited by the construction of the altar of Hercules less than 5m away, and the western boundary is confined by the podium of

⁵⁰ If we follow the assignment of this temple to Asclepius (based on the sculpture found at the base of the stairs), then we might expect to find cocks as the sacrificial offerings. At other sanctuaries to Asclepius throughout the Mediterranean the faunal remains of cocks are very common. See Dignas 2007 for more information about Asclepius and his connection to the cock.

the Temple of Hercules itself. During a sacrifice at the altar of the Tetrastyle Temple, the audience would have been drastically compressed and possibly more exclusive. But perhaps this newly altered topographic situation would not have been entirely disadvantageous for the sacrifice centered at the altar of the Tetrastyle Temple. If the altar of the Temple of Hercules did, cumulatively, over time, unfavorably affect the altar of the Tetrastyle Temple then, presumably, the earlier altar would have eventually been demolished or gone out of use. We do know that the altar of the Tetrastyle Temple was in fact buried in the Flavian era repaving of the sanctuary; but given the almost contemporaneous construction of the two temples some 100 years or so earlier, it seems highly unlikely that the altar of the Tetrastyle Temple would have been intentionally surpassed in use or purpose so soon after its initial construction. Therefore, perhaps both the new exclusivity of the forecourt space imposed by construction of the Temple of Hercules and the proximity of the two altars entailed a sacrifice at the altar of the Tetrastyle Temple that was more specialized and, if size counts, more individualized, than the large, full-court, communal sacrifice that surely would now have fallen within the purview of the cult at the Temple of Hercules.

The ritual at altar of the Temple of Hercules and the space around it would in turn be restricted to the north by the altar of the Tetrastyle Temple and, as well, to the east, by the group of four altars, and to the west by the Temple of Hercules itself. With the ritual officiant standing at the altar of the Temple of Hercules facing to the south, his back would have been to both the Tetrastyle Temple and to the group of four altars. It seems fairly unlikely that any of the surrounding audience would have gathered behind the officiant, hence the 5m space between the altar of the Tetrastyle Temple and the altar of

the Temple of Hercules would have been unoccupied thereby respecting the notional limits of the sacred area belonging to the altar of the Tetrastyle Temple. The well-head of the spring, on a direct line between the entrance to the sanctuary and quite close to the altar of the Temple of Hercules, though seemingly co-opted by that altar would not have surrendered its importance to the sacrifice at other the seven altars nor its significance for the sanctuary as a whole; this well would have therefore been thought of as independent of the particularized internal sacred boundaries within the sanctuary and may have in fact been understood as the southern limit of the sacred area surrounding the altar of the Temple of Hercules (**Figure 41**).

The continual construction activity at the sanctuary can be viewed as a periodic reinvigoration of the fluid character of the notional boundaries within the sacred space. With the addition of each new temple or altar to the Sacred Area of the Republican Temples, the already existing monuments are forced to accommodate the newcomer and to alter the ways in which they complement, interact, and play off each other. This system of architectural communications, however, must be understood as forming the material response to ritual interactions, the mapping of a network of remembered sacred actions onto sacred space, reflecting the constant dialogue between the sacred space and its enacted ritual.

Continuity. Religious Communities. Patronage

The continuous attention to this one particular area over many centuries ensures the embedding of this specific topography in memory, for in such a setting “the physical landscape becomes wedded to the landscape of the mind, to the roving imagination, and

where the mind may lead is anybody's guess" (Basso 1996:55). After the initial selection of the site as sacred – perhaps, as noted above, due to the fortuitous presence of a unique natural spring lying in the center of the topographically anomalous triangular area which sat beside the gate to the city and the crossroads of major trade routes – the successive construction phases of the various temples, the reuse of certain monuments, the preservation of particular structures, and the burial of others creates a material memory of the sanctuary as an actively used, peopled, revisited place. This is a place that acts as a preservation in the mind of repeated experiences, linking use and place, a perpetuation of ritual tradition to some extent necessarily supervised and managed by the sanctuary's religious communities and their patrons among the city's elite; the sanctuary, its architecture and setting, becomes a constructed narrative in and of itself (Rodman 2003:206).

As will be reiterated throughout the following chapters, the placement of an altar is regarded as sacred and is, in almost all cases, preserved over centuries of reconstruction. Altars are superimposed on each other as ground levels are raised, styles change, or temples are reconstructed (see particularly Chapter 5). At the Sacred Area of the Republican Temples at Ostia, we can see examples of both the careful preservation and layering of altars on top of earlier altars as well as the burial of altars and, exceptionally, the replacement of an existing altar with a new altar in a different location. There may be competing approaches to the construction, presentation, and conservation of the "sacred" over time, reflecting an ideology of space tied not to the prestige and importance of the monument or its placement but rather to the development of the temple and the surrounding sanctuary themselves. The continuation of a sacred space, therefore,

can operate in two distinct modes, one “conservative,” maintaining or reproducing cultural patterns, and one “generative,” optimizing the space for contemporary purposes (Hiller and Netto 2001: 13.2). These alternative approaches to curating and conserving the sacred can best be seen by examining relations between the group of four altars and the Temple of the Round Altar.

The four altars are first constructed in the late 3rd- early 2nd century B.C.E. on a paved tufa podium. As evidenced by the regular, clear cuts in these tufa blocks, the original limit of this podium on the eastern side was in line with the side of the 3rd altar; the limit on the western side was at a distance of about the width of a block beyond the western-most altar in the row (**Figure 44a and b**). It appears that this podium initially would have abutted the original street (the via Pomeriale esterna) that paralleled the row of the three altars to the north.

This area does not seem to have gone into significant decline with the construction of the Temple of the Round Altar. Rather, at some point between the altars’ original construction and the construction of the Tetrastyle Temple in the early 1st century B.C.E., the podium on which the four altars stood was expanded to the north to cover the ancient street (this phasing is made clear by the pick marks on one of the blocks of the tufa podium made during the creation of a foundation trench for the construction of the podium of the Tetrastyle Temple) (**Figure 19**). This expansion of the space and boundaries of the area associated with the four altars underscores their continuing importance.

While we don’t know details of the exact use of these four altars during the Republican period, we do know that they received elaborate attention (in terms of

building projects) in the Imperial phases of the sanctuary. Most likely dating to the Trajanic period, the altars are bound by an enclosure wall (still preserving the altars as open air monuments) and linked to a bath building, the enclosure serving as the atrium of the thermal edifice, accessed through doorways and, visually, through windows (Mar 1990: 153).⁵¹ And after this phase, in the 1st half of the 2nd century C.E., the altars are bounded again on all sides by a retaining wall that incorporates a little patio, with a side portico and a small shrine on the southernmost wall; benches line three of the walls (Mar 1990:159; Pensabene 2007: 53) (**Figure 45**).

The four altars are never reburied, dismantled, or repositioned. Instead, from their initial construction to the expansion of their podium at some point in the 2nd century B.C.E. (before the Tetrastyle Temple was built), to their enclosure and connection to the thermal edifice in the Trajanic period, and finally, later in the 2nd century C.E., to the inclusion of a shrine directly on axis with the row of altars, this most ancient space in the sanctuary was carefully preserved and curated. While the remainder of the sanctuary was continually repaved and the ground level raised, while other altars were remodeled or repositioned, this area associated with the four altars was maintained, cared for, and deliberately incorporated with later utilitarian and religious constructions (**Figure 46**).⁵²

The continued attention to another notionally-delimited monumental area within this sanctuary manifested itself in a very different, “generative” rather than

⁵¹ Mar (1990:158) suggests that these altars may have been incorporated in the 2nd century C.E. into a bath complex.

⁵² Not only do the standing remains and what they tell us about their construction phases reveal the continuous attention to this space over five centuries, but epigraphic evidence, perhaps connected to these altars, might also testify to their religious importance during the Imperial period. See Chapter 1, page 74, note 50 for a discussion about the Imperial inscriptions (CIL XIV 341, 373,432, 4625, 4671) that Meiggs uses to argue for a potential group of people who controlled these altars.

“conservative” manner. In the various reconstructions and reconfigurations of the Temple of the Round Altar, the sacred area is continually redefined and re-imagined, while preservationist considerations are clearly secondary. These reconstructions can perhaps serve as concrete evidence for a continuous re-appropriation of the space, which may have been tied to changing patronage in addition to the normative need for expansion and adjustment in response to changes in architectural fashion or increases in consumer demand from a growing population. Already from the first post-Republican reconstruction of the temple in the Augustan period, the altar was physically embedded in an altered system of messages. At this moment, the Republican cylindrical altar was refashioned, its platform enclosed by three reused travertine blocks with Greek inscriptions (**Figure 47**);⁵³ these blocks are thought to originally have come from statue bases (reporting the name of the person who the statue represents, specifying briefly the activities of that person, and relating the name of the sculptor).⁵⁴ Perhaps originally late-Republican donatives from the sanctuary forecourt, these reused blocks cannot have been moved later than the Augustan period (Zevi 1970:110). The act of physically embedding and surrounding the altar of this temple with reused statue bases with Greek inscriptions combines features characteristic of the reuse of already sacralized, neighboring

⁵³1. ΠΛΑΤΩΝ Ο ΤΗΣ ΑΡΧΑΙΑΣ/ΚΩΜΩΔΙΑΣ ΠΟΙΗΤΗΣ/ ΛΥΣΙΚΛΗΣ ΕΠΟΙΕΙ ; 2. ΑΝΤΙΣΘΕΝΗΣ ΦΙΑΟΣΟΦΟΣ/ ΦΥΡΟΜΑΧΟΣ ΕΠΟΙΕΙ; 3. ΧΑΡΙΤΗ ΘΕΜΙΣΤΕΥΟΥΣΑ/ ΕΝ ΔΕΛΦΟΙΣ/ ΦΡΑΔΜΩΝ ΑΡΓΕΙΟΣ ΕΠΟΙΕΙ. Phradmon and Phyromachos are known, significant masters in the Hellenistic period. Lysikles is largely unknown.

⁵⁴ The bronze statues originally belonging to these bases should be thought of as valuable votive donations to the sanctuary. They are most likely war spoils (Rieger 2004:229). The presence of other military votive dedications in the sanctuary, such as the oracular relief showing Hercules choosing lots with the iconography of warfare (**Figure 48**) or the inscription on the plinth of the C. Cartilius Poplicola statue representing him as an active member in political and military life (**Figure 49**), emphasize the military character of the sanctuary. See Rieger(2004:228ff.) for a full discussion of these dedications and Chapter 1.

monuments, an act commonly practiced at this sanctuary, with the intrusion of a seemingly incongruous presence, presumably originating outside the sanctuary, into the proper space of the altar. The blocks could have easily been incorporated with less apparent impropriety into other areas around the temple without encroaching on the particular religion of the altar. The altar was no longer a monument to the integrity over time of the ritual practiced at the place where it stood but, with the start of the Imperial period, had become the representative of other messages.

In the next phase of the Temple of the Round Altar, in the beginning of the Imperial period, with an expansion of the temple, the earlier cylindrical altar was destroyed (covered over by the frontal extension of the temple's podium) and a new platform was created in the forecourt of the temple for a marble altar (**Figure 50**). This new altar was placed off axis with the temple, departing both from the circular form of the previous altar and from its orientation (See Chapter 5 for a discussion about the significance of the orientation of a cylindrical altar). The structure is oriented at 82° east of north, unlike the orientation of both the temple (89°) and the later altar superimposed above (**Figure 51**). In this phase of construction, a brick colonnade was constructed to the north of the temple's forecourt, continuing to the east along what is now the pathway between the Temple of Hercules and the Temple of the Round Altar (**Figure 52**). The forecourt of the temple, with the new altar as its central focus, is thus delimited, bound by the addition of the colonnade to the north and by the via della Foce to the south.

In the next phase of the temple, after the ground level of the area was raised 1 m, this rectangular-like altar was completely buried, and the altar placed on top of it (**Figure 53**) adopted the orientation of the Imperial temple's alignment (other series of altars

placed on top of one another respect the earlier altars' orientations. See Chapter 5 and 6) (**Figure 54**). With this new altar, the temple changed its appearance, with its front and the sides of its podium widened.

The constant reconfiguring and reconstruction of this temple and its altar suggest the preference for keeping architectural forms and scale in line with changing contemporary tastes rather than following the usual preservationist practice of merely updating the decorative features of a monument while closely respecting time-honored dimensions and basic designs (See especially Chapter 6 on memory and Lavinium). The religious community of Ostia had changed since the first construction of the temple and its altar in the late 3rd or early 2nd century B.C.E.; the sanctuary was developing and expanding. In response to such transformations, the Temple of the Round Altar, and especially its altars, also drastically changed. The various altars of the Temple of the Round Altar in the Imperial period demonstrate an obliteration of the material memory of the earliest altar of the temple. Instead, each new altar signifies a new phase or reuse of this sacred area that coincided with the changing sanctuary and its surrounding buildings, and, certainly, with a changing religious community which had little present use for the traditional practices embodied in the forgotten monuments. Following Hiller's (1998:37) conception of the configurations of space, if one changes a part of the spatial complex, one changes the structural properties of the whole complex as well. While it is true that the ground level of the area around the Temple of the Round Altar was raised and earlier altars would have had to have been buried, it is not necessarily true that the new altars cannot have maintained the same style or orientation as the earlier, buried structures. The marked departure from earlier forms in each successive phase of construction, the

deliberate introduction of discordant new monuments, therefore argues for the privileged re-imaging, reframing, and reconfiguring at the expense of normative preservationist decorum of this particular sacred sector within the Sacred Area of the Republican Temples.

The frequent rebuildings and alterations of this area may conceivably be the result of fluctuations in patronage which may, in turn, reflect larger changes in community. Epigraphic evidence of patronage and its vicissitudes at the sanctuary exists from possibly as early as the 2nd century B.C.E.. A marble block inscribed P. LIVIUS P. L. HER. DA (transcribed P(ublius) Livius P(ublīi) l(ibertus) Her(culi) da(t)), dated to the 2nd century B.C.E. (or perhaps the 1st century B.C.E.), found in the area in front of the Temple of the Round Altar (Cébeillac 1971:44; Mar 1990:160; Rieger 2004:231, note 1123). Cébeillac (1971:44) argues that this block originated elsewhere and that it was reused during the Augustan or late Flavian period in one of the many reconstructions of the temple. If Cébeillac is correct in his assessment, then we can see another example (like the reuse of the Greek statue bases around the cylindrical altar) of the Imperial re-appropriation of Republican or Hellenistic objects, a re-appropriation that might indicate the patron responsible for construction choices and for the introduction of novel uses of the sacred space.⁵⁵

With our two examples, the four altars and the Temple of the Round Altar, we see two very different responses to the changing requirements of a sacred space over five

⁵⁵ For other dedications, statues, and inscriptions found within this sanctuary, see Chapter 1 for a summary of the other indications of patronage and for key bibliographic references. Particularly, see Rieger (2004: 227-232). And for the importance of elite families and their patronage of temples in Ostia, see Rieger (2004: 230-232) (with references to other pages in the book for other temples in Ostia). For P. Lucilius Gamala's close interaction with and patronage of the *quattro tempietti* in Ostia, see Gallina Zevi and Humphrey (2004), Rieger (2004), and Tatarkiewicz (2003).

centuries of (re)construction. One area firmly insists on maintaining its basic integrity in the midst of the material adjustments to the changing world of the surrounding sanctuary, accommodating change when necessary but remaining fundamentally untouched in spite of or, perhaps, in response to, the developments and additions neighboring buildings as well as changes in ground level. The other area responds oppositely, changing its intrinsic identity, its forms, and dimensions, the placements, and orientations of its altars at every major phase of sanctuary construction. As I hope to have shown above, the character of the alterations at the Sacred Area of the Republican Temples at Ostia occurring over centuries of construction can be both backward and forward-looking, fortuitous and micro-managed, natural and social, practical and religious, hierarchical and communal, mental and material. Above all, any of these useful approaches and responses through material studies to questions of continuity of cult or the *longue durée* of a sacred space can profit from an attempt to view sacred architecture as the material manifestation of ritual actions performed in time and space. Cicero emphasizes this very concept of the continuity of a sacred site, stating that, once consecrated, the religious status of the space would not be changed (*de Haruspiciis Responso* 32).⁵⁶ While it may be true that the sanctuary as a whole maintained its sacral quality over time, that preservationist considerations predominated, regardless of concrete additions or modifications in the

⁵⁶ *Vetera fortasse loquimur; quamquam hoc si minus civili iure perscriptum est, lege tamen naturae, communi iure gentium sanctum est ut nihil mortales a dis immortalibus usu capere possint. Verum tamen antiqua neglegimus: etiamne ea neglegemus quae fiunt cum maxime, quae videmus? L. Pisonem quis nescit his temporibus ipsis maximum et sanctissimum Dianae sacellum in Caeliculo sustulisse? Adsunt vicini eius loci; multi sunt etiam in hoc ordine qui sacrificia gentilicia illo ipso in sacello stato loco anniversaria factitarint. Et quaerimus di immortales quae loca desiderent, quid significant, de quo loquantur? A Sex. Serrano sanctissima sacella suffossa, inaedificata, oppressa, summa denique turpitudine foedata esse nescimus?*

space, the specific ways in which different sectors of the Sacred Area adapted to overall changes in the surrounding sanctuary followed no set program and no universal model can be said to apply to these alterations.

This theme of change and invariance will be emphasized and explored in depth throughout the following chapters. The responses and negotiations in sacred space were necessarily site specific, embedded in the particular ideologies of the communities – on whichever side of the *temenos* – managing the sanctuary. Apart from dedicatory inscriptions and figural representations, rare at early and mid- Republican era sanctuaries, the particular reasons, explanations, or motivations underlying significant transformations of a sacred space play almost no role in the material memory of action and place. What we can, however, discover through material study and, as the following chapters will continue to show, are patterns of observances and values assigned to ritual sacrifice by a community as expressed in its repeated effort to memorialize, by means of the material arts, these actions and their places of occurrence.

CHAPTER 3

Economy of Ritual (1): Votive Offerings

Sacrifice, bloodless or animal, was an industry with a material basis. Whether performed communally or individually, whether the object of sacrificial dedication was raised, grown, made, bartered for, or bought, an offering was necessarily an *economic* act occurring within the larger framework of the community's overall production, distribution, and consumption of goods and services. It was the tangible, ritually-deposited ash, seed, nut, bone, or crafted votive object – the material end-product of the sacrificial processing of the dedication and not the ephemeral processions, gestures, feasting, spoken prayers, or vows¹ which accompanied the making of the ritual offering – that decisively formed and sealed a relationship of exchange with the god, leaving a durable record and perpetual reminder of the act. The types of objects or animals offered were intimately linked to each particular sanctuary and setting, giving a distinctive character to the local sacrifice.

While we, as archaeologists examining Republican religion, cannot hope to access verbal testimony of ritual (with the exception of the few examples of inscribed votive objects), the deliberately preserved products of ritual (remains of animal bones, vegetal

¹ I am not suggesting that these associated acts were optional. For example, Varro (L.L. vii.8) comments that the saying of the correct words at correct moments during a ritual was essential.

ash, ex votos, statuettes, pottery, coins, etc.)² can usefully inform us about both individual and communal sacrificial practices. This chapter will examine how a range of approaches to studying the economics of the ancient world might be applied to the evidence of sacrifice (votive deposits in this chapter and animal sacrifice in the subsequent chapter) during the Republican period at the sites examined in this dissertation. This chapter attempts to view ritual as a form of economic consumption; Chapter 4 will examine the relation of production to this consumption. And together, the two chapters will seek answers to a variety of questions: what were the relative costs of dedications and who provided or paid for them? Was there standardization within a sanctuary of offering types and if so, who regulated such uniformity? In what sense could it be said that the material economics of the space and sanctuary itself created, determined, and demanded a corresponding type of votive dedication? Who benefited from the dedication – the community as a whole? individuals? the gods? To what extent was the act of devotion individual or communal (and what were the implications of such exclusive or inclusive actions)? What kinds of processing and preparation would have preceded the sacrifice? What relationships (human and divine) did the ritual act entail and how did the material character of the dedications relate to the larger physical aspects – landscape, architecture, urban topography – of the sanctuary? The questions offered here are intended to serve as examples of the types of questions that the avenues of research will pursue within the following two chapters. They are intended to provide a sort of road map to the analysis

² Some votive objects are accompanied by an inscription (De Cazanove 2009 and Poccetti 2009); but the vast majority of the votive dedications are “mute objects” (to use De Cazanove’s (2009) term). See below for a discussion on inscriptions.

that is to come and to present an overview of this study's approach to the economic aspects of ritual and its connection to material residues.

This chapter begins by establishing some definitions, exploring what words such as “offering” and “dedication” and “deposit” might mean for this dissertation. The chapter then engages in a larger, more general discussion of aspects of value, production, trade, and consumption in Republican Rome, addressing different implications in the economics of sacrifice; these ideas and approaches will be important for the targeted case studies in this chapter and the following chapter. This chapter's main focus, a thorough survey and discussion of the collection of *arulae* from Largo Argentina, is then complemented by a consideration of the more general phenomena of *arulae* as votive objects throughout Italy as well as the larger practice of votive offering and popular types of votives in Republican Italy. Placed then in the context of Republican votive practice, the miniature terracotta altars will be revisited and closely investigated through the theoretical frameworks of miniaturization and mimesis. While the Largo Argentina *arulae* remain the primary assemblage of data examined in this chapter, other types of votives from this sanctuary are repeatedly incorporated into the chapter's discussion whenever possible as concrete examples for exploring different themes, theories, or styles.

Definitions

Some of the key terminology I will employ in this chapter needs to be briefly discussed and clarified. There was no word for “sacred dedication” in either Greek or Latin (Bodel 2009:19). For this purpose, I will use the word “votive” – most often

denoting, in a restricted sense, a crafted object but sometimes, as I hope will be clear from the context, applied more generically so as to include animal and vegetal offerings as well. Very generally and allowing for many – some quite important – exceptions, animal sacrifice was, for the most part, communal, while the offering of crafted objects was a private act. A votive, then, in the generic sense, is a ritual offering or dedication addressed to a deity and understood as a means by which an individual, group, or community might resign ownership in order to guarantee divine favor and establish or maintain an ongoing, long-term relationship with that deity. A votive offering was considered a continuing, lasting bond and not a single, isolated event that ended with the deposition of the object in the ground – the very durability of the object signified the permanence of the human-divine relationship. The specifications of the gift can be seen to be determined by the goal which the dedicant hoped to achieve, and the object's various material and aesthetic characteristics (genre, scale, material, fineness, fashionability, individualization) depended as well on the economic situation of the offerer (Bouma 2001: 68). Perhaps, also, the sacred setting itself in which the object was offered played a part in determining the specifications of the gift.

The phrase “votive offering” connotes both a ritual act and a continuous donative process: “votive” conveys a connection between the object itself and a prior vow or prayer (Osborne 2004:5) and “offering” places emphasis on an act of giving that establishes or maintains a relationship of *reciprocity* with the gods.³ Such an emphasis on

³ “Giving” in the archaic period is usually understood by modern scholars to take the form of institutionalized reciprocal exchange or *reciprocity*. The concept will be discussed in detail below. The core notion, as exemplified by the work of Marcel Mauss in the 1920s, is that a “gift” is not an act of altruism but rather entails a relationship which includes an obligation on the part of the recipient to make a gift in return. Douglass (1990:xiv) observes that in a pre-state economy Mauss's “gift cycle echoes Adam

giving and gifting is evidenced in the numerous Latin votive inscriptions which feature the verbs *do* and *donare*, and the noun *donum*. Along with explicit words for giving and gifts appear the verbs *dedicare* and *dicare*, linked etymologically to conceptions of intent. The Roman inscriptional evidence shows a distinction between dedication (giving a gift from the point of view of the dedicant) and consecration (formally transferring a gift to someone who is empowered to accept it). To the Romans, it was important to indicate verbally the intended recipient of the offering – the derivation of *dedicare* from *dicere* reinforces this focus on intent (Bodel 2009:28-30).

The official language of dedication and underlying notions of reciprocity can be seen in Suetonius' *Galba* (18.2): *secuta sunt aliquando manifestiora. Monile margaritis gemmisque consertum ad ornandam Fortunam suam Tusculanam ex omni gaza secreverat; id repente quasi augustiore dignius loco Capitolinae Veneri **dedicavit**, ac proxima nocte somniavit speciem Fortunae querentis fraudatam se **dono destinato**, minantisque erepturam et ipsam **quae dedisset*** (There followed even clearer signs. He had set apart from all the treasure a necklace fashioned of pearls and precious stones, for the adornment of his image of Fortune at Tusculum. This, on a sudden impulse, he **dedicated** to the Capitoline Venus, thinking it worthy of a more august position. The next night, Fortune appeared to him in his dreams, complaining of being robbed of the **gift**

Smith's invisible hand: gift complements market in so far as it operates where the latter is absent." For Mauss, "it clearly is a general characteristic of gifts that they are at some level 'inalienable' from their original owners... Whether this bond consists of tenuous moral claims or powerful magic influence, it strengthens the obligation to give in exchange for what has been received" (van Wees 1998:27). This linkage between the moral and the supernatural in Mauss's view of gift-giving brings to this early model of reciprocity a special cogency in the case in which one of the parties to the exchange is divine: "to give something is to give a part of oneself. To give away is to give part of one's nature and substance, to receive something is to receive part of someone's spiritual essence" (1967:10).

intended for her and threatening in her turn to take away **what she had bestowed** ([trans. Loeb 1914, emphasis not original]).

The popular characterization of sacrifice as *do ut des* should not to be conceived as a barter-like exchange of commodities in which a gift must be returned immediately and must be equivalent to that offered.⁴ Rather, once a votive (object or animal) has been offered and the dedicant has entered a relationship with the divinity, the return of the gift (different in kinds and presumably – as would befit the greater status of the god – of greater “value”⁵ to the dedicant than his original offering) must be deferred and may occur at some distant time in the future; the relationship is one of “goodwill and friendship” rather than a transaction having the “sordid quality of a business contract” (Festuigièrre 1976:413 qtd by Bremmer 1998:133). The returned gift is always different and of greater value, creating an imbalance that inhibits possibilities of ending the relationship through an explicit termination of obligations. Words and gestures play little part in the return; typically, the recipient accepts the gift without an expression of gratitude (van Wees 1998:26).⁶ The value of the gift itself is not important but rather it is the act of giving it, the experience (Bremmer 1998:133) (see below for a further discussion of reciprocity in Roman Republican culture).

⁴ For some discussion of the popular phrase *do ut des*, see Bodel (2009); Grottanelli (1991); Parker (1998);. Within the Roman world, sacrifice created a social system which generated “different and deferred return,” not an immediate exchange but a system which “created and maintained long-term relationships of power via reciprocal exchange” (Gill et al. 1998; Parker 1998; Sahlins 1965; van Wees 1998).

⁵ “Value” is a highly problematic term frequently used uncritically in the literature of reciprocity (see Papadopoulos and Urton 2012). The term will be discussed in greater detail below.

⁶ See Van Wees (1998:13-49) for an overview and historiography of reciprocity. For asymmetry in human-divine relations, see Aristotle *Eudemian Ethics* (1238b 26-30) and the discussion in Parker (1998:122).

A votive offering was both the durable product of an ephemeral process and the material manifestation of the performance of that process. A study of the material as well as the religious significance of votive remains cannot be limited to a de-contextualized analysis of the objects themselves but must also be extended to other sacred buildings and altars (Bouma 2001:64). The votive remains are in direct dialogue with the physical setting in which they are offered. The deposition of votive objects in a sanctuary, the transfer of possession to a deity, necessarily contributes to the sacred character of the objects (Edlund-Berry 2008; Edlund-Berry 2011:12). But their placement cannot be the sole reason for ascribing sacrality (Bodel 2009); the intentions of the offerers who set these objects apart (or select in what combination and with what other objects or groups of objects they will donate them) as property of a deity would have also imparted a sacred status to these objects (Bodel 2009:24ff.).⁷ For the purposes of this project, placement and intention are both essential and mutually reinforcing approaches to the question of sacrality. Certainly, both aspects of sacrality can be seen to be simultaneously at play in the numerous examples of deposits in Central Italy in which a collection of votive objects is spatially marked off in a deliberate way by the dedicants (Bouma 2001:61). I will rely primarily on the “topographical definition” (Bodel 2009:23; Parker 1998:270) of votives, meaning those objects excavated within a *defined* sanctuary, particularly those excavated at or near an altar. However, Bodel’s notion of intention as generating the sacred character of an object will be key to the understanding of *arulae*, the miniature terracotta altars that deliberately and symbolically mimic and replicate their monumental

⁷ See Gell (1998:7-9) who states how art objects embody intentionalities, that an object has “no intrinsic nature [or value] independent of the relational context;” “objects and art mediate social agency” (Papadopolous and Urton 2012:23).

prototypes. But as I will suggest in a later section of this chapter, it may not be conscious intentionality that confers sacrality on these *arulae* but rather an intentionality inherent to the material setting in which the object is offered.

I will generally use “dedication” somewhat interchangeably with “offering” (echoing the pairing of words in Latin descriptions such as *donum* or *dono* with *dedicare*) but may sometimes make a connotative distinction. Following Osborne (2004:5), “dedication” implies the permanence of the object whereas “offering” allows that the given object may perish. So, used on their own, without qualification (such as in the combination of “votive offering”), “offering” would be more appropriate terminology for the act of animal sacrifice and “dedication” for votive practice. Furthermore, “dedication” has a juridical sense, conveying that ownership is transferred from an individual to the god (Rupke 2009: 31).⁸ The act is not simply an act of giving, but rather of consecrating, a “formal transference of the destined gift to its intended recipients by one who is empowered to accept it” (Bodel 2009:29).⁹ This process of *consecration* legally and permanently transfers property to the divine from the human or natural world (Bodel 2009:21). By making an offering to a deity, the individual marks a particular object as property of the gods, as inherently sacred, independently of where it might be deposited within a sanctuary (Bodel 2009:21-22). Votive offerings could, in some sense, be thought

⁸ In reciprocal relations, a gift cannot be alienated by the recipient without offense to the giver. There is a transfer of possession and (in the sphere of Roman legal concepts) juridical ownership, but complete resignation of interest in the disposition of the object is withheld. Civic emergencies could override normative custom; see, for example, Valerius Maximus (VII.6.4), who tells of the melting of gold and silver votive donations to pay the soldiers.

⁹ Bodel (2009:21ff.) notices the further distinction in the Roman world between the act of giving (from the point of view of the offerer) and consecration (the formal transference of the object to its recipient). Wissowa restricts consecration to the transfer of public, not private property to the gods (1912:380-409; reprint 1971).

of as possessions not only of the deity but of the temple as well, with the temple personnel juridically empowered by the formal dedication to collect and reuse especially valuable objects (Smith 2001:19).¹⁰

Economy

The votive dedications, whether crafted objects – often pottery – or animals, fit neatly within a simple economic model of mostly local production, distribution, and consumption appropriate to the communities of the Republican period (Nijboer 1998:42). These objects were either acquired, presented, and dedicated to the deity for the purposes of ritual deposition (becoming what Snodgrass [1991:291-92] calls “converted” deposits) or were perhaps originally intended for some other use (what Snodgrass [1991:292] terms “raw” deposits). In this chapter, the collection of miniature terracotta altars, the *arulae*, from Largo Argentina (a collection of considerable size for a sanctuary in Rome) will be examined and analyzed within the larger framework and context of the economy of Republican Rome. In pre-monetary archaic and Republican Latium, goods and services were exchanged by means other than purchase, entailing notions of comparison, evaluation, and equivalence, becoming increasingly rule bound and organized over time;¹¹ in the sphere of religious dedications, some form of reciprocity would have provided the principal model of exchange (Anzidei et al. 1985:220; Bartoloni 1989:201-

¹⁰ On the other hand, it is nearly impossible to interpret depositions of inexpensive terracotta votive objects manufactured of local clay (like the miniature terracotta altars at Largo Argentina) as potentially reusable temple property.

¹¹ Details from the Carthaginian treaty from 509 B.C.E. suggest a possible complicated process of building and using capital (Smith 1996:202-203, 211), with quantification of commodities introduced along with the increasing urbanization of central Italy in the 7th and 6th centuries B.C.E (Nijboer 1998:66-67).

202; Nijboer 1998:66; Smith 1996). The economy of archaic and Republican Rome and Latium was not solely based on non-market exchange;¹² reciprocity and redistribution, systems of exchange more driven by non-economic motives and more limiting of the extent to which one can acquire, may exist side by side with a market system (Greene 1990:46ff; Nijboer 1994:6; van Wees 1998:41).¹³

There are several useful typologies of reciprocity.¹⁴ One standard model conceives of reciprocity as ranging in type from “generalized” to “balanced” to “negative” (with barter usually included in the latter classification), determined in part by the direction or mentality of the exchange (van Wees 1998:22 following Sahlins 1972). In a simpler and widely-adopted, alternative variation of this scheme, reciprocal exchange is “voluntary requital,” either positive (mutually beneficial) or negative (mutually harmful), with barter viewed along with monetary transaction as market or *commercial* exchange (Seaford 1998:1-4). The “voluntary” condition in Seaford’s definition of reciprocity requires that the act of gifting “retain an appearance...of...the possibility that it will not be requited” (1998:2). In commercial exchange, reciprocity is not voluntary; relationships are not

¹² In anthropological theory, the term “market” usually (but not always) denotes both barter and money exchange (van Wees 1998:24).

¹³ In the pre-monetary society of archaic to mid-Republican Latium, the primary market exchange “currencies” were bronze, cattle, and salt (Waarsenburg 2001:55) and it is possible to speak very generally of the region of Latium as a temple economy, an agricultural economy, and an economy based on pastoralism (Bouma 2001:66). Morel (2007: 496-497) proposes a possible reconstruction of the development of Roman money use as a movement from barter to money, from cattle to bronze ingots (*aes*, *aes formatum*, *aes signatum*). The word for money is thought to be derived from that of cattle, *pecus*. Varro *RR* 2.1.11; Columella 6. *Praef.*4; Ovid *Fasti* 5.280-281. Morel (2007:497) cites another suggestion which sees the appearance of coinage as a unit of metal first appearing in the second half of the 4th century B.C.E and the introduction of genuinely minted Roman coins in 269 B.C.E.

¹⁴ We could also relate theories from the cognitive sciences to offering and votive reciprocity. As discussed in the Introduction, ritual activities can be explained in part by the biologically evolved, innate human tendency to represent not only human actors and patterns of activity, but also to imagine the unseen beings. Thus in reciprocity, the gods can be imagined to accept or reject the offering.

created between parties but instead between the items exchanged, with the transaction immediate (not necessarily the payment) and comprised of objects or services of equivalent economic value (Seaford 1998:3).¹⁵ In a material model of this relation, the objects themselves would hold the authority.

Seaford's model of reciprocity in pre-monetary ancient Greek society is easily adaptable to the quite similar circumstances of archaic and Republican Rome and Latium. Votive offerings and animal sacrifice would clearly be considered examples of positive reciprocity within the Seaford definition. The type of economy in archaic and Republican Rome and Latium, based primarily on gift rather than on commercial exchange, was essential to "reinforcing and recreating relationships within a horizontally mobile elite" (Smith 2001:19 qtding Nijboer 2001). Ritual itself, requiring invariant, constant, formal arrangements among officiants, participants, and the divine, helps to mitigate the instabilities arising from the negotiations in gift exchange, producing more stable, durable relations among the parties (Nijboer 1998:66). The votive object itself therefore becomes a materialized symbol of a stable, *abiding* network of relationships encompassing individual worshipper, community, and deity.

An economy centered on gift-giving and long-term exchange relations was reliant on credit and trust, since "the economic credit of an individual is inseparable from his moral credit" (Smith 2001:22). The objects exchanged by reciprocity acquire value through acts of negotiation; they are demonstrations of obligation. Value, therefore, does not have to reside in the materiality of the object itself but can also arise from acts associated with the

¹⁵ In yet another formulation, reciprocity may be direct ("mutual" – between two parties) or indirect ("univocal" – A gives to B who gives to C who gives to A). For Seaford (1998:2), "univocal" exchange may tend to become so diffuse that it "ceases to count as reciprocity."

object.¹⁶ The actions and the materials exchange value; value cannot exist separately from its social context.¹⁷ In reciprocal human-divine relations, the deity makes the moral and material evaluation of the votive offering and determines the magnitude and kind of divine favor that would make a suitable return, the gods in effect can be imagined to either reject or accept the offering (van Wees 1998:37).¹⁸ Even the ancients recognized that the moral value of a votive offering was not necessarily related to its material worth, since the mortal who “serves [the gods] as best he can is held to be acting properly” (Aristotle *Nicomachean Ethics* 1163b 15-18).

Apart from the role played by the material votive object itself in human-divine relations, the individual act of deposition could have its own significant social, public aspect. In an economy based on reciprocity, with social integration playing a predominant role in exchange, all participants are able to “retain at least notional autonomy” (van Wees 1998:29). While the offering of an object to a deity in archaic or Republican Latium is conventionally characterized as an individual, solitary act made in “lonely isolation” in contrast to public, communal animal sacrifice, individual votive dedications

¹⁶ Appadurai’s model of value is quite textured, consisting of “politics of value” (*politics* connoting assumptions, relations, and contests connected to power) (1986:57), “regimes of value” (the varied conditions in which objects circulate) (1986:4), and “tournaments of value” (periodic events that are somehow removed culturally from everyday economic life) (1986:21), all examined in both space and time (1986). Appadurai (1986:3) presents a model of value in which “value is embodied in commodities that are exchanged” and human transactions and motivations are keys in understanding and attributing value.

¹⁷ As Barbara Herrnstein Smith (1995:180) notes, it may be helpful to consider *value* as a “general name given to a variety of different positive *effects*.” The so-termed *subjective theory of value*, a theory in which value is tied to the ability of an object to accomplish the desires of the giver, distinguishes between value to the individual and exchange value (Papadopoulos and Urton 2012: 6). This view of value, conceived of as an “essential quality or inherent property of a thing... that is independent not only of what amount of money (or anything else) it might fetch in some market but also independent of its performing any functions...” (Herrnstein Smith 1995:179), nicely reconciles the paradox of seemingly cheaply-made terracotta votives that nonetheless can be assigned great ritual value.

¹⁸ In an exchange economy, the presence in votive depositions of objects having measurable or quantifiable properties would facilitate comparability and evaluation (Smith 2001:19).

could also be part of a more public, inclusive ceremony (Smith 2001: 21-22). The offering of a votive in a public setting could therefore be a demonstration and proclamation of the creditworthiness of the individual, a way to justify his (or, in fact, her) social position within a larger community (Smith 2001:22).¹⁹ From Ioppolo's excavations in front of the altar of Temple B at S. Omobono (from phase 3 and 4 of the archaic temple, dating to the 6th century B.C.E.) for example, personal votive objects (such as miniature bowls, worked bone objects, fragments of pendants in amber, glass, and coral, and hammered bronze figurines) were found in the same strata²⁰ as faunal and vegetal remains from sacrifice. Personal votive offerings were not restricted to a one-time of year ceremony marked by the festival calendar, as it seems annual public sacrifices were; evidence for private offering on such a public occasion would to some extent reflect a deliberate choice to publicize the act.²¹

Although no faunal evidence potentially providing some clue to the connections between private offerings and public sacrifice had been recorded for the excavations from Largo Argentina, the majority of the examples of votive deposits from that sanctuary suggests a wide range of individualized practice, including graffiti of names of the

¹⁹ The careful excavations of a deposit from the sanctuary at Satricum reveal just this bipartite, public-private aspect: the deposit contains both the faunal remains from a public sacrifice and characteristically "individual" votive offerings such as full-sized jars and bowls, bronze and iron objects, and bone implements, (Bouma 1996 Vol 1: 228ff., 420). Excavations at this site have revealed the careful ways in which the offerers used stones and other architectonic fragments to signal that the objects (all from a single act of deposition) belonged together (Bouma 2001:60).

²⁰ The crafted finds were recorded from strata AB 19-20, Virgili (1977:30-31); the faunal and vegetal remains come from strata AB 17-AB21 (Virgili 1977:30ff.).

²¹ Sanctuaries sought sources of income. The economic involment of sanctuaries, the link between revune and sacred places, can be seen linguistically in the cognates *lucar* (type of revue) and *lucus* (sacred grove). Reused votives may have been a source of income for sanctuaries, though, as will be seen in the discussion of *arulae* below, the value of these votives came more from their symbolism than from their actual material worth.

dedicators inscribed on the bases of vessels and statuettes of the offerers. The staggering number of ointment jars that have been excavated from the sanctuary at Largo Argentina (550, all of a fairly similar make, see below for details) suggests that they were only secondarily viewed as “convertible” for use as votive deposits (**Figure 1**). These jars concurrently served a “raw,” functional purpose as containers during the ritual act, an event easy to imagine as public, shared by many members of the community, with the objects themselves (and their uniform type) perhaps even distributed or prescribed by the sanctuary itself.

Arulae from Largo Argentina: surveying the data

Terracotta votives, personal dedications in a larger, public space, can be extremely useful for investigating the economic processes behind ritual and how sacrifice explicitly relied on materials to establish and secure a reciprocal connection with the deities. The laws forbidding the mishandling or removal of votives from a sanctuary once they have been donated explicitly recognize the special character of the link between the crafted objects and the built sanctuary.²² The role played by votives in the overall material drama of sacrifice will be best understood by examining how these objects interact with the material focus of ritual performance, the altar. It follows, then, that by far our best guide to such understanding will be those miniature terracotta altars which, by their form alone, manifest materially aspects of the most socially important and

²² The *lex aedis Furfensis* (see Introduction page 30, note 38) describes the procedure of inauguration of a temple and a consecration of an *aedes*. It also details regulations regarding the handling of objects that are donated to the sanctuary. If a donated object is stolen, the aedile could determine the amount of the fine. See Laffi (1978); Stek (2010:94).

performatively elaborate of all of ritual events, communal animal sacrifice.²³ The large collection of miniature terracotta altars, *arulae*, from Largo Argentina allows us to begin to examine the role played in a general way by votive offerings in Republican Roman religion, focusing on questions of replication and standardization, miniaturization, the interplay between a votive dedication and the space in which it is offered, and the determining role played by the sacred setting in selecting the particular type and material character of a votive offering. Once surveyed, the collection of *arulae* from Largo Argentina will be placed in the context of *arulae* from Republican Italy, and in the even larger context of contemporary types of votives. Thus situated in an overview of Republican votive gift giving, the Largo Argentina *arulae* are revisited and investigated, considered in the light of a variety of theoretical frameworks which guide an understanding of what role the individual offerings of these miniature altars might have played in the monumental spectacle of communal ritual sacrifice at Largo Argentina.

The reflexive character of context and setting, as emphasized throughout this dissertation, finds material confirmation in the proliferation of *arulae* found within the *temenos* of the sanctuary at Largo Argentina. The fourteen intact or fragmentary *arulae* documented from the excavations at Largo Argentina carried out by Marchetti Longhi from 1929- 1942 were not buried or emplaced undeliberately, scattered about or carelessly discarded.²⁴ Rather, these votives were excavated from clearly discernible areas of votive deposit (identified as such by Marchetti Longhi in his *Giornali di Scavo*)

²³ We could also think of here the miniature terracotta representations of sacrificial cakes, documented at S. Omobono (and Satricum). (Bouma 1996 Vol I.: 275-277).

²⁴ Another 8 *arulae* fragments were found in the excavations of the Teatro Argentina (Gianfrotta 1965-67: 2037-2042; 1955; 1152; 902). These examples are very similar in form and manufacture to those found nearby within the *temenos* boundaries.

either along the platforms of the altars of Temples A and C or along the southern boundaries of Temples A and C (**Figure 2**). The miniature altars were deposited in combination with miniature and normal-sized vessels, architectural terracottas, and figurines (see below). All the *arulae* found within this sanctuary, dating from the 3rd-2nd century B.C.E., are mold-made, composed in two sections from unlevigated, local clay with numerous large inclusions (mostly of augite, pozzolana, and mica) (**Figure 3**). The fragments reveal that the *arulae* have hollow interiors and are articulated on all four sides (unlike the flattened, rear profiles of the *arulae* from Lavinium). The quality of materials and workmanship of these *arulae* implies an inexpensive manufacturing process; they are of much lesser quality than, for example, the *arulae* found at Lavinium which are substantially heavier and more finely produced (four from the Sanctuary of Minerva, two from an urban deposit, and an additional two from another urban deposit) (**Figure 4**).

Of the *arulae* from Largo Argentina, only three have been carefully published and catalogued; two of these are rectangular and aniconic, the third is of hourglass shape decorated with a figural relief (Ricciotti 1978: no.38, 81, 96; *Roma medio repubblicana* 1973:83, no.62).²⁵ This latter *arula* (only the upper fragment remains), a form particularly common in Rome in the mid-late Republic (see below), is the *only* example of this style of the fourteen *arulae* found and documented in Largo Argentina (Ricciotti 1978: no.38; *Roma medio repubblicana* 1973:83 no.62) (**Figure 5**). On its front, all that is visible are the dentils in the crowning molding and the forms of the two figures in

²⁵ The *arula* is composed of echini of equal dimensions, connected, with not very high articulation, by a S-curved shaft.

relief, identified as a winged Nereid riding a bull (*Roma medio repubblicana* 1973:83).²⁶

The figural decoration is of a type that is particularly suited to the curvilinear form of the double-echinus *arula*, and, as is common, the head of the figure is placed in a part of the crowning cornice. On the back right corner of the *arula* are the impressions of three small marks, interpreted as a letter (or letters) of the alphabet, referring to the manufacturer (**Figure 6**).²⁷ This mark was made before the *arula* was fully baked, therefore making it a mark of production not of commercialization or sale.²⁸ This *arula* was found between Temples C and D (*Giornali di Scavo* 1929:114, August 30th) along the north side of Temple C in the stratum under the level of tufa.²⁹

The other 13 *arulae* (11 fragments and 2 complete examples) are all aniconic with a core body in the form of a rectangular parallelepiped or prism. The two complete parallelepiped *arulae* (published by Ricciotti 1978: nos 81 and 96) each have a core body

²⁶ Traces of the red paint on the cape of a winged figure can be seen along with traces of white coloring conserved on the short sides and on the contour of the figure.

²⁷ No known workshop for Largo Argentina exists. We do know of some workshops connected to sanctuaries (for example, at Lavinium). The proximity of these workshops suggests that votives could be produced for the purpose of ritual burial, specifically for a local audience and clientele, distributed to worshippers visiting the sanctuary. It is likely that terracotta, tiles, cooking jars, lids, and other tablewares were produced *en masse* at Lavinium from the 7th- 4th centuries. B.C.E..The surrounding woods (the *Silva Laurentina*) may have provided the wood for the firing; and it is likely that a clay source was the Pliocene deposits surrounding the urban area (Nijboer 1998:138). See Nijboer (1998:132ff) for a discussion of kilns and workshops at Lavinium. To the northeast of the Thirteen Altars were a double kiln and an associated building (thought to be for manufacture and storage of both votive objects and domestic ceramics; a vast quantity of bucchero and impasto vessels has been found at the site). The building included storerooms and open areas (common features in workshops in antiquity). Also, within this area, over two hundred loom weights were excavated, suggesting their use as practical and not votive objects (Nijboer 1998: 136). The sheer amount of domestic pottery suggests a secular use of the building. See Introduction Chapter for details about this northeast edifice.

²⁸ A similar mark appears on an *arula* from the Esquiline (Ricciotti 1978: 83, no.29) that depicts a winged figure and the snout of a bull. The mark of manufacture appears on the upper crowning molding.

²⁹ In the fill of this stratum were also many fragments of red impasto ceramics, miniature black-glaze vases, ceramic tableware, a loom weight, and the bases of two small, black-glaze plates with stamps depicting Hercules holding a cornucopia in his left hand and, in his right hand, a small amphora which he places on a small altar (*Roma medio repubblicana* 1973:131 no.152, p.132no.156).

with stepped moldings which run around all sides (**Figure 7**). Of the eleven fragments, only one example preserves both the crown and base moldings (**Figure 8**), exhibiting a style and articulation similar to one of the complete *arula* published (Ricciotti 1978:104 no.81); the other fragments preserve mainly portions of the base molding. The fragments reveal traces of *scialbatura*, a whitewashing plastering (as on, for example, no.96 in Ricciotti 1978:106) (**Figure 9**).

In general, the *arulae* rise from a rectilinear base, articulated by means of a stepped molding (**Figure 10**), each band either angular (**Figure 11**) or slightly curved (**Figure 12**), having as few as two horizontal bands and as many as four or five. Such stepped molding is a common characteristic of *arulae* (cf Ricciotti 1978:71-72, 77, 85). From this base molding, a shaft, flat on all four sides, ascends the height of the body. The crowning molding may vary. Some examples of the *arulae* are articulated by curved moldings: for example, one fragment has a base molding that is characterized by either a cyma recta or scotia mold and has a crowning molding which is articulated by a torus that projects between two fillets (**Figure 13**). A torus and a cyma recta molding also articulate the base of another *arula* (**Figure 14**) and a cyma recta molding characterizes another fragment. Given the *arulae*'s diminutive sizes, the sheer amount of molding, both of the base and the crown, seems conspicuously disproportionate. If, as some architectural theories hold, base moldings are sculpted representations of what might be conceived as the underlying support and point from which the weight of the building or structure above seamlessly rises, that is, if the moldings are thought of as metonymic indicators of the perceived load path of the structure above, "depicting the intensity of the load to be symbolically supported by the form" (Mallgrave 2005: 112-113), then in the examples of

these *arulae*, the scale of the supporting elements is, proportionately, way out of correspondence with what would be expected in a *material* sense. Such exaggeration of scale in the molding can be seen as an active, deliberate means of attributing monumentality and grandeur to a materially miniature object.

The simple and anomalously rectangular thirteen votive altars of Largo Argentina in fact correspond quite closely to the actual type of the architectural altars at this sanctuary, creating a dialogue between the monumental and the miniature, between the communal and the individual, between the functional and the symbolic, a dialogue mediated by the material authority of the sacred setting and its control over the form, type, and character of the votives offered. When compared with the full-sized altars of temples A and C (**Figures 15, 16**), the miniatures share the same rectangular form, simplicity of molding (apart from scale) composed of stepped, horizontal bands articulated by curved details (the cyma reversa molding of the monumental altars clearly suggested in the miniature),³⁰ and absence of figural decoration or ornament.

The parallelepiped form of *arulae*, predominant at Largo Argentina, represents perhaps the final, more simplified, and somewhat standardized version of the whole class of these objects (Ricciotti 1978:24). Furthermore, the Largo Argentina *arulae*, in their departure from the conventional style of *arulae* found in Rome during this period (of

³⁰ The altar in front of Temple A that dates to the first period of the temple (dated by Marchetti Longhi to 1st half of the 2nd century B.C.E., and by Shoe (1965:152) to the 1st quarter of the 2nd century B.C.E.) has a base molding that is characterized by a cyma reversa slightly deeper than high, with unequal curves (the outer more than twice as large as the inner). The inner curve ends with a fillet projecting above, corresponding to the cyma reversa on the crown of the altar where the projection on the inner curve resembles a small half round (Shoe 1965:152). The two curves of the crown molding are almost equal in length, depth, and profile. There is a projection on the inner curve that is turned like a small half round. The altar in front of Temple C (dated to around 175 B.C.E.) has a crown and base with cyma reversas of quite similar proportions, each only 2/3 as high as it is deep. The crown has an outer curve that is smaller and more angular than the inner curve (Shoe 1965:153). The base has an inner curve twice as long as the outer, but with a similar depth (Shoe 1965:160).

hourglass form and decorated with a female figure) (see below), and in their seemingly intentional imitation of neighboring architectural types, testify to the intricate network of material connections binding the miniature and the original, sanctuary and setting, dedicator, community and god. With 13 out of the 14 examples of *arulae* aniconic and of a rectangular form, the simple, and perhaps conservative, architectonic iconography, seems a deliberate and meaningful choice determined by the character and contours of the communal altars and the kind of ritual performed at these monumental structures.

Contextualizing Arulae

Having surveyed and examined the collection of *arulae* from Largo Argentina, we are now ready to put these objects into conversation with the production and use of *arulae* more generally in order to see how the Largo Argentina altars might conform to or depart from general trends. Found widely from the 6th to 2nd centuries B.C.E. in central Italy and Magna Graecia, *arulae* could be funerary or votive in function.³¹ Although not within the scope of this study, it is interesting to question why *arulae* stopped being offered after the 2nd century B.C.E.. It is tempting (though by no means certain or tested) to see a correlation between the decline in the use of *arulae* and the beginnings of minted Roman coinage. Certainly, coins too can be offered as votives (see the discussion below).

Catalogues classifying the types of Italic *arulae* date from the early 20th century and document over 330 known examples (only 37 of which are without decoration). The majority of the *arulae* found in Rome, for example, come from the Esquiline necropolis

³¹ Though full-scale domestic altars abound, there are very few examples of *arulae* from domestic settings. See Fischer-Hanson (1977-80:7-18) who describes an *arula* from Morgantina which was found in a house (also see page 15 note 2).

and date from the 4th-3rd century (around 50 or more are recorded from this location) (Castagnoli 1962:162).³² While *arulae* were primarily symbolic of larger altars, they may have also been used as incense burners (there are traces of fire on the top of at least one *arula* and the depressions in the tops of a few *arulae* suggest a basin for incense),³³ as pedestals for small objects,³⁴ or as lamps (a form of *arulae* from the Imperial period have lamps attached to a side) (Ryberg 1940:155).³⁵ They are mold-made, composed in two sections, rectangular, square, hourglass, or cylindrical in form, typically decorated only on the front side (if they are they decorated), although in some cases all four sides might be decorated (Van Buren 1918:15) (**Figure 17**).³⁶ *Arulae* come in a range of sizes (from 8-55cm in width and up to 45-50 cm in height)³⁷ and almost all examples were articulated with a base and crowning molding, with or without a cornice (as we saw above with examples from Largo Argentina) (Ricciotti 1978:5-6). The moldings of *arulae* from Latium, for example, generally took the form of expansive, opposing S-curve moldings

³² Ryberg (1940: 155-56) argues that the use of *arulae* in votive practice was imported from Sicily to Rome by way of southern Etruria (Jastrow 1938:12-13). See Dressel (1879).

³³ Van Buren (1918:44-45). 8 examples found on hourglass shapes from the 5th century B.C.E. (half of which are from Rome). Also see Van Buren (1918:15). Agreeing with Van Buren, see Weuilemmer (1939: 432ff.). See Stuart Jones (1926:328, no.30) who describes an *arula* with a depression or basin in its center which would have served either for libations or for charcoal to heat incense. Orlandini (1959:102) states that he is unconvinced by such a function since the vast majority of *arulae* have a perfectly flat upper faces and that he has yet to find an example with traces of fire. Ricciotti (1978:14) notes rare traces of fire on the tops of some *arulae*.

³⁴ Gerhard, E (*AnnInst* 1835:41).

³⁵ Stuart Jones (1926: 314-331) commented that many *arulae* have flat backs and therefore may have been placed originally against a wall. And being flat, these *arulae* may have served as basins for sepulchral lamps (1926: 314-315). Jastrow (1946) proposed that all *arulae* were dedicated to chthonic deities.

³⁶ In 1879, Dressel catalogued *arulae* from Rome and noted 16 different styles. Van Buren (1918) has catalogued all the known types from Sicily and Italy.

³⁷ At the start of the Hellenistic period, the dimensions of *arulae* were reduced, a reduction paralleling the increasing prominence of the circular and square forms of *arulae* (Ricciotti 1978:7)

(cymas), with the lower base molding larger than the upper.³⁸ Mold-made, *arulae* types vary slightly in measurement and detail, and casted reproductions are rarely precisely identical (Van Buren 1918:16).³⁹

Various types were in use over a long period of time and as new molds were needed they were created from already-fired *arulae*, a process that resulted in a reduction in size and loss of depth and vividness of the depiction due to the shrinkage caused by firing (Jastrow 1938; Ryberg 1940:156; Ricciotti [1979:9] records an 18% decrease in size in the second generation of objects).⁴⁰ *Arulae* were not exclusively Italic; examples have also been found from Archaic Corinth and Perachora, but these are thought to have either been imported or imitations of the western models (Ryberg 1940:155).⁴¹ As highlighted above, the hourglass form of *arulae*, developed in central Italy,⁴² was the preferred style in Rome (Ricciotti 1978:8; 26-28).⁴³ The choice of decorative subject was often

³⁸ This type of molding can be seen in the example of an *arula* from the eastern sanctuary at Lavinium that depicts Hercules and the Nemean Lion. See Castagnoli (1962:162; 1972:23).

³⁹ An example of such a manufacturing process can be seen in a mold of an *arula* from Ardea (**Figure 18**) and one from Tarentum (modern impression made from mold). See Blümner (1879:135, figure 29).

⁴⁰ The examples of *arulae* from Falerii clearly exhibit this progressive decline in quality with the reuse of a mold. See Comella (1986:82). For a detailed description of the fabrication of *arulae* see Ricciotti (1978:8-10). The holes (2-3cm wide) in the backs of the *arulae* are linked to the cooking process (Ricciotti 1978:12).

⁴¹ For Corinth, see Swindler (1932:512-20) and Broneer (1947:214-23). And for a short bibliography of *arulae* outside of Italy see Ricciotti (1978: 5 n.1).

⁴² This type was also common in neighboring cities south of Rome such as Lavinium, Ardea, Satricum, Lanuvium, Velletri, Segni, Alatri, less numerous in Etruria, and just barely evident in Faliscan territory. Castagnoli (1962:162).

⁴³ The hourglass shape, according to Castagnoli (1962:163) may be associated with the cult of the dead, and may have been influenced by representations of such altars in Babylonian cylinder seals and on Mycenaean plaques and gems (1962:163). The author suggests, however, that perhaps the Latial *arulae* were not immediately derived from such distant models but rather mimicked the local altars of the time period (the stylistic attributes of the molding akin to the monumental altars, for example, at Lavinium). See Ricciotti (1978: 20). The hourglass shape may also reproduce the form of cippi from the 6th and 5th

coordinated with the shape of the *arulae* (*Roma medio repubblicana* 1973:73);⁴⁴ the *arulae* of the double-echinus, hourglass form, for example, characteristically feature scenes of voyage (Nagy 2000: 18).⁴⁵

Most *arulae* tend to be locally produced,⁴⁶ with a correspondingly local or regional standardization of depictions.⁴⁷ For example, sphinxes commonly appear on *arulae* from southern Italy and Sicily, while very few examples of Roman *arulae* depict this figure type.⁴⁸ Significant numbers of both hourglass and rectangular forms (sometimes termed respectively *double-echinus* and *parallelepiped* forms) display a Nereid riding a dolphin or a winged figure riding a bull (such as the depiction on the one hourglass shaped *arula* from Largo Argentina) (Ricciotti 1978:52). The majority of the miniature altars found in Rome often depicted some variation of this scene, with images of a seated female figure riding a bull, a dolphin, or sometimes, a panther (see Van Buren [1918] for a catalog of *arulae* organized by depiction).⁴⁹ It has been proposed that the

centuries B.C.E. or may be borrowed from traditional Greek architecture (Castagnoli 1962:163-164 for a list of possible exempla).

⁴⁴ Ricciotti (1978:52) notes that on the *arulae* which depict mythological scenes, the allusion is most often to the funerary realm, a characteristic appropriate to the funerary origins of *arulae*.

⁴⁵ The only subject which appears on examples from all of Italy is a lion riding a bull (a similar figure appears on the monumental altar at Loryma, Ryberg (1940:156).

⁴⁶ A mold found on the Esquiline reinforces the inference of local manufacture (Ryberg 1940:156; *Roma medio repubblicana* 1973: 96n.88). See also another example of a mold, in *Roma medio repubblicana* (1973: 78 n.52).

⁴⁷ There are some depictions of religious scenes on *arulae*. For example, on a miniature altar from the Esquiline the Capitoline triad sit on a throne in an *aedicula*; other examples depict Dionysiac scenes (Ryberg 1940:169-171; Van Buren 1918:28-29).

⁴⁸ One example comes from the Sanctuary of Minerva at Lavinium (**Figure 19**).

⁴⁹ The two most common depictions from Roman *arulae* during this time period were Europa riding the bull and Thetis on a dolphin carrying weapons to Achilles (Ryberg 1940:164).

figural imagery of Roman *arulae* most likely derives from the same sources as that found on Praenestine cistae and mirrors, rather than from the depictions on *arulae* from southern Italy (Ryberg 1940:163-64, 175). Quoted depictions from a variety of different objects and media can also be seen on the earliest examples of *arulae*, showing, in particular, a close connection to ornamental terracotta revetments from early temples.⁵⁰

The Interplay between the Miniature and the Monumental: The Value of an Arula

While coins or other fine objects as dedications might have more material value and monetary worth, and anatomical votives, statuettes, and miniature pottery might be more popular and widespread as offerings, the miniature terracotta altars, neither expensive and individualized nor so commonplace that they speak to us only in generalities, manifest themselves as a type of votive object with particular, specialized meanings, functions, and value. As was shown with the examples from Largo Argentina, *arulae* are personal objects intended to evoke the function as well as the architecture of their more august archetypes. Regionally-specific correspondences of form between miniature votives and their neighboring monumental models epitomize a network of reflexive relations that link object and setting, individual and community, human and divine (Nagy 2000: 9). The interaction between the form and style of the miniature votives and their monumental altar models that was so clearly evident at Largo Argentina is not restricted to this one sanctuary. This interplay testifies to the power of material objects to determine and affect one another as well the ritual bound up with these objects.

⁵⁰ For example, the depiction appearing on friezes of a biga drawn by winged horses and driven by a winged figure or on the antefixes from Satricum and from Falerii (Ricciotti 1978:36; Ryberg 1940: 157-158).

In southern Italy and parts of Sicily the rectangular shapes of local *arulae* echo those of the monumental altars of the region;⁵¹ elsewhere in Sicily, circular *arulae* mimic larger, local models;⁵² further north, *arulae* and monuments are mostly square; and in Rome and Latium, they are generally of the hourglass form (flat on their horizontal and two of their vertical sides and larger at the base) (Ricciotti 1978:8).⁵³ Some particular examples: the miniature cylindrical *arulae* from Morgantina (**Figure 20**),⁵⁴ from Gela (**Figure 21**),⁵⁵ or from Siracusa (**Figure 22**)⁵⁶ have the form of the monumental cylindrical altars at, for example, the Sanctuary to Demeter and Persephone at Morgantina (**Figure 23**).⁵⁷ In Rome and Latium, the ubiquitous hourglass-shaped *arulae* (particularly those found at the Esquiline necropolis or the *arulae* from Lavinium) (**Figure 24**)⁵⁸ have the form of the monumental hourglass altar of Verminus from Rome (**Figure 25**),⁵⁹ the altar dedicated to C. Sextius Calvinus on the Palatine (**Figure 26**), or the altar in front of Temple A at

⁵¹ Orlandini (1959:103) and Comella (1990:241) comment that *arulae* of a parallelepiped shape (with added base and crown moldings) are especially common in Sicily and southern Italy in the archaic period. Orlandini (1959: 102) states that the *arulae* from Gela range in size from 55-8cm at their base.

⁵² The circular *arulae* become the most prevalent form in 4th-3rd century Sicily. See Ricciotti (1978:7). Cylindrical *arulae* are also found at Pompeii. See Elia (1962) and D'Ambrosio and Borriello (2001).

⁵³ In the collection at the Antiquarium Comunale in Rome, G. Arciprete (quoted in Barbera 1995: 220 note 60) notes that out of the 50 *arulae* in the collection, 30 are of the double echinus type (hourglass), 18 with a vertical profile, 1 cube, and 1 cylindrical. But Ricciotti (1978:19), commenting on the same collection, notes that there are 46 *arulae* in the collection of the double echinus variety, 51 of the parallelepiped form, and only 1 of the cube variety.

⁵⁴ Bell (1981: 98, 229 nos. 910 and 911).

⁵⁵ Museo Archeologico Regionale di Gela, inv. Sop. BL 30.

⁵⁶ Archeologica della Sicilia sud-orientale: 1973. P.123, no.385 Tav.XXXIX

⁵⁷ Sjöqvist (1964).

⁵⁸ Castagnoli (1962:162).

⁵⁹ Comune di Roma, Musei Capitolini, Inventario Sculture, S 1707Inventario Epigrafi, 6981 I² 804. Castagnoli (1962:159-160).

Fosso'dell Incastro, Ardea (**Figure 27**).⁶⁰ And like monumental altars throughout Italy, *arulae* demonstrate a conservatism of form, faithfully preserving and reproducing earlier types.

Arulae referenced larger altars through depiction of function as well as imitation of form: on their upper surfaces, examples of *arulae* depict fruit, other bloodless offerings, or flames, recalling the types of sacrificial events that would have occurred at monumental altars (for example, two *arulae* from Morgantina) (**Figure 20**).⁶¹ The near absence of traces of fire on the *arulae* suggests that they were not regularly used for the actual act of sacrifice nor presumably for offerings of libations or even smaller votives, but rather were symbolic – associating the personal with the communal aspects of sacrifice (Van Buren 1918:15, 44-45, and see above). As Nagy (2000:12) observes, linking, miniature, monument and ritual, “the use of *arulae* to commemorate or ‘imitate’ a sacrifice would help explain the apparent insistence on the part of the donor to replicate the appropriate shape of a certain type of altar.” The portable altar thus simultaneously evokes sacrificial events, experience, and representation, “articulating the evident links between the pragmatic and the significative, between object as sign and as material” (Knappett 2012:2). As both physical votive offerings in their own right and as symbols of and referents to something larger, portable miniature altars can be seen to exist in a “kind of virtual space or relational network” (Knappett 2012:15) – an altar-centered space that can be imagined as physically reaching out beyond the landscape and architecture of the public sanctuary to encompass the reality of private needs and the realm of the gods – a

⁶⁰ Di Mario (2007:70).

⁶¹ Bell (1981: 98, 229. Nos 910, 911).

network of topographically emplaced material objects that connects the individual, the communal, and the divine worlds.

Although inexpensively manufactured and lacking appreciable monetary value, the *arulae*, by replicating and calling to mind their monumental counterparts, have an intrinsic worth apart from their material or aesthetic value. In an economic (and religious) system largely based on reciprocity, the value of a votive, miniature altar was the individual equivalent in symbolic intent to the communal sacrificial offering that took place at the monumental altar.⁶²

The act of personal deposition, however inexpensive and diminutive the durable object, would necessarily engage the offerer in a dialog with the larger, more elaborately-orchestrated yet ephemeral, communal blood sacrifices on the actual altar. The *arulae*, though manifestly unusable for actual animal or other sacrifice (Orlandini 1959:102 and see above),⁶³ assert their value by means of deliberate abstraction, their very reduction in scale and detail and their lack of literal utility endowing these diminutive imitations of “real” altars with a token- like character.

Republican Votives: Types, Forms, Trends

While certainly a documented, distinct phenomena, the offering of *arulae* in Republican ritual contexts was assuredly not an exceptionally popular or profuse practice; other types of votives were produced and given in far greater quantities.

⁶² Comella (1990:240) argues that the altar was a symbolic substitution for the sacrificial altar and therefore for the act of sacrifice itself, a view that encompasses both the funerary and votive uses of the *arulae*.

⁶³ For the few exceptions, see Van Buren (1918:15, 44-45) for evidence of burning from incense, not from animal or fruit offerings

Although different in type from the *arulae*, many of the more common votives activate the same questions, approaches, or hypothesizes raised by a focus on and discussion of miniature altars. In an interesting breakdown of the category of votives, Bouma (2001: 61) divides votive objects into three categories: pottery (in the ordinary sense of the term), ceramics other than pottery (such as the *arulae*), and non-ceramics. Labeling pottery “traditional” gifts, Bouma claims (2001:65) that the presence and quantity of “non-traditional” votive gifts are indicators of the economic character of the community hosting the sanctuary. Such distinctions allow us to probe the material function, significance, and worth of votive objects, particularly *arulae*, within the sanctuary proper. The preponderance of votive objects at sanctuaries in Latium were locally produced. Imported objects, though evident in substantial quantity at S. Omobono and Lavinium (and to some extent as well Ardea⁶⁴ and Ostia⁶⁵), were fairly uncommon as votive offerings in Latial cult sites until around 500 B.C.E. (Bouma 2001:65), and were therefore not classed by Bouma as “traditional.”⁶⁶ The number of imported vessels documented at S. Omobono and Lavinium,⁶⁷ both sanctuaries associated with ports (Ardea and Ostia, it should be pointed out, share this characteristic as well), has

⁶⁴ At Ardea, amphorae from Punic Sicily (one inscribed with the name *Magone*, a common name throughout Carthage) were found Di Mario (2007:17-18).

⁶⁵ In the excavations of the cella of the Temple of the Round Altar, a handle of a Rhodian amphora was stamped with the Greek words: ΕΠΙ[ΕΡΕ]Ω[Σ] / ΘΕ[Υ]Δ[Ω]ΡΟΥ, datable to the first decade of the 2nd century B.C.E. was found. See Zevi (1970:109).

⁶⁶ Imported ceramics can be found at other sites, such as in the Capitoline deposit (Gjerstad III, 190ff.); the deposit near the Lapis Niger (Gjerstad 1960:223ff.); the votives from S. Maria della Vittoria on the Quirinale (Gjerstad 1960:145ff.); the Temple of Mater Matuta at Satricum (Bouma 1996).

⁶⁷ For S. Omobono, see Virgili (1989:45-61; 1990:129-130); Castagnoli (1981: 124-149); For Lavinium, see Castagnoli (1975; 1981: 177-187).

repeatedly been interpreted as an indicator of their role as trading centers in an “international economy” (Bouma 2001:65).⁶⁸

Representing the primary category of votives (“traditional” and “non-traditional”) in central Italy in the archaic and Republican period are: terracotta or bronze statues and statuettes of divinities; terracotta (or occasionally bronze) statues, statuettes, busts and heads of devotees, offerers, children, mythological figures, warriors, dancers and musicians, augurs, priests, and haruspices; hammered bronze figurines; anatomical votives; miniature altars; animals; cippi and bases; composite vases; conical objects, discs, and spirals; lamps; miniature pottery; temple models; and incense burners (*ThesCRA* Volume 1 2004:328-379). While this range of possible votive types is quite extensive, anatomical votives, figurines, and miniature pottery predominate.⁶⁹ The

⁶⁸ At S. Omobono for example, the extensive range in type and origin of the imported ceramics reveals the economic status of the cult community; over 100 imported vessels were recorded (Virgili 1989:47). The great majority of the imported pottery was found in the deposit at the NW of the podium (Virgili 1989:46) (see Chapter 4). Attic ware tied to ritual use appears mostly in the form of cups or kylikes; Ionian imports were represented in particular by little master cups, and forms similar to Attic lip cups, Laconian wares by cups with high feet and kylikes; many examples of Etrusco-Corinthian pottery imported from Etruria appear predominantly as kylikes, cups, arybaloi, alabastra, and paterae. At the Sanctuary of the Thirteen Altars at Lavinium, similar assemblages of imported ceramics and locally produced objects were found in association with the altars from all phases of construction. For example, decorated Ionian and Laconian cups, Laconian little master cups, and Attic Siana cups, droop cups, lip cups, kylixes, kantheroi, dinoi (one decorated with satyrs and maenads) were found alongside locally manufactured terracotta votive heads, impasto *ollae*, and bucchero tablewares (Castagnoli 1975; Castagnoli 1981:177-183). Interestingly, Fenelii (1991:489) notes the near absence of ceramics of Corinthian type from the deposits connected to the earliest phases of the altars (only a fragment of an alabastron was recorded). In the contemporary deposit from phase I of the urban deposit at Lavinium, the opposite phenomenon occurs – a near absence of attic and Laconian vases but a presence of ceramics of Corinthian type.

⁶⁹ Anatomical votives have been found at over 290 sites in central Italy and become mass-produced throughout Italy by the end of the 4th century. For early examples, see Cristofani 1985 and Turfa 2004; for possible uses or explanations of these votives, see Comella 1986; Comella and Stefani 1990; Girardon 1993; Glinister 2006; Potter and Wells:1985; Torelli 1999; Turfa 1986, 1994, 2004; for their connection to Rome see Coarelli 2000:200; De Cazanove 1991 for a summary; De Cazanove 2000; Edlund-Berry 1987:56; Menichetti 1990:325; Torelli 1973:138-139; 341-43, 1999:chapter 2. For statues and statuettes, see Colonna 1985; Comella 2004, 2005. Some of the most sophisticated – and fairly atypical – examples of full-scale votive statues come from the eastern sanctuary at Lavinium (also known as the

selection of the type of object would have been prescribed or at least limited by custom, correlated with ritual performance (for example, the ointment jars from Largo Argentina, see below), recommended as appropriate for the deity receiving the offering, and as efficacious in securing the attention and favor of the god with respect to the particular intent of the offerer. Furthermore, the specific offering chosen would have, in some way, been determined by the topographic matrix of the sanctuary itself, serving to define the character of the sacrifice, bloodless or animal.

When large quantities of a particular shape of vessel or object are deposited within the same, bounded sacred space, the individuality and particularity of the object were arguably of less importance than its genre or contents and its role in and relationship to a larger cultic function. For example, at Largo Argentina, of the over 550 excavated miniature ointment jars of quite common ceramic fabric, over 200 were deposited next to the platform of the altar of Temple A (Andreani 2005). These 550 vessels exhibit some variety in form (some have more elongated necks, others wider bodies) and in decoration (some have a black or red glaze on their necks, others on their bodies, and the interiors of many are glazed), but there is nonetheless an overall uniformity in form, scale, and general appearance (**Figure 29**). For the participant ultimately depositing one of these, it may not have been the vessel itself that was the primary dedication, but rather its contents and their use in an act of libation, the actual material experience of the act of offering, that was essential to the ritual. The glaze on the interior of many of these vases would support such a ritual function since without such glaze, oils contained within the vessel

Sanctuary of Minerva) and depict young devotees of both genders in offering stances, dedicating apples or balls (Castagnoli 1981: 188-189; 209ff.) (**Figure 28**).

would seep through the fabric of the ceramic (**Figure 30**).⁷⁰ The fact that the majority of these vessels are preserved in their entirety suggests that they were not simply discarded after they had performed their function as ritual implements, but rather that after use (possibly repeated use) they were carefully deposited along with other standard offerings of a distinctly votive character. As both functionally and materially votive, though mass-produced and lacking individuality, these humble ointment jars had acquired, through their use, the status and the consequent value of ritual instruments. They become fitting candidates in their own right for votive deposition and can be seen to have acquired intrinsic value, for as Valeri notes “the value of the offering always coincides with its utility” (1985: 63). These ointment jars, critical components of the material setting of a complex social, religious process, fulfill Smith’s requirement that a votive must “fulfill expectations; it must convince...[it] must carry conviction as a suitable object, and insofar as it also symbolizes the relationships, which the donor participates in, those relationships must also carry conviction” (2001: 22).⁷¹ The act and object mutually reinforce each other, simultaneously reifying the type, value, and character of the ephemeral act of sacrifice and imposing the memory of the act on the permanent materials of the object.

⁷⁰ At S. Omobono, there is a prevalence as well of ointment jars; aryballoi, alabastra, and mold-made ointment jars which could be used to hold perfumes and olive oil were predominant vessel types in the sanctuary. Their use as containers for olive oil is attested by olive seeds and nut seeds found throughout the excavations of the sanctuary (Virgili 1989:53).

⁷¹ An example of uniformity of offering analogous to that of ointment jars at Largo Argentina can be seen in the votive deposit of over 30,000 miniature vessels from the Eastern Sanctuary at Lavinium (the Sanctuary of Minerva) (see discussion below). At this site, the predominance of miniature *ollae* (along with a much smaller assemblage of larger models of the vessel) seems to be tied, both in typology and materials (impasto), to the specific cult and cult practices of the sanctuary (Fenelli 1991:493).

Like their full-scale models, miniature votive statuettes most often depict a devotee. For example, at Largo Argentina, of the 16 statuettes recorded (and 50 fragments), the subjects often appear standing, sometimes resting on a plinth and, in only one example seated.⁷² The majority of the figurines from Largo Argentina were discovered along the platforms of altars A (29 fragments were recorded from near the altar of A) and C, and along the southern podium of Temple A. There is a single example of a votive animal (most likely a bull) (**Figure 31**). The typical statuette from this sanctuary is of a draped female, modeled on the tanagran type (**Figure 32**). Of the divinities represented, Marchetti Longhi (*Giornali di Scavo* 1930; February) notes a statuette of a divinity holding a baby which he claims may represent Juno Lacina or Mater Matuta; another statuette depicts a young Roman Mercury of a type often attested in Roman votive contexts and throughout Etruria and Latium (Andreani et al. 2005: 119).⁷³ The statuettes of devotees from this sanctuary form a largely homogenous group; they are of similar scale and mold-made from depurated, powdery, pale-colored clay, a medium that indicates local production. The statuettes are hollow and many have flat bases which allow them to stand upright. Their type and manufacture are similar to those of finds from many other Roman-Etruscan-Latinal contexts dating to the 3rd-1st century B.C.E..

With mass-produced, mold-made votives, an individual would have had to find some way to personalize his or her offering. In some rare cases, these votives show evidence of

⁷² In the 4th century B.C.E. in Southern Etruria, figural miniatures were quite common (depicting warriors and koutrophoroi, for example) and by the 3rd and 2nd centuries B.C.E. were widespread, their production becoming standardized in the last centuries of the Republic (the most popular depictions were of draped men and women modeled on “tanagran” types).

⁷³ A similar type was found at the Sanctuary of the Thirteen Altars at Lavinium (Castagnoli 1975: 323, E104-105).

hand molding – exceptional craftsmanship or particularized details, suggesting individual commissions (Glinister 2006:28). A few examples of anatomical votives seem to suggest consultation between the purchaser and the producer of the object (Glinister 2006:11).⁷⁴

Individualized and Inscribed Votives

Votives could be individualized by inscriptions, naming the god or the offerer (after funerary inscriptions, votive inscriptions are the next largest category) (Rupke 2007:157). By inscribing one's full name, a dedicator showed his commitment and engagement in a system that lacked a notion of "congregational membership" (Rupke 2007:158). With an inscription, the continuous, ongoing relationship intended between the dedicator and the dedicatee can be maintained without the presence, or performance of the suppliant (Rupke 2009). The personalized graffiti on replicated votives "replaces the repetition, sometimes hinted at in objects of dedication" (Rupke 2009:35) and the words and acts represented by "large glittering slabs of inscribed bronze can be as impressive and overwhelming, as the robed priests and processions who enact the ritual itself" (Wilkins 1996:124). The inscription, referring primarily to the dedicant, is "better understood as an act," and lends a public and visible character to a private act of communication (Postgate et al. 1995:459-60; Wilkins 1996:124). Here words and objects are what define the lasting ritual bond. Commenting on epigraphic testimony in sacred dedications, Bodel (2009:23 quoting Lassère 2005:542) notes that "even if the behavior is private, the transaction of it is public, since the inscribed text was deposited in a sanctuary." Votive

⁷⁴ Potter and Wells (1985:28-29) use some of the votive heads from Ponte di Nona as examples of objects that most likely were commissioned by more affluent people.

inscriptions themselves may serve as ritual acts concerned with ritual efficacy⁷⁵ as they perhaps can be thought to have “a universalizing ‘fixing-effect’ on the ritual within a perspective of eternity” (Wilkins 1996:124) – the fixed words of the text overriding lapses in the verbal performance of the ritual and guaranteeing its validity. In a religious system lacking a doctrine or system of beliefs, these inscribed words serve not to explicate but rather to assist in the production of the materialized experience of a ritual.

As opposed to graffiti incised on mass-produced terracotta votives, individualized inscription that had occurred before the clay was baked would imply a specific commissioning and, presumably, a correspondingly specific intention (Rupke 2009: 35). It must be kept in mind, however, that writing may have been economically and socially out of reach for the majority of offerers and that votives often remain “mute” (De Cazanove 2009). Derrida claims that works of art are “already talkative, full of virtual discourses” (1994:12-13); and, indeed, the altars in this dissertation do, in a sense, “talk,” not discoursing representationally works of art, but actively guiding and informing the practice of sacrifice. This would seem to be all the more so in the case of votives where the parties to and intentions of such discourses are so clearly entailed by the object.

Although inscriptions are found on a variety of votive object types,⁷⁶ the majority of examples serving as supplements to votive offerings comes from vases.⁷⁷ Examples of

⁷⁵ We could think here of the passage from Varro (*L.L.* vii.8) quoted earlier in this chapter in which he comments that pronouncing the correct words at correct moments during a ritual was essential. We should note, of course, that a philosophically influenced intellectual like Varro might not provide good evidence for what most people did or thought about practice.

⁷⁶ Nonnis (2003:especially his appendix on 40ff.).

⁷⁷ Comella (2005:475) suggests vases may not have been properly votive objects but rather part of the *instrumentum* of the sanctuary.

graffiti incised on the vessel bases excavated in sanctuaries relate the names of proprietors or offerers. At Largo Argentina, for instance, a number of the black glaze or terra sigillata cookware included graffiti, often with names that can be associated with the servile classes or with foreign pilgrims (Andreani 2005; for comparanda see Comella 1986:12; Threipland 1969: 7-9; Vagnetti 1971:175-177).⁷⁸ At this site, for example, on the base of an open, black-glaze vessel is incised the name *Anina* and on the bases of two different terra sigillata open vessels appear *Crysant(i?)* and *Axsuris* (**Figure 33**). The range, placement, and typology of names support the hypothesis that they were not inscribed by the manufacturer, but rather are testimonies of individual dedicants' visits to the sanctuary with their personalized offerings. The complete names incised onto the bases of these vessels from Largo Argentina are quite different from the individualizing marks on the bucchero from a deposit in Veii.⁷⁹ Commenting on this collection of votive pottery, Threipland (1969) notes that the graffiti etched onto the exteriors and interiors of the bases of the bucchero vessels most likely would have been carved by the merchants selling the vases rather than by their owners (Threipland 1969:9). This hypothesis is supported by the individual letters found on these vases, all in cursive form, closely resembling each other (Threipland 1969:9).

Inscriptions occur, with much less frequency, on votives other than pottery.

Inscriptions on anatomical votives, for example, are quite rare (De Cazanove 2009:

⁷⁸ On many of the pieces of tableware (often aretine) found on the Esquiline in Rome, the graffitied names are the names of the owner, serving as a memory of his offering (Dressel 1880:312).

⁷⁹ See below for the marks (most likely a letter or mark of the manufacturer) found on an *arulae* from Largo Argentina.

355).⁸⁰ An inscription found on the base of a small votive limestone cippus (10x11x6.5 cm), dating to the 3rd century B.C.E. found in front of Temple B in Largo Argentina reads: [---] eiusqu[e---]/ [d]ederon[t pro]/ domod fa[miliad]/ souad quis[que]/ leibereique (*Roma medio repubblicana* 1973:122 no.130; Marchetti Longhi 1933:310).⁸¹

Monetary Deposits

Coins could serve as well as sacred dedications. Sanctuaries, in fact, often included physical receptacles for collection. The question of the relation of the monetary value of coins to their symbolic value as votives needs to be addressed. It will also be useful to consider the use of coins in a votive context in light of the observation raised above that the phenomena of offering *arulae* fades out as coins begin to be minted and more widely dispersed. As opposed to, for example, terracotta objects,⁸² coins could be considered distinct from other votive offerings by three primary characteristics (not otherwise found together): coins were not originally manufactured as intentional sacred gifts (Snodgrass'

⁸⁰ Examples from Roman Gaul are the most numerous. See De Cazanove (2009:357ff.) for a discussion. Examples can be seen for instance on a votive leg from Ara della Regina at Tarquinia (Tarquinia, Museo arch. Inv4291; Comella 2005: 47; Turfa 2004:363), a fragment of a leg from Campetti near Veii (Colonna, 1981: 231 n. 13), a heart dedicated to Minerva from Lavinium (Fenelli 1984:336, fig 11.), and two uteri from the sanctuary at Fontanile di Legnisina (Vulci) (Colonna et al. 1988: 32, no.12, figures 11-13). Inscriptions can also be found on bronze anatomical votives, for example, on a phallus from Este (AE 1997 589= SI 15, n.9) (Callegari 1936:13) and on a bronze hand from the church of S. Gregorio on the Celian (Colini 1944:49, n.3).

⁸¹ Inscriptions could also occur on votive altars (votive altar to Tinia from the Poggetto sanctuary at Bolsena, or the votive altar with an Oscan inscription from the Naples Archaeological Museum Inv.2550) (**Figure 34**) (Morandi 1991); on votive animals (a bronze bird from Volterra) (Colonna 1985: 34, no 1.17; Edlund-Berry 2004: 369 (no.346)); on lamps (a bronze lamp from Cortona) (Bruschetti 1978); and on miniature pottery (a miniature pitcher from the Portonaccio sanctuary at Veii) (Colonna 1985: 105, no. 5.1).

⁸² Crawford (2003:69) states that terracotta votives were offered by a worshipper who did not expect to get it back or for it to be used by anyone else, and that they were often displayed for a little while and then buried or dumped. Coins, according to Crawford, can be considered however to follow the "same path" as terracottas and could even be displayed (Crawford 2003:72). For coins included within votive deposits see Crawford (2003:80-83).

“raw” deposits); they could carry high monetary value; and they could be re-usable (Crawford 2003: 69). Termed *thesauri*, *donaria*,⁸³ or *stips*, the Latins clearly labeled designated donative places for offering coins and gifts of value (Varro *LL* 5. 182, 3; Dionysius of Halicarnassus 4.15; Seneca *Epist.* 115.5; Macrobius *Sat.* 3.11.6; ritual taxes are mentioned by Tertullian *Nat.* 1.10). Present from the beginning of the 2nd century B.C.E. and becoming increasingly popular in the 1st century B.C.E., *thesauri* were small (usually stone-built) monuments, modeled after examples from the Hellenistic East, consisting of a hollow cavity within the trunk of the structure with a slit on the upper (often hemispherical) surface through which coins could be dropped and collected.⁸⁴ They could be cubical or ovoid, but commonly were cylindrical or in the form of a single trunk-like block, with or without a base (Torelli 2005:354-356). The coins deposited into a thesaurus were intended for monetary use by the sanctuary rather than as votive objects⁸⁵ for subsequent deposition.⁸⁶ In Italy, at least 18 *thesauri* (*donaria* or *stipes*) are attested, with some of the most prominent examples at the sanctuaries in Fregellae,

⁸³ The word *donarium* is used to designate an offering to the gods. *Donaria* were fixed monuments in sanctuaries: at Pietrabbondante, for example, before Temple A and at S. Omobono between the altars of Temples A and B. *Donaria* could support statues or serve as receptacles for offerings, or alternatively, serve as monumental decoration in a sanctuary (Macrobius III.ii.6). According to Servius (*Ad Aen.* 2.269), *donaria* in the Imperial period were structures used for the collection of offerings.

⁸⁴ Their forms bear similarities to the portable boxes that were used for collections.

⁸⁵ Coins could also be used as foundation deposits (Crawford 2003: 74-75); for example the coins buried under the 6th century temple at Satricum (Waarsenburg 2001). Coins could be offerings in water within a sacred site as well (CIL XI 4123).

⁸⁶ From the *Lex Aedis Furfensis*, ILLRP 508. Chapter LXXII of the *Lex Coloniae Genetivae Ursonensis* states that the money that had been offered *stipis nomine* had to be used for sacrifices by the temple where the offering was made. Crawford (2003: 70) states that all the *thesauri* studied by him could have been opened (with different degrees of difficulty).

Sulmona and Sora (Catalli and Scheid 1994:58, 63).⁸⁷ According to Torelli (2005:355), the structures of *thesauri* are thought to reflect the changing economic circumstances of the mid-2nd century B.C.E. and the “monetization” of sacred offerings, a shift in which coins began to replace other types of offerings (Stopponi 2011:29; Torelli 2005:354-56).

Usually erected outside temples or cult monuments and frequently including inscriptions to commemorate their construction or the dedicatee, these receptacles were often set close to altars. The proximity of thesaurus and altar is attested in the details of the rituals of the Arval Brothers. During their sacrifice to the dea Dia, the Arval Brothers are said to have placed themselves in front of the temple, near the altar, in order to “give to the thesaurus,” offering their monetary contribution to the sacrifice (Catalli and Scheid 1994: 64; CIL VI 2104a). At Fosso dell’Incastro at Ardea, in front of Temple A, the *thesaurus* directly abuts the altar of the temple (**Figure 35**). Unfortunately, very little material was found within this travertine structure aside from some anomalous animal bones and some pottery dating to its final 2nd century C.E. phase (di Mario 2007:72-73).⁸⁸ A similar arrangement can be seen at Campo della Fiera at Orvieto, where an almost square structure, situated directly next to (to the west of) one of the altars in the forecourt of the temple, contained over 200 coins that date from the mid-first century B.C.E. to the Augustan period (Stopponi 2011:29) (**Figure 36**). In front of Temple B at Largo Argentina, there is a well directly on axis with the temple and the later brick altar belonging to the temple (perhaps the location of an earlier altar, see Chapter 1), that may

⁸⁷ Contra. Crawford (2003:70) who catalogues over 20 examples from Italy.

⁸⁸ This connection among the deposition of animal bones, votive objects, and *thesauri* can be seen in Seneca’s statement (*Epist.* 115.5) that *colitur autem non taurorum opimis cororibus contrucidatis nec auro argentoque suspenso nec in thesauros stipe infusa...*” (virtue is nurtured not by sacrificing the fattened bodies of bulls or by hanging up gold and silver as offerings or by placing a *stips* in a *thesaurus*...).

have been used for the collection of money (**Figure 37**). The square well was closed (at the time of discovery and excavation in 1931) by a polygonal flint block (*Giornali di Scavo* 1933:223) and although the well's date of construction is unknown, the twelve bronze coins that were found at its base date to the Augustan period and could suggest the time of either its consecration or its re-consecration.

Miniaturization of Votives

Having surveyed the different types of votives popular during the Republican period, it is necessary to explore how certain votives might have been particularly distinctive, objects of greater symbolic wealth. Perhaps the votives which are most individualized and which most explicitly exhibit the symbolic character of tokens embodying the intent of the offerer (Bodel 2009, and see discussion above) are those objects, like the *arulae*, deposited within a sacred space, which replicate and mimic in miniature a larger archetype. Such an interplay between the miniature and the monumental, where the miniature is placed next to or deposited at its monumental archetype, reveals the active influence of the space and setting on the performance over the ritual act. From archaic Rome itself, miniature vases are by far the most common, with popular miniature forms being *ollae* (two handled jars, which also appear in the same deposit in full-scaled versions), *kernoi*,⁸⁹ and *focaccine* (miniature replicas of sacrificial cakes) (Bartoloni 1991). One of the largest collections of Latial miniature pottery was found in an urban deposit at Lavinium, where over 30,000 miniature vessels of impasto ware were recorded

⁸⁹ A *kernos* is a vessel that includes multiple smaller vases for a variety of offerings such as salt, pepper, beans, wool, peas, grains, cereals. Such a form was common in prehistoric Greece. Cf. Virgili (1989:53).

dating from the second half of the 7th to the beginning of the 6th centuries B.C.E. (Bouma 1996, Vol.III :47; Edlund-Berry 2004: 373; Fenelli 1984:331, 1991:490; Nijboer 1998:137).⁹⁰ In this assemblage, by far the most predominant forms in miniature were *ollae*, occurring alongside miniature bowls, cups with curved handles, small cups, and miniature burners, produced either by hand or by wheel (Fenelli 1991:490) (**Figure 38**).⁹¹ Of this collection, over 1,500 pieces are intact or almost so. In general, miniature vessels, imitating larger forms, seem to have served a double purpose: as containers for food offerings on the one hand, and as votive offerings in and of themselves which, by their deliberate diminution of detail and scale, symbolically represent the functions and meanings of their larger models. As Bouma suggests (1996 Vol. 1: 226-227), these small vessels may have been the receptacles for first offerings, such as the first grain of corn, a pea, a bean, a morsel of cheese, a small portion of meat, some untreated wool, or used as a container for oil, wine or other liquid (water or milk), or even as a holder of personal gifts, like bronze rings (Bartoloni 1991; Jovino 2005:34). On the other hand, aside from the ointment jars which would certainly have held oils, perfumes, or other liquids for libation, the miniature vessels may not have been intended to hold or serve anything, acting rather as symbolic pointers, like the *arulae*, to their full-scaled functional models, closely mimicking the form of normal-sized cook ware – burners, plates, cups, *ollae*, bowls, cakes made of grain.

⁹⁰ Rupke (2007:154) states that only 15,000 were found.

⁹¹ Large quantities of miniature vases were also found at Grotta del Re Tiberio, Tivoli, and Rome (including S. Omobono, see below).

At S. Omobono, an enormous quantity of miniature vessels was excavated (**Figure 39**), many in the popular, everyday form of a cylindrical, ovoid *olla* (Bartoloni 1991); other common forms of miniature pottery were *kernoi* and *focaccine*. These miniature objects, made by hand in fairly coarse impasto, are thought to have come from a local seller nearby the sanctuary (Virgili 1989:52-53). These miniature vessels lack any traces of fire or burning (the exceptions being a basin and a lamp, Virgili 1989:52). The assemblage of votives excavated at S. Omobono (unlike Lavinium), with its preponderance of miniature vessels, shows a striking near absence of examples of the kinds of normal-sized, locally-manufactured, utilitarian tablewares (such as spherical or cylindrical *ollae* and *dolia*) that would have served as models for the miniature votives (Virgili 1989:52). Along with miniature pottery, the deposits at S. Omobono contained a vast quantity of miniature, terracotta representations of sacrificial cakes (Bouma 1996 Vol I.: 275-277) (**Figure 40**), modeled on the actual cakes (made of grain or flour) that were commonly offered to the deity during a communal sacrifice.⁹²

Apart from ointment jars, only five miniature vessels have been recorded and documented from the excavations at Largo Argentina (**Figure 41**). Mostly from a deposit near the platform of the altar of Temple A, the miniature vessels imitate forms used for cooking and ritual practice. These miniature vessels range from 2-4cm and are of black-glaze or local, light-colored clay, showing no traces of burning. The clay itself is typical fine ware fabric but the vessels have been coarsely produced. The forms are similar to those found at S.Omobono: open-form bowls and cups (with ring bases), two-handled

⁹² The cakes were especially common at sanctuaries to Mater Matuta, for example at Satricum, see Bouma (1996 Vol. 1:275ff). At the sanctuary of Demeter and Kore at Corinth, no meat was consumed, only sacrificial cakes (Bruit-Zaidman 2005).

jars, and one-handed cooking vessels modeled on full-scale functional archetypes. One example is a rare form, imitating a larger ladle or spoon (**Figure 42**). This ladle is strigiliated (in contrast to the other, unarticulated vessels) and there is a small hole at the end of the handle, suggesting that it may have been intended for display or for some other kind of decorative purpose.⁹³

Miniature replicas? models?

Through the process of miniaturization – that is, through the selection of certain representative features to be preserved at the expense of more utilitarian considerations – the miniature votives of all sorts would have had a significant psychological effect on both those who viewed and those who held them (Bailey 2005:28). Scholarly literature offers a variety of theories and explanations of miniaturization, all sharing a common emphasis on the material authority and active quality of the object. As Stewart (1993:43) notes, a “reduction in dimensions does not produce a corresponding reduction in significance.” Miniaturization creates an active object, an object that, with authority, compels the viewer to make inferences, resulting in the possibility of a variety of different reactions and interpretations which serve to “test the relation between materiality and meaning” (Stewart 1993:57).

⁹³ Votives could be hung for display purposes. For example, see the collection of miniature votive animals from Dion, on display in the site museum. Also, see Glinister (2006:17) for other parallel examples; she notes that Corinthian votives were often pierced for display as were some examples of votives from Gravisca. The pierced, hanging dolls depicted on painted *lararia* come to mind. For example, those on the altar at the southwest corner of *insula* IX.11 on via Abbandonza in Pompeii. Festus (108L) states that dolls were suspended from compital shrines; Macrobius (*Sat.*1.7.35) states that they hung at every door (see Stek 2010: chapter 9 for compital shrines).

Knappett (2012) links the miniature to the monumental through a metonymic relation, a part standing for the whole of the richly sensual experience of communal animal sacrifice – kinetic, tactile, aural, olfactory, as well as visual;⁹⁴ for an object’s “signifying power... is enhanced by the concentration of so much semiology in such a tiny element of matter,” resulting in “a multiplication of ideological properties” (Platt 2006: 237; Stewart [1993:47-8] qtd in Platt 2006:237). Gell calls these material part-for-whole representations “holographic fragments of the larger unities to which they are united by stylistic linkages” (1998:220).

Bailey (2005:29) distinguishes between *models* that “reproduce reality in reduced dimension with maximum detail retained”⁹⁵ and *miniatures*, cultural creations that do not seek exact precision and exactitude in representation. Models (according to Clark [forthcoming] qtd by Knappett 2012:7) tend to create “surrogate situations” which allow the viewer to think more effectively about the real world. Miniatures, on the other hand, give the viewer access to alternative worlds and realities (Bailey 2005:30, 32, 34). It may be, however, that in the case of human-divine relations, Bailey’s distinction between “models” and “miniatures,” real and other worlds, is overly rigid and needs to be fine-tuned. Models, even if close representations of larger types, are nevertheless, in their reduction of size, abstractions as well. Such abstraction in fact recalls Clark’s characterization of models as objects created through “selective concretization” (Knappett 2012:12). Testifying to a selective act, the object signifies the importance of its

⁹⁴ According to Knappett (2012:6) miniatures can be analyzed in terms of frequency, fidelity, distance, and directionality, as well as by contiguity, factorality, causality, and convention.

⁹⁵ For example, an architect’s blueprint.

relation to its referent, magnifying value through diminishment of scale. As Bailey recognizes, “through compression and distillation, something that is physically smaller becomes more powerful than what is larger. The small stimulates very big thoughts about larger worlds” (2005:42). However realistic in other respects, compressive reproductions of physical objects like monumental altars (which themselves have emblematic significance) would only tend to emphasize the importance of this symbolic function.

Miniature replicas can exist beyond the physical context of altar, temple and precinct walls – with the tomb, in particular, serving as the other principal site at which major deposits of *arulae* have been found.⁹⁶ Unlike the direct, indexical relationship at sanctuaries between miniature ‘sign’ and ‘monumental referent’ (Knappett 2012: 1-2, 5, 6), the numerous *arulae* that have been discovered in funerary contexts would have echoed more distantly – and perhaps at second hand – a range of architectural archetypes rather than the model of a single local example. Even more token-like than sanctuary *arulae* having specific referents, miniature funerary *arulae* were not required to be iconically faithful to any canonical form (a departure from form commented on by Knappett 2012: 12).⁹⁷ *Arulae* from necropoleis were considerably freer from such constraints and could be intricately ornamented and take on more imaginative forms.

Dionysius of Halicarnassus, in a metaphor from fragment 6 of his *de Imitatione*,

⁹⁶ It should be noted that, according to Kleiner (1987), Roman funerary altars in general were intended as commemorative markers and not tables for sacrifice (as Greek and Etruscan funerary altars may have been). The depictions (often of a patera and a pitcher) on Roman funerary altars allude to rituals that would occur at the grave (for example, the laying out of the body or the celebrations of feast days). But the fact that the majority of Roman funerary altars (about 75%) include portraits demonstrates that, though they might have been in the form of sacrificial altars, they were not used for that purpose.

⁹⁷ As an example of such objects, Knappett (2012:10) discusses an assemblage of miniature vessels from Knossos in the area of Early Magazine A. Knappett here addresses Weingarten’s (2007) hypothesis that each of these vessels represents a unit of some commodity.

compares this species of mimesis to the convergence of many small streams into one. The typological differences between closely mimetic sanctuary *arulae* and their more generic and less conformist funerary counterparts seem to make a good fit with Bailey's model-miniature classificatory scheme (with those from funerary contexts qualifying as highly abstracted "miniatures," and those from sanctuaries as somewhat more realistic "models").

Arulae and Mimesis

Whether termed "model" or "miniature," sanctuary *arulae*, as has been shown, quite explicitly mimic and replicate specific monuments, conveying an association that extends beyond questions of dimensions, forms, style, and detail to those of the meanings inherent in communal altars and their settings. Such complex relations can be unpacked and better understood with help from theories of mimesis and emulation. Much attention has been paid in Roman studies to the Roman emulation of Greek statues.⁹⁸ Usually interchangeable terms such as "replication," "imitation," "mimesis," "replica," "copy," "repetition," "adaptation" or "reproduction" have been given a specialist turn and invested with quite distinct connotations. A few examples of this specialist terminology include: according to Trimble (2011: 106, following Karanastassis [1986:211,224] and Alexandridis [2004: 219]),⁹⁹ the use of the words "copy" or "replica" connotes a work

⁹⁸ See Gazda (1995, 2002); Perry (2005); Trimble and Elsner (2006).

⁹⁹ Karanastassi (1986: 207-291). See also Alexandridis (2004).

that faithfully reproduces some model¹⁰⁰ in both its details and overall appearance (Perry 2002:158); a “repetition” tends to be assigned to a miniaturized or low-quality reproduction that does not positively depart from its original model; a “variant” makes some changes to certain details but still references a particular archetype; and an “adaptation” or “free copy” relates to something that alters both detail and overall form.¹⁰¹ Platt (2006:238) states that the only true forms of “reproduction” in antiquity were produced by casting, molding, or imprinting and that an eclectic approach to copying was more highly valued than faithful reproduction (Perry 2002:158).

In a material sense then, sanctuary *arulae* should be classed as repetitions (Castagnoli 1962: 162; Nagy 2000:8-9; Ricciotti 1978:8,15); however, as value-preserving tokens, these votives clearly function as replicas. The aesthetic aspects of these objects are less important than their ability to evoke meaning. As Quintilian warns, “imitation in and of itself is not enough” (*Ist Orat* 10.2.4: *Ante omnia igitur imitatio per se ipsa non sufficit*). As replicas, the miniature altars serve “visually to denote the link between an image and its archetype by means of a rhetoric of resemblance” (Gaifman 2006:259). As replications of cult monuments, these *arulae*, in the manner of representations of cult statues, can serve as the “emblem of the entire cult... becom[ing] influential in the creation of a network of cultic affiliations, by visually marking the propagation of the cult itself” (Gaifman 2006:260). Within a sacred context, cult statues and emblematic monuments themselves are representations; hence, *arulae* are imitations of

¹⁰⁰ Ancient sources in fact condemned an exact copy.

¹⁰¹ Gazda (2002: introduction) states that A. Reiff in 1959 distinguished the nuances in the words *interpretatio*, *imitatio*, and *aemulatio*. To him, *interpretatio* was the true or exact copy, *imitatio* was the free copy, and *aemulatio* was “ideal sculpture.”

representations, in the sense of “imitation-as-coalescence,” closing the gap between model and copy and allowing for “a fusion of sign and referent that absorbs and transforms the viewer or listener to the extent that he or she temporarily transcends the limitations of mortal form and understanding... a blending of *sēma* and god” (Platt 2011:71).

The miniature copies, then, as well as serving as votive, private material depositions and symbols of intent, also function aesthetically and emblematically to evoke the meaningful communal experience of the altar in its character as a tangible instrument of interaction with the supernatural world. Gaifman (2006:274), discussing the replication of cult statues, even goes so far as to argue that “the value of the original monuments of cult was not limited to their ritual value, but depended on their reproducibility or ‘exhibition value.’” It is tempting to extend this argument to *arulae*. As in the replica of a cult statue, the meaning of a miniature altar is not, according to Cicero, limited to what is “easy or obvious from a model” (*non ut multos imitatores saepe cognovi, qui aut ea, quae facilia sunt, aut etiam illa, quae insignia ac paene vitiosa, consecantur imitando*) (Cicero, *de Orat* 2.90.5). Rather, careful thought must be given over to the consideration of the sacred value of an exemplum and the material authority that such an object possesses.¹⁰²

Notions linking the study of rhetoric and the material arts by means of the classical concept of ‘imitation’ may help shed some additional light on the question of how replicas functioned in cultic contexts. In modern scholarly practice, the term “imitation,”

¹⁰² See also Quintilian, *Inst.* 10.2.16; *Hoc autem iis accidit qui non introspectis penitus virtutibus ad primum se velut aspectum orationis aptarunt: et cum iis felicissime cessit imitatio, verbis atque numeris sunt non multum differentes, vim dicendi atque inventionis non adsecuntur, sed plerumque declinant in peius et proxima virtutibus vitia comprehendunt ...*

the common Latin translation of the Greek “mimesis,” connotes copying from works of rhetoric or art, while the Greek parent term connotes copying from nature.¹⁰³ Famously, Plato saw the natural world as itself a shadow – and, therefore, a negative copy of the world of forms; from this, for Plato, it followed that artistic imitation produces “mere copies of something that is already itself a copy of the ideal world” (Plato *Republic* 596d-e, Jimenez 2010:49). Aristotle, often using theatrical imagery, introduced the idea that a mimetic act cannot produce an exact copy or image of the original person or object and therefore must involve some sort of translation or interpretation, thus creating, in the view of some modern scholars, a “mask that ‘reveals as much as it hides’” (Aristotle, *Poetics* 9.6-7; 14.11; Jimenez 2010: 57 qting Derrida 2004:206). For Jimenez, such mimetic interpretation is always reflexive, as “repeated imitation is what makes the ‘original’ an ‘original’ in the first place, transforming it into a model to be copied, [and so] it would seem beside the point to try and find out whether an imitation is accurate or not, or whether the ‘real’ and ultimate original source can be found” (Jimenez 2010:56). For as Platt observes (2011: 222), in a religious setting, in a ritual context, the “mimetic distance generated by several layers of representation can, paradoxically, lead to a clearer perception of the divine forms that the cult statues [or ritual objects] embody.” Imitation produces not things but images, not passively “a repression of difference, but a form of

¹⁰³ Within the field of rhetoric, both Quintilian and Dionysius of Halicarnassus (in his letter to Pompey 3.1) praised *imitatio*, viewing it as a key factor in creating classical rhetoric, works which relied on the previously written sources (see Heath [1989:370,373] and Weaire [2002:351, 359]). An artist created his own work through encounters with other models and forms, a process which fell in line with Roman conceptions and ideals of the aesthetic (Perry 2002:154-156, 159-60). In *Dinarcho* 7, Dionysius of Halicarnassus discusses two different types of imitation, one that is based on rules and precepts and which tends to produce an unnatural reproduction, and the other, based on nature, producing something pure and natural after long exposure, experience, and thorough analysis (Perry 2002: 158-9). Arguably, the miniature altars examined here, imitating at once both the monumental altar within the sanctuary and, simultaneously, reflecting exposure to the array of altars erected throughout the Roman world, would be categorized by Dionysius of Halicarnassus’ second, natural type of imitation.

resemblance” (Jimenez 2010:51), not just copies of shadows but of “shadows in a mirror” (Jimenez 2010:51, 57).

Jimenez’s view of mimesis calls to mind Bailey’s theorizing of miniaturization; the imitation does not preserve exact detail but instead reveals a “general truth and gives more pleasure to the audience because it allows understanding of the universal causes of things” (Jimenez 2010:50). Following Bhabha, Jimenez aptly notes that (2010:57), “mimicking does not create an exact double, but reproduces a partial representation of a model that becomes different through repetition.” Like Bailey’s miniatures, mimetic representation does not necessarily faithfully reproduce or recreate reality but instead “frames reality” (Jimenez 2010:50) and offers a “stylized portrait,” selecting certain features to highlight while ignoring others; a “notion of absence” necessarily accompanies any act of mimesis (Jimenez 2010:50; Platt 2011:80).

Context is a primary factor in shaping, in both space and time, the nature, value, and meaning of experience. This is particularly so in the case of the intentional reproduction of experience, when an object is expected to fulfill certain roles, to be recognized in certain ways. Replicated objects are never “simply transparent unmediated reproductions of something else;” rather, replicas are indicative of an “ideological decision to combine, categorize, mediate and reinterpret form” (Trimble and Elsner 2006:209). It is not merely the object itself which should be considered but the intentions behind the production of such an object – “mimicry reveals something in so far as it is distinct from what might be called an itself that is behind” (Jimenez 2010: 51 quoting Lacan 1977:99). This conception of a socially-mediated mentality of replication helps link the discussion of the material and social functions and typologies of miniature altars to questions of the mind

and the cognitive processes discussed earlier in Chapter 1. For if, as Trimble and Elsner claim, “all replication...lies significantly in the mind and in its social network of relations,” and if the actions and mentalities behind the production and uses of these miniature altars are indeed of central importance, then we should refocus our attention from questions of *what* these replicated objects might mean and, taking up Sperber’s (1975) provocative challenge, ask instead *how* these miniature altars might mean, *how* they connect to ritual practice, how they connect with the space and the setting. Having explored in depth in this chapter how the type, form, and character of bloodless, votive sacrifice respond to and interact with the sanctuary and sacred monuments at which the ritual is enacted, we now must investigate if and in what ways these mutual relations, this exercising and reinforcing of material authority on and by action, can be seen at work in the paradigmatic case of true animal sacrifice.

CHAPTER 4

Economy of Ritual(2): Animal Sacrifice

In different yet complementary ways, the economic implications of sacrifice are exemplified by votive and animals offerings. The analysis of and discussions concerning the votive *arulae* in the previous chapter helped to shed light on the involvement of the ritual of votive sacrifice with the Republican economy and to see the ways in which these objects of the marketplace of ritual were in direct dialogue with the monumental setting of the sanctuary. This chapter will build on and expand the previous chapter's study to include the economic aspects of animal sacrifice. Animal sacrifice was at once a fundamentally traditional religious act, a *material* industry, and an economic process. The sacrifice of carefully-bred and selected animals or the offering of rigorously-prepared vegetal fare can be viewed as having much in common, in an economic sense, with the dedication of crafted material votives. Both the selection of the particular type of votives and animals offered can be seen as determined by the surrounding natural or built resources. Pastoral and agricultural products too are embedded in natural, social, and economic contexts embodying an ongoing, reciprocal relationship between mortal and god. As we have seen, often unexceptional "secular" objects, manufactured in a commonplace manner, became sacralized "votives" by their deposition in a sacred area (Parker 1998; Edlund-Berry 2011), by their material relations with the architectural

setting of the sanctuary, and by virtue of the intentions of the offerer of the gift (Bodel 2009). Similarly, once within the *temenos* of a sanctuary, animals designated as sacred, led in a procession by a *victimarius*, and surrounded by a community of worshippers, also became religious, ritual “objects,” material goods, destined for sacrifice at the monumental altar. In Latium, the offering of meat for religious (non-funerary) rituals dates back to an era of pastoral and rural cults (Bouma 1996 Vol.1: 228).¹ From their breeding, to their exchange, to their ritual slaughter, to their consumption, sacrificial animals were not only physical religious entities, but also economic “commodities” (Appadurai 1986).

The ritual of sacrifice engaged all the senses – the sounds of the animals,² possibly muffled by the music of flute players; the crowded feel of the sacrificial audience; the touch of the animal’s neck before it was slaughtered; the sight of the bloody ritual spectacle; the smell of slaughtered animals or cooking meat; and the taste of the animal’s flesh. These passing aspects of the ritual no doubt physically engaged (albeit to different extents) the attention of the audience and the ritual participants while passing largely unnoticed by the divine recipients of the sacrifice.³ Rather than such powerful but evanescent phenomena or the prescribed ritual vows – processions, music, and gestures of the sacrifice that left little lasting trace in the writing or art of contemporary

¹ In Latium, the oldest such offerings have been found at Cassino, dating to the 10th-8th centuries B.C.E..

² Seneca *Oedipus* 366-370: “Nor is that wound which strikes thy ears the deep lowing of the herd, nor are frightened cattle bellowing anywhere; it is the lowing of the altar-fires, the affrighted murmurings of the hearth.”

³ Some studies suggest that the smoke of the cooking meat of the altar reached the gods (Scheid 2005b:46).

Republican culture – it is in the durable, *material* record, the ritually deposited animal bone or remains of vegetal offering burnt on the altar and offered to the deity, that which was not removed or consumed, that we can glimpse the role played by the most essential of economic activities in the formation of reciprocity relations between humans and gods: food production.

Assemblages of faunal evidence in particular provide a grounding for investigations into the actual practices of and possible incentives behind sacrifice, into how the actual choice of the species or age of a sacrificial animal may have in fact been determined by the specific setting of the ritual. We may ask, for example: what species were offered and of what categories (adult/infant, male/female, etc.)? Did the selection of animals change over time as the natural setting or architectural layout of the sanctuary changed? In what season did a sacrifice occur? What combination of animals was offered? What ages, parts, or sexes of animals predominated? Does this change over time? Was there standardization among the animal offerings and who or what regulated such uniformity? How did the selection of the animal engage with the larger economic, political, and religious circumstances of the community? Did the sacrifice only provide for the god and the immediate participants or did the larger community also share in the distribution of the meat? Was the consumption of the sacrificial meat confined to the sanctuary precinct or could the meat be sold or distributed outside the *temenos* walls? When, if ever, did the meat gain and lose its sacred quality?

The previous chapter surveyed the various possible theoretical approaches to an understanding of the economic setting of the symbolic value and consumption of votive altars in archaic and Republican Latium. The following discussion will take a more

conventional approach to the economic process, examining the production and consumption of sacrificial animals. Allowing for important differences between craft and agricultural production, presumably much of what was said above about economic theories of votive deposition could be applied as well to animal sacrifice. This chapter begins with a general survey and review of the scholarship of those aspects of animal sacrifice peculiar to the region of Latium – the sacred feasts, the status of sacrificial meat, the distribution and sale of sacrificial meat, the location of kitchens within sanctuaries, the methods for slaughter, carving, and preserving meat, the sources for animals, details about the breeding patterns of the three main sacrificial species (sheep/goat, pig, and cattle). Such detail into and contextualization of the practice of sacrifice serve to lay the groundwork necessary for a comprehensive understanding of the different aspects of animal sacrifice. With this extensive background, the chapter then moves into a more detailed, site-specific, close analysis of the faunal assemblage from the archaic altar at S.Omobono. Such a comparative examination of regional trends and local practice evidenced in the faunal data will help to determine what might be particular about the animal sacrifice at S.Omobono, how details about the architecture of the sanctuary and the surrounding topography might provide clues to interpreting the faunal data (and vice versa), revealing the extent to which sacrifice at the sanctuary can be seen as markedly-local and topographically-bound. While this chapter will focus primarily on the rich collection of faunal remains found at S. Omobono, its approach and methods the can be adapted and extend to any of the other sites studied in this project.

Banquets, feasts – is that what sacrifice is about?

How important was meat and meat consumption in the Roman world? How did sacrificial meat play into the larger dietary habits of the Romans? If public sacrifices included a communal feast where might these meals be held? These questions frequently dominate the study of Graeco-Roman public, communal animal sacrifice.⁴ By probing these questions and issues, I intend to explore how we can move the conversation away from the final product and outcome of sacrifice towards the entire sacrificial process and procedure that result in the production of meat.⁵ A discussion of banquets, feasts, and meat distribution is essential to an examination of faunal assemblages and what these remains can reveal not just about the sacrificial meals but also about the ritual that produced them. Many scholars focus on an alimentary view of Greek and Roman animal sacrifice.⁶ This approach is particularly prominent among French structuralist scholars such as Lévi-Strauss and Vernant and Detienne (1989). According to these schools of thought, sacrifice, by definition, is not only the actual slaughter of the animal and the subsequent offering of its entrails to a deity, but also the carving, distribution, and consumption of the meat.⁷ The related proposition – that all meat consumed had been

⁴ In modern scholarship much attention has been paid to the role of the meat produced from a public sacrifice. The following discussion and review of scholarship will serve to emphasize this tendentious focus on the product, highlighting the need for a study of the entire process of the sacrifice.

⁵ In what follows, I am explicitly focusing on sacrifices in public sanctuaries. Domestic sacrifice (as well as other types of sacrifices, such as funerary) would necessarily entail a different set of questions and hypotheses; these are beyond the scope of this study. See Chapter 6, pages 451-453 and later in this chapter, note 170 for domestic sacrifice and offerings as contrasted to public, temple sacrifice.

⁶ Rüpke (2005); Scheid (2005b, 2007b); Stowers (2011).

⁷ Greek sacred laws attest to the procedures and regulations of sacrifice and, at times, to the distribution of meat: LGS 65 from 92 B.C.E.. Sacred laws could also insist that the sacrificial meat be eaten inside the boundaries of a shrine (implied by the Greek words “ou phora”). “Xenia” were meat portions of

ritually slaughtered –though occasionally questioned, especially in more recent scholarship, has also been strongly represented in the discussions of Greek ritual practices that have come to dominate the study of sacrifice in the western Mediterranean world (Berthiaume 2005; Stowers 2011; van Straten 2005; Vernant and Detienne 1989; cf. Chioffi 1998).⁸

While Greek public sacrifice may entail a variety of meanings, the ritual always involves feasting: “Sacrifice like lunch did not encode its own interpretation apart from the implicit practical understandings that constituted it as an act of cooking, eating, giving and honoring” (Stowers 2011:49). During a sacrifice within a sanctuary, very rarely were the “usable” parts of an animal placed in the fire and destroyed; most animal parts were made available to the worshippers and ritual participants (LSGG 18) (Jameson 1988:88). Greek meat came from domesticated, not wild, animals and meat was not a large part of the people’s daily sustenance (Von Reden 2007: 394-395). According to Vernant and Detienne (1989: ch.1), all meat sold by a butcher had to come from animals that had been sacrificed or from animals fit to be sacrificed.⁹ If enough meat could be

communal sacrifices (Schmitt-Pantel 1992: 157). Profit from selling a surplus of sacrificial meat or “aparchai” could immediately be used for the acquisition of votive offerings; See SEG 27 (1977) no. 657 (Sicily); IG II 1672, 2630 (329/8 B.C.E. Eleusis); LSAM 72, ll.48-50 (3rd century B.C.E. Halicarnassus).

⁸ A discussion of the question of what was considered a food *offering* and what was considered more of a feast or banquet needs to be grounded in an understanding of the contemporary terminology. For example, we must consider that the Greek word *thusia* means a food gift to a god. Therefore, writers can emphasize the divine side of the word and practice, implying a food offering, or the human side and it means a feast/banquet/meal (with the offering implied). When animals were killed for ritual acts other than sacrifice for the gods the Greeks did not use the word *thusia*. The practice of burning or burying or killing animals, usually involved in the worship of underworld deities, was called *enagismos*; here the meat was usually not eaten. It seems as though the basic terminology for Greek and Roman sacrifice – and other terms as well – alludes to the human use of the produced food.

⁹ Although there are a very few references to herds that belonged to sanctuaries (Tegea: LSCG 67=IG V.2,3; Ios: LSCG 105=IG XII.5,2; Livy 24.3.3-7 tells of the sacred herds at the sanctuary of Hera at

gotten from sacrifice, then it was not profitable for Greeks to keep animals solely for slaughter.¹⁰ Based on the sacrificial calendar from Erchia, a deme in Attica with about 700-800 adult citizens, in the first half of the 4th century B.C.E., the amount of meat produced from sacrifices was about 796kg per year, with each citizen consuming a portion of about 1kg of meat per year (Jameson 1988:105; Von Reden 2007: 395). And based on calculations for the amount of sacrificial bovine meat available during state festivals in Imperial Athens, there would be one kilo of beef per adult per year (Von Reden 2007 395-96).

The link between sacrifice and feasting in Greece can also be seen linguistically. Ancient Greek does not have separate terms to convey a secular slaughtering and butchering of an animal other than the vocabulary used to refer to religious sacrifice or killing on behalf of the deities (see the note 8 above) (Vernant and Detienne 1989: ch.2). Therefore, a butcher who slaughters an animal in his shop or in another location receives the same functional name, *mageiros*, as a ritual officiant sacrificing an animal at a monumental altar (Vernant and Detienne 1989: ch. 1).

Ancient Greek sources link sacrifice to the gods with banquets for the humans, and most modern scholars seem to agree that Greek sacrifice was intimately linked to

Kroton), most temples would not have their own herd, but the animals would instead be purchased (Von Reden 2007:395).

¹⁰ Sheep and goat were the most common sacrificial animals in the Greek world, though cattle were sacrificed at more lavish occasions (Von Reden 2007: 394). 5th century Athens demanded a sacrificial cow for the Panathenaia from its colonies and members of the Delian League (IG I³ 34,42, I³46, 11; I³ 71,57). According to Xenophon (*Hell.* 6.4.29) in the 4th century, at a festival of Apollo, the Thessalian leader Jason of Pherae supplied 1,000 oxen and over 10,000 sheep, goats, and pigs for sacrifice. After cattle, pigs were the most expensive full-grown animal; the value of pigs is the food which they provide, particularly as a source of fat (Jameson 1988:98-99). Unlike in the Roman world (see below), pigs in the Greek world were only used occasionally for public sacrifice and more commonly adult pigs may have been sacrificed by private groups or households (Jameson 1988:99).

banqueting, that all meat was, in some way, sacrificial, and that all banquets were, in some way, religious. But there is no such explicit link in the ancient Roman sources, and the question remains more debated among modern scholars on Roman sacrifice (Rüpke 2005).¹¹ Kajava (1998), in particular, along with other modern scholars (Belayche 2007; Huet 2007; Scheid 2005b:215), argues against the idea that all meat was sacrificial;¹² this seems to be the general consensus among Roman scholars. But many modern Romanists do seem to follow the Greek model, viewing feasting as a religious act, an essential component of sacrifice, and often using the terms “banqueting,” “feasting,” and “sacrifice” interchangeably.¹³ For example, John Scheid (2005b:219) questions what it is that constitutes the religious act – the sacrifice itself or the banquet. He further proposes (2005a, 2005b:216, 251) that every banquet was in some way a staging or reinterpretation of mortals feasting with the gods¹⁴ and that a sacrifice not followed by a feast indicated a

¹¹ Scheid (1985:198ff.) cites two literary examples linking the banquet to sacrifice. However, both these examples have to do with sacrifices in military camps (not in public sanctuaries) and soldiers feasting on sacrificial meat. The examples do not relate a distribution of meat to the masses of people.

¹² Kajava draws the distinction between sacred and secular banquets based on the location in which the feast occurs, labeling all meals outside the *temenos* as secular. This however assumes that the Romans had a conception of a secular realm such as began to develop in the Middle Ages in the West. But surely, the Romans could have made an offering or prayer before an everyday meal.

¹³ I do not mean to suggest by this that all Roman sacrifices included a feast at the sanctuary or that all banquets involved sacrificial offerings. I merely mean to emphasize the predominant role sacrificial meat has played in discussions and investigations of sacrifice in modern scholarship.

¹⁴ Rüpke (2005) asks whether man invites god or god invites man to a sacrificial banquet. For the gods inviting the mortals, see Plautus *Rudens* 362 and 590; Martial *Epigrams* 9.90. For the mortals inviting the gods, see Statius *Silvae* 3.1.138 and a *lex arae*, dating to the Tiberius’ reign, erected on an aedicula from the Forum of Clodii which invites the *genius* of Caesar. Rüpke follows the theory that men invited the gods to a banquet (since the affair took place within the space of a temple); Scheid, on the contrary, views the gods as inviting the men (following the Greek idea that mortals invited gods only into small rooms for shelter). Veyne (2000) also address this question and argues that the mortals invited the gods to banquets.

failure of communication with the gods (2007:20).¹⁵ He argues that the public distribution of meat from a sacrifice for a banquet in a place other than a sanctuary was itself a religious and not secular occurrence. Such an explicit link between sacrifice and banqueting can be seen on a monument now in Cologne:¹⁶ on the main face the relief shows a *praefatio*, with the sacrificant offering a libation in the fire and two *victimarii* (one holding the pig, the other a plate); the two sides show tables, the settings for the ritual meal, covered with various food, fruits, and the head of a pig.

Scheid (2007b) argues that *all* food animals, large and small livestock (except fowl),¹⁷ were sacrificial and would have had to undergo some sort of ritual operation before they were slaughtered, even if this occurred with a very simplified version of sacrifice at a butcher's shop or at the market (2005a; 2007:26).¹⁸ He believes that public distributions of meat from temples for banquets in other places were "supremely religious" occasions.¹⁹ Scheid even goes so far as to state that if there were not an essential link between sacrifice and banqueting and if all meat were not sacrificial, then the status and importance of sacrifice would be lessened and this ritual could not be considered a central

¹⁵ For Scheid too (2005a; 2005b: chapter 9; 2007b), the sacrificial banquet (both public and private) is a way to put on view social rank. Plautus uses the term *participes* (*Mostellaria* 312, *Persa* 757) to refer to the participants who have claimed their part of the meat. Livy too uses this term (10.38.9). In Plautus *Trinummus* 468-475, the class distinction is made in the context of public banquets.

¹⁶ Huet (2007:208); Ryberg (1955:171).

¹⁷ For fowl sold in macella see Varro *RR* III.3.4.

¹⁸ One did not need to be or have a priest near in order to sacrifice an animal. However, Scheid (2005b:215) also states that it is (and has been in previous works) his primary intention to verify the status of the meat that was consumed at public, communal banquets in early Imperial Rome and not necessarily to argue that all meat consumed in Rome came from sacrifices. Scheid asserts that this too is the intention of Kajava.

¹⁹ In an earlier work, Scheid (2005b:214-221) questions whether or not the distribution of meat was something that the ritual of sacrifice required.

and omnipresent rite in Roman religion (2007b:21). Certainly, at least, all the meat slaughtered in a sacrifice was eaten and thought in some sense to be religious. The Latin words *profanare* (to bring anything to a god before a temple, to offer in sacrifice) and *polluceo* (to offer up as sacrifice or to serve food) are terms often used in connection with the distribution of meat.²⁰ For example, Varro (*L.L.* 6.54) states *itaque olim fano consumebatur omne quod profanum erat* and, four centuries later, Aurelius Victor (*De Origine Gentis Romae* 6) states *polluctum cum profanatum dicitur, id est proinde ut sit fani factum*.

Nevertheless, it would appear that in Rome, in the public sphere, a distinction could be made between ordinary banquets and sacrificial feasts, that is, between feasts that occur outside and within the *temenos* of a sanctuary.²¹ While most meals in the Roman world did not include meat,²² those that did arguably did not have to be sacrificial feasts. For example, in the Republican period, non-sacrificial banqueting could take place on ceremonial occasions, such as meetings of the *collegia* of the *sacerdotes publici* (Rüpke

²⁰ The act of “removing” inherent in the word “profanare” is meant to indicate the action of making something that belonged to a god fit for human use (i.e., meat). The Romans did not make a major distinction between meat and non-meat offerings in their terminology or practice.

²¹ This of course does not include domestic sacrifice. Although late sources, it is tempting to look at Artemidorus, for example, who makes this distinction (*Oniericritica* III.14); and Macrobius (*Sat.* III.XI.7) who distinguishes between sacred and non-sacred feasts: *Ergo apud Evandrum quidem fit iusta libatio, quippe apud eam mensam quae cum ara Maxima more utique religionis fuerat dedicata et in luco sacratio et inter ipsa sacra in quibus epulabantur: in convivio vero Didonis, quod tantum regium constat, non etiam sacrum, fuisse, apud humanam mensam in triclinio, non in templo, quia non erat religiosa sed usurpata libatio, solam fecit libasse reginam, in cuius persona nulla observationis necessitas et multa ad usurpandum in potestate permission.*

²² See Chapter 4’s discussion of the vegetal remains from S. Omobono and vegetal offering more generally.

2005).²³ Large-scale banquets were particularly associated with Roman games, triumphs,²⁴ and other spectacles. Veyne (2000:6) expands on the types of meals that were *not* preceded by a sacrifice: family meals, social dinners, daily meals, and certain festival meals.²⁵ For example, during the February festival of the Parentalia, banquets were held but the sacrifices that occurred during the festival, usually bloodless, would not have provided the meat necessary for the banquet (Kajava 1998:116). There are contexts other than sacrificial ritual during which meat was consumed²⁶ – game animals (pheasants, turtledoves, wild boar)²⁷ or in the arena.²⁸ In Rome, in the 2nd and 3rd centuries C.E., scenes of boar hunts and the subsequent butchering of the animals and banqueting are depicted on lids of sarcophagi.²⁹ Furthermore, the wild animals that were consumed by

²³ We might also consider as an example of non-religious meals eating in a public taverna. See Ellis (2004) for a general discussion of bars and taverna in Pompeii.

²⁴ While triumphs necessarily included sacrifices, the meat for the *visceratio* did not necessarily come from the sacrifice. See Beard (2009).

²⁵ Again, here we need to think of the terminology for sacrifice used by the Greeks (discussed in note 8 above) which implies a food gift (either with an emphasis on the divine side or on the human side)

²⁶ Contra Scheid (2007b:21), who states that no ancient sources mention the eating of dead animals (aside from those having been slaughtered).

²⁷ Martial *Epigrams* VII.27; Apicius n.332; Horace *Epist.* I.6.56-61.

²⁸ SHA Probus 19.2. See Kyle (1998:189ff.).

²⁹ On the lid of a sarcophagus from Ostia's Isola Sacra, Meleager's hunt of a wild boar and a banquet are depicted. In the details of the image of the banquet, the animals are carved and prepared for the feast. This banquet is most likely linked not to sacrifice but to agricultural work (Huet 2007:205). See the discussion later in this chapter concerning sacrifices for agricultural purposes. However, the animal is incised on its back, a detail that recalls a relief in the Louvre of a sacrifice of a cow, representing the *litatio*, or inspection of the animal to ensure that it is fit for the gods. See also the lid of a sarcophagus in the crypt of S. Cecilia in Trastevere for another depiction of a hunt of a wild boar and the subsequent banquet involving Meleager, Atalanta, and the Dioscoroi.

wealthy Romans, species which would add variety to their diets, were obtained not through sacrifice but rather through the hunt or purchased at urban markets.³⁰

In addition to the claim that not all feasts were religious and necessarily preceded by a sacrifice, it has been proposed that the public distribution of meat was not limited to sacrifice but could occur on a variety of social occasions (Kajava 1998: 110).³¹

Lexically, at the center of these issues concerning the religious status of meat, we find the term *visceratio*, meaning the public sharing of meat,³² but this term is generally also assumed to convey the sense of meat that comes from a sacrificial animal (Kajava 1998:109).³³ There is no clear evidence, however, that the sharing of sacrificial meat was in fact called *visceratio*.³⁴ Latin authors use words such as *carnem patere*,³⁵ *carnem accipere*,³⁶ *carnem dare*³⁷ to describe the apportioning of sacred meat, and *visceratio* pertains more to *largitio* and *munificientia*. *Visceratio* is also attested epigraphically (for

³⁰ Of course, animal sacrifice is about domestic animals particularly. See Smith 2004. A different set of smaller animals would have been offered in domestic sacrifice (see Chapters 2 and 6). Juvenal *Satires* 6.38-40 notes that wild game can be purchased at the market.

³¹ Suetonius (*Caesar* 38.4) links banquets with the distribution of meat.

³² This word is first attested in Cicero's *de Officiis* 2.55, which discusses public banquets, hunts, and gladiatorial games. Seneca *epist.* 19.10 also uses the word *visceratio* but not with its more common meaning of "banquet," and instead uses it to signify "meal." *Epulum* generally connotes an organized banquet whereas *visceratio* is the public distribution of meat. Seneca couples *visceratio* with *epulum* in letter 73.8, returning to the primary sense of the word. Bread and wine are usually served at an *epulum* although meat too could be served (CIL IX 4215) (Kajava 1998:123).

³³ This connotation is found in three passages from Servius' commentary on the *Aeneid* (1.211, 6.253, 7.716).

³⁴ There is no reference to the word *visceratio* recounted in Arnobius *Nat.* 7.24, which presents sacrificial vocabulary.

³⁵ Varro *LL* 6.25 and Cicero *pro Plancio*. 23.

³⁶ Pliny the Elder *NH* 3.69.

³⁷ Livy 32.1.9.

example, CIL IX 23 where a large sum is paid for a public dinner. See Kajava 1998:121-123). In Rome, for example, in 328 B.C.E., Marcus Flavius publically distributed meat on the occasion of his mother's funeral; the practice of *visceratio*, the public distribution of meat, is therefore attested as early as the 4th century B.C.E..³⁸ Distribution of meat could also occur in connection with electoral canvassing, or upper class self-advertisement (Kajava 1998:115).

Kajava's thesis is supported by the conspicuous silence among Latin authors and in market-place inscriptions regarding the origin of meat in Rome (Belyache 2007:32).³⁹ Only very rarely do documents actually provide information attesting that the meat was consumed in the ritual setting at the end of the sacrifice.⁴⁰ A famous exception to this pattern describes a sacrifice and banquet occurring within the sacred precinct of the *Ara Maxima* in the Forum Boarium. Food remaining from the banquet was forbidden to be removed from the precinct and ordered to be burned (Varro *LL* 6.54). Here, the consumption of the sacrificial meat was explicitly public and communal, a necessary

³⁸ Livy 8.22.2-4; the funeral of Q. Fabius Maximus Rullianus was accompanied by a distribution of meat as well (Kajava 1998: 113). These two funerals were followed by only a distribution of meat and not by games or other entertainment as was common. CIL I 2634 links a *visceratio* to a funeral, the only epigraphic testimony of a funeral *visceratio*. Cicero (*contra Vat* 12.30) also tells of a banquet after a funeral.

³⁹ CIL VI 1770 from 363C.E. relates the transaction for a lamb and how certain parts came from the slaughterer, and others from the merchant. The absence of explicit references to sacrifice in literary descriptions of banquets as is argued by Scheid (1985:195, 201) can be explained by the fact that all banquets were preceded by a sacrifice; it was therefore implicit.

⁴⁰ Plautus *Trinummus* 468-472 relates that the meal was held in the temple. There is an example from Ravenna (CIL XI 126) that states that the banquet of the meat that had been sacrificed had to occur within the temple. Varro *LL* 6.54 specifies that the animal had to be consumed within the temple; Pliny *NH* 32.20.10; Cicero *Tus.* 2.21.47 and *de legibus* 1.7.22 tells of the different parts of the animal at a sacrificial banquet.

aspect to complete the ritual of sacrifice.⁴¹ The feast included not only edible meat (*omnia esculenta poculenta* [Festus 298, 29-30L]) but also a supplementary offering, a *magmentum*, a part of uncooked meat set on the altar (Varro *LL* 6.54).

If it was not necessary for sacrificial meat to be consumed within the *temenos* of a sanctuary, if the meat could be removed from the sacred area, then at what point after an animal was ritually slaughtered did the meat lose its “sacrality?”⁴² Was sacrificial meat always inherently sacred? It would seem not. Following the “typical” procedure of Roman sacrifice (Scheid 2005b:55-57), after the *litatio* which assured that the victim had been accepted by the god, the *exta* were offered to the god and the remainder of the animal to the participants. After the offering to the deity was consumed by the fire on the altar or buried in the ground (that is, after the animal was ritually incorporated into the physical matrix of the sanctuary), the animal was deemed “profane,” indicated by the sacrificant seizing and placing his hand on the remains of the animal (Scheid 1998:76). This final ritual procedure was the *profanatio*, defined by Trebatius (as related in Macrobius *Sat.* III.3.4), a contemporary of Cicero, as indicating something that has lost its sacred or religious character and has reverted to its status as the property of the mortals (*profanum id proprie dici quod ex religioso vel sacro in hominum usum*

⁴¹ Macrobius *Sat.* III.12.2; Scheid (2007b:22).

⁴² Sacrificial animals produced much more meat than could be consumed immediately on site. According to Patrice Méniel (quoted in Scheid 2007b:22 note 8), after the sacrifice for the Arval brothers on January 3rd, which produced about 9.5 tons of bovine meat, the Capitol could not become a place in which this meat could be salted and prepared. Instead, the meat had to be portioned out and taken away from the sanctuary.

proprietatemque conversum est”).⁴³ Therefore, the carved sacrificial meat was no longer sacred but rather ordinarily alimentary, no longer a sacred “object,” no longer tied to the setting and character of the sanctuary. At the close of the ritual, sacrificial meat could have been taken to a ritual participant’s house, or to the butcher for sale (Scheid 1985:204ff.; 2007b:22).⁴⁴ Sacrificial meat was still privileged over other cuts of meat and the price at the market for such meat would necessarily be higher.⁴⁵ The actual purchase of the meat (at a *macellum* or at a butcher shop) may have been a way in which to participate in the sacrifice (Livy 25.12.15, Seneca *Ep.* 73.8; Pliny *Ep.* 10.96.10) (Scheid 2007b:22). But it must be noted that the sale or distribution of salted or cured meat, occurring much after the actual slaughter, would weaken the purchaser’s connection to an earlier sacrifice.

In Rome, butchers (according to Plautus), a notably inferior social class,⁴⁶ were found outside the Esquiline gate (Belayche 2007:42).⁴⁷ Ancient sources relate that meat sold at

⁴³ Cato *de Agricultura* 50.4: *ubi daps profanata comestaque erit*; 132: *Iovi caste profanato sua contagione* (texts transcribed from the Budé edition of the text, 1975).

⁴⁴ Scheid (2007b: abstract) suggests that money might have been distributed among the plebs for the purchase of sacrificial meat. Veyne (2000:14) suggests that, by a tacit convention (of turning one’s eyes away), some of the leftover meat from the sacrifice would have been left in the sanctuary for the poor to consume.

⁴⁵ Servius *ad Aen.* 8.183 comments that after Evander sacrificed a cow to Hercules, the meat cost more because of its *religionis*. Plautus (*Menaechmi*, 288-290) too asks the cost of sacred pigs: MEN. *Responde mihi./adulescens: quibus hic pretiis porci veneunt/sacres sinceri?*

⁴⁶ Epigraphic and iconographic testimony suggests that butchers were very often recently freed slaves, working throughout the city without direct access to sanctuaries (Tran 2007). To be a butcher was not a respected occupation. Martial 6.64 scorns the “cruel” butcher. Although butchers themselves are not explicitly mentioned in the Edict of Diocletian, the Edict does relate that other tradesmen with occupations similar to that of butchers made only 50 *denarii* a day (MacKinnon 2004:175). The Edict of Diocletian, dating to 301 C.E., addressed to provincial residents, lists prices for any type of commerce (not just restricted to markets): *in venalibus rebus, quae vel mercimoniis aguntur vel diurna urbium conversatione tractantur* (concerning items for sale, which come about either for commercial transactions or are handled

a butcher shop could be divided into parts (an action that would have already occurred in the sanctuary if the animal were from a sacrifice) and that meals could be prepared from an entire carcass with its *viscera*,⁴⁸ entrails that would not be present if the animal had been sacrificed; sources also tell of butchers selling such carcasses.⁴⁹ Apicius provides recipes that involve cleaning, gutting, and disemboweling animals (a kid, a sucking-pig, a hare), implying that some animals could be purchased whole (MacKinnon 2004:218).⁵⁰

According to Scheid (2005b:233), there was a sufficient quantity of sacrificial meat to keep butcher shops well stocked.⁵¹ For example, in Rome, on the Ides of every month, a

as daily business of cities [preamble to Edict, 66-67; Giacchero 1974]). Of course, this Edict dates to a period considerably later than this study.

⁴⁷ Pliny *Letters* X.96.10 states that the flesh of the animals' victims was sold outside the sanctuary in Bithynia. CIL VI 33870 mentions the importation of meat to a butcher near the Temple of Libitina, likely on the Esquiline. References in ancient authors and inscriptions relate that, as early as the late Republic, butchers (*lanii*) and market salesmen (*maccellari*) were organized into *collegia* or other groups. Varro *RR* 3.2.11 makes the distinction between *lanius* and *macellarius*, between a butcher and a market salesman. In Livy 44.16.10 *laniena* may mean slaughter-house. A *macellarius* could sell meat, poultry, and game (Plautus *Aul.* 370ff.; Varro *RR* 3.2.11, 3.3.4). For inscriptions see: CIL 1.2.978, 6.167; Chioffi (1999); Frayn (1996); Waltzing (1895-1900: 26, 8). References from Varro (LL.8.55), Livy (44.16.10), Plautus (*Epid.* 199 or 2.2.15), and Tertullian (*de Anim.* 33.3). all allude to the *lanienae*, the butchers' shops, where butchers usually carved and prepared already-slaughtered animals (MacKinnon 2004:175).

⁴⁸ Plautus *Miles Gloriosus* 711-712: *sacrificant: dant inde partem mihi maiorem quam sibi, abducunt ad exta; me ad se ad prandium, ad cenam vocant.*

⁴⁹ Plautus *Pseudolous* 342-343: BAL. *Non edepol habeo profecto, nam iam pridem vendidi. / CAL. Quo modo? BAL. Sine ornamentis, cum intestinis omnibus.*

⁵⁰ Whole young pigs and lambs are found at S. Omobono (MacKinnon 2004a:224-225). To be discussed below.

⁵¹ According to Patrice Méniel (quoted by Scheid 2005b:229 as personal communication), a Roman sheep could give 20-25 kg of meat, a calf of 2 years around 100kilos, a pig around 100 kilos, and a cow around 300 kilos. According to Lepetz (1996 137-138) a cow 360kg, a pig 104kg, and sheep/goat 18kg. Sumptuary legislation concerning dietary extravagance was instituted after 200 B.C.E. (MacKinnon 2004a: 226-227), but it is unclear how strictly these laws were enforced. There is limited evidence for holocaust sacrifices in Rome. Three occurred most likely in the area sacred to Dis and Proserpina in the field of Mars (at the foot of the Ponte Victor-Emmanuel II). One of these rituals included nine lambs and nine goats. Evidence for this ritual comes from two epigraphic testimonies, some coins, and a literary reference from the historian Zosimus (Scheid 2005b:99).

sheep was said to be sacrificed, the *ovis Idulis*.⁵² The amount of meat from religious sacrifice could be limited, however, by the state. An Edict of Domitian, according to Suetonius (*Domitian* 9.1), forbade the slaughter of animals for ritual sacrifice. However, during the months when there were fewer religious festivals, there would have been a shortage of sacrificial meat for sale in the shops, and it is likely that butchers would have had to slaughter meat outside the context of a religious setting or festival (Scheid 2005b:233, 251-252).⁵³

As shown by Huet (2007:199), depictions of butchers or of banqueting almost never reveal scenes connected to the ritual of sacrifice. For example, a funerary relief from

⁵² Ovid *Fasti* 1.56, Macrobius *Sat.* 1.15.16; Paul ex. Fest 104.

⁵³ If not sold at a butcher's shop, slaughtered meat (sacrificial or not) could be sold at a *macellum*, a centralized market which provided municipal control over the sale, distribution, and even ritual slaughtering of meat (Van Andringa 2006). For in depth discussions of *macella* and their connection to sacrificial meat, see Van Andringa (2007; 2006) and De Ruyt (2007). For a discussion of the etymology of "macellum" see De Ruyt (2007: 137-38, 140-141). The conception of *macellum* as strictly a meat market derives from Plautus, who writes about getting supplies from a *macellum* for a celebratory meal (Frayn 1993: 3). The *macellum* of Pompeii provides *in situ* evidence for these combined practices. In Pompeii, a series of graffiti reveals information about the sale of meat. Prices of meat are listed in CIL IV 4000, 4227, 4422, 4888, 5380, 6263, 8561, 8566. In the restaurant or hotel (IX.7.24-25,) there is an inscription detailing a list of meat or products sold (CIL IV 5380), indicated in *as* and *denarii*. The type of meat sold is only mentioned once: *bubella* (a cut of beef) and *botellum* (sausage or blood sausage) for the cost of an *as*. Two other lists from the Palestra indicate the price of meat (CIL IV 8561, 8566). CIL IV 241 and 373 tell of the sale of poultry or birds (these are graffitied on electoral posts). In the north-west of the Pompeian *macellum*, set in a small, axial chapel was a small sacrificial altar, suitably-sized for a small animal, and equipped with a drain to remove the blood of slaughtered animals (Van Andringa 2006:191-92). To the south of and adjoining this area was an enclosure with stalls where numerous juvenile pig, goat, and sheep skeletons have been recorded; it is in this area that the slaughtered animals were likely skinned and cut up before being sold at the market (Van Andringa 2006:192). The *macellum* in Pompeii did not sell the meat from only these smaller animals slaughtered on site, but also that of larger animals originating from the public, communal sacrifices at the temples near the Forum (Van Andringa 2006:199). Such a placement of temples near fora was common throughout the Empire: for example, at Alba Fucens, Herdonia, Dougga, Djémila, and Bula Regia. At the *macellum* at Nyon, for example, the floor was strewn with cattle bones but no lower legs and very few heads were found. These absences suggest that the animals were cut up close to the locus of sacrifice before the pieces of meat were brought to the *macellum* for sale (Van Andringa 2006:199). At the *macellum* at Paestum, a small enclosed area with a large circular basin for fish replaced an enclosed cult space in the 3rd century C.E. (De Ruyt 2007:139-140).

Ostia⁵⁴ illustrating a butcher's shop with carving instruments hanging from roof beams, blood basins, and scales in the background, shows the head of a boar accompanied by two sows approaching the butcher, each animal depicted without any sacrificial ornament. The absence of such ornament, such as *infulae* or *dorsual*, suggests that the sculptor of the relief chose not to highlight a sacrificial *pompa* but rather a scene of an animal being brought to slaughter (Huet 2007:203; Kampen 1981:141, no.8). In this Ostia funerary relief and others of its kind⁵⁵ there is a set of characteristic attributes: the butcher, dressed in a tunic, is depicted in the act of carving an animal (almost always a pig)⁵⁶ with a cleaver; the scene includes a large butcher's block, a container (for blood or sections of the animal), carving instruments, and pieces of meat hanging from ceiling beams (Huet 2007:204). The details of the illustrations help to relate the procedure of butchery: the carving of the animal on a block or table; the evisceration and the suspension of the animal from hooks; and finally the sale of the meat. However, aside from depictions, there are no *in situ* examples of rooms with such accoutrements for butchery: no slaughtering tables, scalding tanks, hooks for hanging the dead animals (MacKinnon 2004a:172). Furthermore, no racks or hooks, equipment that would have facilitated the storing and preservation of the slaughtered animal, have been discovered

⁵⁴ Museo Ostiense inv.133.

⁵⁵ For example, a funerary stela in the Museo Civico in Bologna which depicts a butcher carving meat, or a funerary relief from Trastevere, dating to the first half of the 2nd century C.E., now in the Museum of Dresden (inv ZV44) which shows a butcher holding a cleaver, in the act of carving, and, on the other side of the relief, a scale hanging and a container for collecting the blood of parts of the animal. See Kampen (1981:no.53, fig 45).

⁵⁶ The only relief that shows a cow hanging from a hook from the ceiling beams is conserved in the Museum in Dijon (Huet 2007:208, note36). On a relief in Ostia (Museo Ostiense inv.133), the head of an animal might be a calf (Monteix 2007:178). A late 2nd century C.E. relief from Ostia (Museo Ostiense inv.134) depicts a woman selling rabbits and chickens; in the shop are depicted monkeys, hanging fowl, and a snail (Kampen 1981:52-59, 139 no.3).

on the sites that present large (and analyzed) faunal assemblages (MacKinnon 2004a:172).⁵⁷ On the other hand, nowhere on the funerary monuments figuratively memorializing the activities of high-end butchers do we find any indication of the deceased's boasting – as would be natural if it were so – of having played a role in sacrificial procedures.

Images of Sacrifice

From visual and literary depictions, the procedures for the actual slaughtering of an animal can be reconstructed. Of course, these depictions date at the earliest to the late Republican period, and therefore well after the period of my study. Nonetheless, these late depictions of sacrifice can provide us with a means of testing the conclusions and observations about Republican sacrifice made in this dissertation. A major public sacrifice generally included three attendants: the *victimarius* (holding the axe that was used to sever the animal's head), who was also likely responsible for purchasing the sacrificial animal and disposing of the meat (Pliny *NH* 7.54);⁵⁸ the *popa*, who stunned the animal with a blow to the head with a mallet; and the *cultarius*, who cut the animal's throat.⁵⁹ A similar procedure was also likely used for slaughtering non-sacrificial animals (MacKinnon 2004a: 177). Depictions of the actual slaughter or the moment before the

⁵⁷ Plautus *Capt.* 4.1.914-5 mentions meat hanging on racks.

⁵⁸ *qualis causa patri quoque eius Menogenis coci sui cognomen inposuit, iam Strabonis a specie oculorum habentis vitium imitato item servo; Scipioni Serapionis indiderat suarii negotiatoris vile mancipium. eiusdem familiae Scipioni post eum nomen Salvitto mimus dedit, sicut Spinther secundarum tertiarumque Pamphilus collegio Lentuli et Metelli consulum, in quo perquam inportune fortuitum hoc quoque fuit, duorum simul consulum in scaena imagines cerni.* Also see Valerius Maximus 9.14.3.

⁵⁹ Propertius 4.3.62; Persius 6.5.74; Suetonius *Caligula* 32.3; CIL I 1604.

slaughter are very rare in Italy; even implements of slaughter or butchery are not commonly shown (Ryberg 1955:4). Scenes most often display the presentation of a victim at an altar, an officiating group centered around an altar, a sacrificial animal (usually an ox in the Empire, with the exception of scenes of *suovetaurilia*) adorned with *vittae* and *dorsulae*, and the attendants holding sacrificial implements (such as the *patera*).⁶⁰ In these scenes, the priest is generally to the right of the altar, his right hand pouring a libation over the altar; a flute player is behind the altar (occasionally a *cornicines*, a horn-blower, is also included); and other attendants center around the altar – the *victimarius* (with head covered, wearing an apron and a tunic or toga and leads a cow,⁶¹ often with a halter, to sacrifice), the *popa* (with covered head), the *camilli* (often holding incense boxes and jugs), *ministri* (often with a jug in the right hand and a bowl in the left), heralds (who said the prayer), and additional assistants (often children) (Fless 1995). In the Augustan period, the emperor is added to these scenes and appears to the right of the altar, in the position of a deity, and larger in scale than the *victimarii* or the other attendants (Ryberg 1955:4). In later Imperial iconography, the Emperor occupies the main position of the scene as the chief priest of the state (Ryberg 1955:130). Another possible scene is the sacrificial procession.

⁶⁰ The characteristic representation of late Republican sacrificial scenes shows a line of victims ascending towards the center. For more details see Ryberg (1955:chapter 3).

⁶¹ Modern international English lacks a rational gender neutral singular for an adult bovine bred primarily for meat rather than for service as a dairy or work animal. In ordinary, non-zoological terminology, the traditional word, “ox,” has lost much of its original age and gender neutrality, and has come to signify, in particular, an adult, castrated male employed as a draft animal. As a default alternative and at the slight linguistic cost of sometimes calling a “bull” a “cow,” I follow standard informal U.S. usage and apply the term “cow” in the singular as a gender neutral term for any adult beef animal. <http://www.merriam-webster.com/dictionary/cow> (Sense 2). Contra: <http://oxforddictionaries.com/words/female-cattle-are-cows-male-cattle-are-bulls-but-what-word-do-you-use-if-you-don-t-want-to-specify-an-animal-s-sex>.

In over 150 reliefs of sacrifice, only 17 reliefs show clearly the moment right before slaughter; only four show the animal dead (Huet 2005:94). These exceptions will be focused on as in their rarity they might be able to tell us something about the moment of slaughter. A mosaic from Ostia (in the House of the Vigiles) shows three cattle about to be slaughtered; one has fallen, likely from the *popa* holding the axe above its head, with black marks (perhaps blood?) underneath its body; another victim is being constrained, a rope around its head (Huet 2005:103). With the Trajanic period comes an interest in representing sacrifice right after the moment of slaughter (Ryberg 1955: 129). A couple of panels on the column of Trajan (LXXX and LXXXVI) show an ox lying beside an altar; one scene (LXXXVI) depicts a *victimarius* kneeling down and holding the head of a victim, with its neck stretched, its tongue protruding from its mouth, its ears drooping, and its forelegs bent backwards, as if the animal is either dying or already dead (Ryberg 1955:126) (**Figure 1**). Two reliefs from the Severan arch of the Argentarii (silversmiths) in the Forum Boarium, dedicated to the members of the imperial family, show sacrifice scenes: in each pylon two *victimarii* lead a cow; within the passageway is a depiction of the altar attendants, the slaughtering of an animal, and implements of sacrifice; a *popa* with an axe, two long-haired *camilli* with incense boxes and *patera*, and a flute player are represented above the head of the cow (Ryberg 1955:137-39, plate 49) (**Figure 2**). The depictions on this arch are unique in that they show the emperor himself receiving sacrifices.

Modes of Slaughter

In both sacrifice and non-religious animal slaughter, animals would have had to be rendered motionless in order for the slaughterer to kill the victim without risk of injury to himself. This act could have been achieved by herding the animal into a small space where only its head would protrude, by lassoing the animal and wrestling it to the ground, by tying the front legs of larger animals together to trip them, or, with smaller animals (such as pigs and sheep or goats), by wrestling the animal to the ground and holding it there. Animals in Roman sacrifice are thought to have been stunned with a mallet before having their throats slit; butchers too tend to stun or shock animals before slaughter (MacKinnon 2004a:177).

The butcher or ritual practitioner usually severed the carotid artery and jugular vein to remove all the blood, since blood taints the taste of the meat. Hanging an animal is the most efficient way to drain all the blood;⁶² the animal could have been lifted by its back legs, its blood draining into a container and perhaps reserved for sale or for use in processed meat products.⁶³ For example, in a selection of reliefs (as those on the funerary relief at Ostia [discussed earlier], a funerary altar from Verona,⁶⁴ and a relief from the Museo Torlonia in Rome which shows animals [pigs, birds, geese] hung from hooks from

⁶² According to MacKinnon (2004a:178), modern butchers use chains, ropes, and pulleys to hoist animals and the Romans too may have used a similar system; no archaeological evidence exists, however, of such a practice. My personal experience witnessing the sacrifice of sheep in Istanbul for the Kurban Bayrami allowed me to see the use and practice of hooks to drain the animal's blood as well as the process of butchery post-sacrifice.

⁶³ It seems that, aside from blood sausages, the Romans did not use animal blood too frequently in their cooking (Tertullian, *Apol.* 9.13).

⁶⁴ Mus.Civ.Arch Inv.73.

the ceiling beams for sale in a boutique-like setting).⁶⁵ To facilitate the bleeding out of the animal, the head may have also been draped over a flat surface, over a table-like structure,⁶⁶ or, as in the case of sanctuaries, over the upper surface of an altar. These flat surfaces of altars would have also provided a solid, hard surface on which to chop and carve the animals into desired pieces or cuts.⁶⁷ However, if animals were in fact also carved on the altars, one might reasonably expect to see carving marks incised on the soft tufa of the altars.⁶⁸

After the blood was drained, the animals were dehaired (pigs) or skinned (cattle, sheep, and goats); younger animals were easier to skin than older ones (MacKinnon 2004a:179). If the horns were intended to be worked, they would have had to be sawn off (MacKinnon 2004a:171). Following skinning was the gutting process during which butchers made an incision in the hanging, inverted carcass just below the genitals down over the belly, reaching in to remove the entrails. In butchery,⁶⁹ these entrails were then

⁶⁵ Inv.379.

⁶⁶ For a Greek depiction, see the image on the black figure Attic pelike (Paris, Foundation Custodia 3650). In the present-day sacrifice for Kurban Bayrami, the sheeps' heads are draped over a long, flat drain.

⁶⁷ For a Greek example, see the treatment of an animal's leg on an Attic black figure oenochoi in the Boston MFA 99527.

⁶⁸ Presumably, however, these marks could have been worn away with time and the exposure to the elements.

⁶⁹ In modern butchery of cattle and caprines, the common practice is to remove the forelegs first, then the head, then the hindlegs, then the torso, back and belly, dividing the vertebral column, then dividing the parts into manageable sections (MacKinnon 2004a:180). Such was certainly the series of events that I witnessed at the sacrifices of sheep for the Kurban Bayrami where the entrails were removed and separated from the animal's carcass. The process for pig butchery is different: the head is detached first, then the spine is bisected, then the legs removed, then the ribs, legs, and belly of the pig are further sectioned into pieces of meat. The process of bisecting vertebrae is not confirmed by the osteological data from Roman Italy. It may have been a practice in the Republican period, mentioned by Plautus and Lucilius and evidenced at the Republican sites of Locri, Cozzo Presepe, Colognola, and Pozzuolo del Friuli (MacKinnon 2004:182).

separated into their component parts; in sacrifice, the entrails (liver, lungs, spleen, and heart after 260 B.C.E. [according to Pliny *NH* 11.186]) were offered to the deities along with other parts of the animal.⁷⁰ Though the practice rarely occurred (increasing slightly over time), animals could be partitioned longitudinally, indicated by the bisection of their vertebrae.⁷¹ According to Plautus (*Truc.* 2.7.614) this was a common practice in the carving of lambs.

Monteix (2007) has examined the tools used for butchery both through evidence with an original provenance of the macellum in Pompeii and through depictions of butchery on funerary reliefs. Representations of knives can be seen in thirteen reliefs of butchers or slaves carving meat (Monteix 2007:172), scenes which seem to become standardized in Italy during the 2nd century C.E. (Monteix 2007:176). A study of carving marks on bones reveals that two different types of instrument were used (Monteix 2007:171): the hatchet or cleaver for the cutting of the bones or the separating the carcass into joints,⁷² and a knife for the removal of the hide, the dissection or the sectioning the meat off the bone.⁷³ Both these instruments could be used universally for different types of animals.⁷⁴ Cut

⁷⁰ Varro *LL* 5.112. Tertullian (*Ad Nat.* 1.10.35) scorns sacrificers for offering parts of animals that a person would throw away at home, such as the head, hooves, feathers, and hair. For the practice of cooking the *exta* directly in the fire in Greek ritual, see the image on the Attic black figure krater in the British Museum (B362). Divination from entrails is rarely shown in Roman art (Ryberg 1955:129). An exception to this is a relief from Trajan's Forum, known as the Extispicium, in the Louvre, which shows a scene of divination off to the left side of an imperial group (Ryberg 1955:129).

⁷¹ This practice is quite rare in cattle.

⁷² Osteological data reveal a fairly standardized practiced for "jointing," carving the animal into distinct parts.

⁷³ MacKinnon (2004a:163) also observes that saws were used infrequently and not until the Imperial period. They gained some popularity in late antiquity.

⁷⁴ Monteix's study finds a fixed typology of instruments used in butchery: 2 types of cleaver, a long knife, and a small triangular blade knife.

marks made by knives on the shaft of bones also indicate the process of meat removal; however, knife marks on the foot (areas of poor quality meat) indicate hide removal (MacKinnon 2004a:163).

The manner in which cattle were slaughtered cannot be accessed through faunal evidence.⁷⁵ Leg bones of cattle reveal the most carving marks, particularly the distal humerus, proximal radius, and ulna (upper and lower forelimbs). At S. Omobono (to be discussed in depth below), only the rib bones of cows show butchery marks, probably from a cleaver or knife (MacKinnon 2004a:165). The long bones of sheep and goats similarly display the majority of the carving marks; marks on the metacarpals (part of the forefeet) are also abundant. The relative scarcity of carving marks on the phalanges of the lower feet and the abundance of marks on the metapodials (a metacarpal bone, that is to say in the feet) suggest that the lower feet of sheep and goat were discarded whole; metapodial bones outnumber long bones of sheep/goats on most sites (MacKinnon 2004a:166). At S. Omobono there are butchery marks (again, likely from a cleaver or knife) on the vertebrae and on the ribs of caprines. In the Republican period, generally more whole sheep and goats were slaughtered (MacKinnon 2004a:202). It is unclear, as well, how pigs were slaughtered. There are marks on pigs' neck vertebrae at some sites; however, this may be due to subsequent butchery. Unlike the cattle data, there is evidence for cranial bones from pigs that exhibit carving marks; many parts of a pig's head were

⁷⁵ The near absence of intact cattle cranial bones may suggest that cattle were slaughtered by such a forceful strike to the head that the bones were completely shattered; shattered cranial bones of cattle have been found at Satricum and the Temple of Vesta in Rome (Bouma 1996 Vol.1: 237). Other marks on cattle's hyoid bones (for example, in a sample from Metaponto) suggest that animals' throats may have been slit (MacKinnon 2004:163). These observations, however, remain inconclusive. At urban "special sites" (following MacKinnon's 2004a typology of sites), there is a preponderance of cattle heads (MacKinnon 2004a:199).

edible (tongue, muscle tissue, and brain, for example). Also unlike the data for cattle and sheep and goat, there is a near absence of long bones of pigs, suggesting that pig butchery may have been more destructive.⁷⁶ In the Imperial period, more saws were used in the disarticulation and carving of pig bones than were used on sheep or goat skeletons.

After slaughter, pigs had to be dehaired and skinned; the skin could have been scorched with hot water, thus loosening the bristles of the skin.⁷⁷ Whole pigs may have been roasted as well (MacKinnon 2004a:170). The numerous knife marks along the body of a pig's scapula suggest that this part of the animal produced a lot of meat (unlike cattle, sheep, and goats). The humerus (upper forelimb) of pigs also reveals much butchery activity. At S. Omobono, there is some evidence for butchery marks on the heads, necks, scapulae, vertebrae, humerus, ribs, pelvis, femur, radius, ulna, tibia, carpal/tarsals, metapodials, and phalanges of pigs; there is more evidence of butchery marks on older pigs than on younger pigs from this site. However, no details are reported (MacKinnon 2004a:170, table 49).

After the slaughter, the meat would have had to be preserved by smoking, drying, salting, pickling, or coating (with honey, for example).⁷⁸ Drying could be done outdoors and would take between one and three weeks; smoking could also occur outdoors. Methods could be combined, and each technique had its own benefits and hindrances.

⁷⁶ MacKinnon (2004a:171) adds that this absence might also pertain to taphonomic processes since pigs are generally slaughtered at a younger age than cattle or sheep or goats and thus their bones may have a faster rate of decomposition.

⁷⁷ Columella (12.55.4) and Cassiodorus (*Var.* 9.6.11) discuss the process of skinning non-sacrificial animals.

⁷⁸ Apicius 1.7.1-2.

Salting was the most prevalent method alluded to by ancient authors.⁷⁹ The process entails the close layering together of pieces of salted meat inside a large jug or vessel where, according to Cato (*de Agricultura* 162.2), they remained for five days, were then turned, and remained for another twelve days. After the meat was removed from the vessel and the salt was brushed off, the pieces hung to dry for three days, then washed and rubbed with oil and hung to be smoked for two additional days. The difficulty with this process (aside from its length and intricacy) would have been the high cost of salt (MacKinnon 2004a:174). But price would have been less of a consideration at S. Omobono, positioned at the juncture of the Tiber and the route of the salt trade (which would later become the *via Salaria*), where access to cheap salt would have been particularly easy.

Where did the sacrificial meat come from?

Sacrificial animals were necessarily pre-selected.⁸⁰ Varro (*RR* 2.5.10-11) states that there was a particular type of cattle raised for sacrifice (*ad altaria*), the other for slaughter (*ad cultrum*), proving that meat was butchered outside of the context of sacrifice: “*illosce iuencos sanos recte deque pecore sano esse noxisque praestari spondesne?*” *Paulo verbosius haec, qui Manili actiones secuntur lanii, qui ad cultrum bovem emunt; qui ad*

⁷⁹ Columella 12.55.4; Cato (*de Agricultura* 162.1-3); Martial (*Epigrams* 1.41, 7.54); Horace (*Satires* 2.2.117); Strabo 3.4.11, 4.3.2, 4.4.3.

⁸⁰ In a passage discussing Pythagoras’s opinion that animals are not responsible for their destiny as sacrificial victims, Ovid (*Met.* 15.6-142) distinguishes between guilty animals and innocent animals and accuses mortals of deliberately attributing to the divinities a continual crime of slaughtering cows, sheep, and goats solely for lavish feasts.

*altaria, hostiae sanitatem non solent stipulari.*⁸¹ Macrobius (*Sat.* III.5, 6) distinguishes from the herd the selected animals that were destined for sacrifice.⁸² Ancient authors like Varro⁸³ attest that the desired type of meat for consumption came from the country, from a farm, and not from the butcher (Horace *Satires* II.4.17-18). And Juvenal (*Satires* XI. 64-66) proudly tells his guests that the meat for dinner came from the farm: *fercula nunc audi nullis ornata macellis./ de Tiburtino ueniet pinguis agros/ haedulus et toto grege mollior*... If we are to believe these authors, the fact that sacrificial animals were a distinguished and exact type, a breed from a farm, that there was something particular about them, then it follows and we might be able to say that for each sanctuary the sacrificial animal was specific. The animal was not only chosen because it was from a farm or bred for sacrifice, but it was selected according to the inclusion and make up of available and surrounding resources.

Work animals and flocks of sheep could be rented for use and for their products.⁸⁴ Varro (*RR* 2.3.5, 2.7.6) alludes to a number of contracts made concerning sale and purchase of livestock. He associates these contracts with the *Lex Manilia*, dating them

⁸¹ All Latin passages from Varro in this chapter are taken from thelatinlibrary.com. Scheid (2005b: 227-228; 2007b:25) disagrees with the usual interpretation that Varro is discussing sacrificial and non-sacrificial slaughter. Scheid reads Varro as saying that the meat merchant has to vouch for the good health of the flock or cattle that he sells at the moment of the sale; but for cattle destined for the altar, this guarantee is not required. According to Scheid, Varro only distinguished between animals that are preselected for sacrifice and those that are not preselected. He believes that Varro is discussing the provenance of each animal, that the destiny *ad cultrum* does exclude the animal's slaughter from being sacrificial (2005b: 228).

⁸² Authorities would control the birth and the health of the animals, although they did not have to guarantee good health at time of sale (Scheid 2007b:25). Varro (*RR* 2.5.11) states that those who sell for sacrifice do not usually make a legalistic stipulation about the soundness of the victim.

⁸³ *RR*.2.4.3: *Quis enim fundum colit nostrum, quin sues habeat, et qui non audierit patres nostros dicere ignavum et sumptuosum esse, qui succidiam in carnario suspenderit potius ab lanario quam e domestico fundo?*

⁸⁴ Lirb (1993:275ff.); Martin (1990).

back to at least the mid-2nd century B.C.E. but perhaps deriving from even earlier habits; the formula for selling sheep is therefore *antiqua* and *prisca* (RR. 2.2.5). And in the details of contracts, Varro (RR 2.5.11) relates that butchers who bought the oxen for the purpose of slaughter used a longer form of contract. To ensure a valid sale, in each contract the animal must be legally owned by its seller and the seller must guarantee, as the much later, 6th century C.E. *Digest* of Justinian states (19.1.11.4-5) (itself a compilation of earlier Roman law), that the animal *esse, bibere, ut oportet* (eat and drink, as it should) (Frayn 1993:119). In such a transferring of property, the animals must be freed willingly from their previous owners at the same time as any imperfections of the animal are stipulated; to use vocabulary linked to the sale of animals, the creatures must be seized (*emptio*) and traded (*tradito*) (Meylan 1950:176-77). In the sale of animals and in the transferring of property of livestock, Varro primarily relies on two general conditions – the monetary payment and tradition of sale (Meylan 1950:175).

Animal husbandry was a specialized branch of an organized agricultural economy during the archaic period (MacKinnon 2004:243). Animals were moved from one owner to another, but it is difficult to determine what the character of the exchange may have been. The faunal data from Roman Italy reveal little about either the type of exchange (be it gift-giving, barter, or sale) or its organizational structure: reciprocal inter-site exchange, intra-site exchange, contractual supply, or inter-family exchange (Clark 1987:157 quoted in MacKinnon 2004a:247).⁸⁵ Based on Clark's model, the faunal remains at S. Omobono seem to fall into either the category of occasional inter-site exchange, in which

⁸⁵ Evidenced in zooarchaeological data only by the regular occurrence of butchery marks (MacKinnon 2004a:247).

production levels are set to allow for increased consumption at certain times or periods, or occasional intra-site exchange, characterized by a “generalized strategy” for a process focusing on meat rather than animal production (Clark 1987: Table 1 no. 8, no.3). This model-type can be applied to a spatial concentration of faunal remains (like the deposits at the eastern face of the archaic altar of S. Omobono) which can be linked to certain specific activities; there are marked peaks for the age of slaughter (like the young pig and caprines at S. Omobono), suggesting a culling of animals at a single time. In such a system of exchange the producer is the consumer; this fits well with an economic concept of sacrifice in which a breeder partakes in the sacrificial feast of his animal.

Generally speaking, by examining the faunal remains at a site, a sense of the production end of the process can be obtained from the number of butchery marks on the animals, a lack of a “realistic herd structure” (i.e., more breeding females than young males), and from the abundance of young animals as seen in the dental data. The character of consumption can be seen in the large number of bones belonging to young animals, an absence of evidence of a breeding herd, a lack of butchery debris, evidence for young animals in the fusion data but not in the dental data, and the remains of animals which could not have survived in the ecological climate of the site (Clark 1987: 185). Extending Clark’s categories to S. Omobono, we can clearly see the end product of the sacrifice in the remains of the pigs (most bones revealed the traces of butchery); the consumption end (according to Clark’s categories) can also be seen then in the lack of female pigs and the large numbers of young animals not surviving the climate.

Most animals were likely herded into Rome on hoof (even from far distances) and they may have been housed for a short period of time within stalls in the city or even at

the butchers' shops (if not intended as sacrificial animals).⁸⁶ Animal stalls have been found at a number of Roman sites in Italy, but only at the villa Settefinestre are there pig stalls numerous enough to house more than just a couple of animals (MacKinnon 2004:131).⁸⁷ Older animals could be led by foot to the markets, but younger animals (like the caprines and pigs that were sacrificed at S. Omobono) would not have had the stamina (MacKinnon 2004:245). Perhaps then, these animals were selected as the sacrificial species at this specific sanctuary because of the availability and accessibility of particular natural resources. These species may have been found closer to Rome and thus were more easily attainable. Livestock was sold at urban markets,⁸⁸ periodic markets, and rural farmsteads. Private arrangements could also be made for having animals slaughtered (for example, in Plautus' *Aulularia* 567: *caedundum conduxi ego illum*). Columella (7.3.13) tells of a shepherd who sold young lambs directly to the market. The breeding of animals of sufficient quality for sacrifice would have provided a farmer with a profitable commodity for exchange (Frayn 1984:39).

⁸⁶ Animals were brought into Rome in this manner in late antiquity as a part of taxation (MacKinnon 2004a:183). There is no archaeological evidence supporting the hypothesis that they were housed within the city or at shops in stalls.

⁸⁷ Other animal stalls have been found at Gravina, S. Giovanni, and Monte Irsi. These have just a few rooms perhaps to hold cattle (MacKinnon 2004a: 131). For animal stalls at Italian sites see Rossiter 1978. At Settefinestre, a pig sty complex made up of 27 rooms facing a central courtyard has been excavated and documented. Each sty matches Varro's and Columella's general descriptions of a sty (*RR* 2.4.14, Columella 7.9.10): each should be around four feet high and unroofed. See King (1985).

⁸⁸ For example, at Aquileia (CIL I.2 2197). See Frayn (1993).

Although there is no evidence that the Forum Boarium in Rome was actually a cattle market,⁸⁹ many mythological or legendary tales are attached to the history of the Forum Boarium, its function and its name. For example, Varro (*LL* 5.146), Livy (21.62.3), and Festus (ed. Lindsay p 27), allude to cattle sold on the site; Propertius (4.9.7) claims that oxen grazed on the land.⁹⁰ The Forum Boarium existed as early as the archaic city, at the end of the 7th century B.C.E.,⁹¹ and originally extended from the boundary of the Velabrum and the Porta Trigemina to the Vicus Iugarius, and eventually to the Tiber (Richardson 1992:162-3).⁹² In the beginning of the 6th century, Greek ships most likely entered the port of Rome from the Tiber (Coarelli 1988:127). The actual space of the Forum Boarium may have originally been bounded on the east by Servian Wall (Richardson 1992:162) but more than infrastructural monuments, the temples and other public buildings constructed both within and surrounding the area demarcated the Forum Boarium (Frayn 1993:147).⁹³

⁸⁹ Richardson (1992:163) states that a cattle market would have required large amounts of fresh water and an open space suited for easy access. He mentions the Circus Maximus as a much more appropriate setting, considering these requirements.

⁹⁰ Cicero *Pro Scauro* 23 states that at the end of the Republic, the Forum Boarium was a setting for legal business and Livy (*Ep.*16), Valerius Maximus (2.4.7), and Tertullian (*De Spect.* 5.6) state that this area was the scene of gladiatorial contests. Furthermore, CIL VI.1035 from dedication of the Arch of the Argentarii mentions “argentarii et negotiantes boarii.”

⁹¹ The emergence of the Forum Boarium as a livestock market may have derived from the frequenting of the Via Salaria (Coarelli 1988:109-112), an area where the sale of salt was concentrated and sold perhaps as early as the end of the Bronze Age.

⁹² Ovid *Fasti* 477,478; Varro *LL* V.146; Propertius 4.9.17; Livy 10.23.3; 21.62.3, 22.57.6, 24.10.7, 27.37.15, 29.37.2, 33.27.4, 35.40.8.

⁹³ The Forum Suarium, the other livestock market in Rome (first mentioned in the end of the 2nd century C.E. and greatly important in the 4th), located between the Via Flaminia and the Pincio on the Via Lata, was a market specializing in pigs (CIL VI.9631). Livy attests to an earlier use of this Forum (10.23.2, 22.57.6, 24.10.8, 27.37.17, 29.37.1). According to a late-compiled source (Justinian *Digest* 1.12.1.11), this market was primarily under the control of the *praefectus urbi* who regulated the price of meat, but could

Wild animals played little part in the Roman diet though more wild breeds were eaten during the Republican period.⁹⁴ In general, cattle make up one-third of the meat consumed by Romans (regardless of time period).⁹⁵ Sheep and goat meat amount to 1/5 of the meat consumed (MacKinnon 2004a:194) (see page 338 for more details). Among caprines, lamb was preferred to mutton, with goat coming in a poor third.⁹⁶ Columella (7.3.13) relates that lambs, with their supple meat, brought a high price at the butcher.⁹⁷ Sheep and goat meat account for more of the Roman diet during the Republican period, a time when pig meat is significantly less common, particularly in southern and central Italy (MacKinnon 2004a:217; MacKinnon 2004b:55). The amount of pig meat consumed varied considerably over time and throughout different regions in Roman Italy, with pork accounting for between a third and almost half of the meat consumed in central Italy in the Imperial period (MacKinnon 2004a:192-194, 215). Pig consumption notably gains in popularity over time, particularly in the Imperial period and in late antiquity. In Imperial western central Italy, pigs are by far the most commonly consumed animal (over 60%), a

also fall under the control of a tribune of *fori suari* (CIL VI.1156a). Frayn (1993:148) tentatively suggests that the livestock sold here would have entered the city from the Porta Flaminia and may have possibly originated from Lucania; they would have been collected by *suarii* and carefully weighed before they were sold at the market. This assumption (quoted by Frayn 1993:149) is based on a passage in the *Codex Theodosianus* Book 14. We know, however, that pigs were also bred in Etruria in Settefinestre. Much of the evidence for weighing of livestock comes from the 4th century C.E.. See Frayn (1993:153ff.). It is also possible that pigs sold in Rome could have been supplied from the villas (such as the one at Settefinestre) (King 1999:171).

⁹⁴ The average never reaches above 18% (MacKinnon 2004a:192).

⁹⁵ This and the following estimates come from MacKinnon's careful study of Republican and Imperial breeding and consumption patterns and habits. Necessarily, because of the wide range of time these estimates must remain just that.

⁹⁶ Juvenal (*Satires* 11.64-72) and Martial (*Epigrams* 10.87) mention a tender kid as part of a feast; Columella (7.7.2) hints that goat meat was not very common.

⁹⁷ Aelian NA 16.32.

remarkably different pattern from that of southern or northern Italic regions (King 1999:169). This preference for pork is evidenced in faunal assemblages in Latium beginning as early as the 3rd-2nd centuries B.C.E. (King 1999:169).

Varro, Columella, and Pliny relate characteristic traits of the different, popular sacrificial animals – cows, sheep, and pigs, animals that were each mythically tied to Rome and Italy.⁹⁸ The connection between cattle and Italy can be seen in the popular etymology of the Latin word *vituli*, from which the name “Italia” was believed to have been derived;⁹⁹ cows are also the animals used for the foundation rites of towns. Sheep are connected to Rome since Romans came from shepherds (for example, Faustulus); furthermore, Romulus and Remus (as shepherds) celebrated the founding of Rome with the festival of the *Parilia*, during which ceremony both sheep and shepherd were cleansed. Pigs are connected to Italy by the legendary white sow and her thirty piglets that Aeneas found on Italic soil when he first landed;¹⁰⁰ also, wild boar is prevalent throughout the territory of Italy (Varro *RR* 2.1.5) (Huet 2007:211). Together, these three animals make up the canonical assemblage of sacrificial victims for the ritual of the

⁹⁸ Columella (*de Re Rustica* 6 preaf. 6) states that there are two categories of quadrupeds: those that partake in the work of man (cows) and those that please man or are used to man’s advantage (sheep, goats, pigs).

⁹⁹ Varro *RR* 2.1.9-10: *denique non Italia a vitulis, ut scribit Piso? Romanorum vero populum a pastoribus esse ortum quis non dicit? Quis Faustulum nescit pastorem fuisse nutricium, qui Romulum et Remum educavit? Non ipsos quoque fuisse pastores obtinebit, quod Parilibus potissimum condidere urbem...et quod, urbs cum condita est, tauro et vacca qua essent muri et portae definitum?*). See also Varro *RR* 2.5.3: *Nam bos in pecuaria maxima debet esse auctoritate, praesertim in Italia, quae a bubus nomen habere sit existimata. Graecia enim antiqua, ut scribit Timaeus, tauros vocabat italos, a quorum multitudine et pulchritudine et fetu uitulorum Italiam dixerunt. Alii scripserunt, quod ex Sicilia Hercules persecutus sit eo nobilem taurum, qui diceretur italicus.*

¹⁰⁰ Varro *RR* 2.4.18: *In quo illud antiquissimum fuisse scribitur, quod sus Aeneae Lavini triginta porcos peperit albos. Itaque quod portenderit factum, post tricesimum annum ut Lavinienses condiderint oppidum Albam. Huius suis ac porcorum etiam nunc vestigia apparent, quod et simulacra eorum aenea etiam nunc in publico posita, et corpus matris ab sacerdotibus, quod in salsura fuerit, demonstratur.*

suovetaurilia, a sacrifice of male animals traditionally made to Mars for the purposes of communal expiation; to purify an area before the construction of a temple or the city after an inauspicious prodigy; or to close the lustrum that followed the census (Ryberg 1955:33).¹⁰¹

Assumptions about animal husbandry and breeding for sacrifice in Roman Italy rely on evidence that the climate of Italy has changed very little in the last 4,500 years (MacKinnon 2004a:27). Cattle are mentioned more frequently in agricultural literature than any other animal (MacKinnon 2004a:86). While caprines could be pastured in non-arable, hilly country (like nearby Rome), cattle required lower-lying grazing lands, areas that could otherwise be used for cereal cultivation, thus making the rearing of cattle an expensive undertaking (MacKinnon 2004a:91).¹⁰² Large-scale cattle breeding¹⁰³ usually occurred in well-irrigated valleys, particularly in verdant grasslands near the coast during the winter months and in wooded territories in low-lying hills during the summer months (MacKinnon 2004a:88);¹⁰⁴ This type of terrain characterizes the rich pasture land immediately outside of Rome.¹⁰⁵ Cattle mated in mid-June or July, and calves were born

¹⁰¹ Cato (*De Agricultura* 141).

¹⁰² Varro (*RR* 2.1.19); Columella 6.24.1.

¹⁰³ Varro states that between 100-200 cattle per owner is reasonable (*RR* 2.5.18).

¹⁰⁴ Varro (*RR* 2.5.11).

¹⁰⁵ Ovid (*Fasti* 5.639-640): *'haec loca desertas vidi sine moenibus herbas:/ pascebat sparsas utraque ripa boves* ; Pliny (*Epist.* 2.17): *Varia hinc atque inde facies; nam modo occurrentibus silvis via coartatur, modo latissimis pratis diffunditur et patescit; multi greges ovium, multa ibi equorum boum armenta, quae montibus hieme depulsa herbis et tepore verno nitescunt. Villa usibus capax, non sumptuosa tutela;* Propertius 4.9.16-20: *"ite, boues, Herculis ite boues, nostrae labor ultime clauae,/ bis mihi quaesitae, bis mea praeda, boues, /aruaque mugitu sancite Bouaria longo:/ nobile erit Romae pascua uestra Forum."* None of the authors is specific about precisely to which pastures outside of Rome he is referring. It is possible that these types of pastures were located to the south and west of Rome (MacKinnon 2004a:91), areas where "cattle rearing may have been conducted on a relatively large scale" (MacKinnon 2004a:93).

ten months later in the spring (MacKinnon 2004a:89). Full grown and past their second year, cattle, both male and female, were usually older than pigs or sheep when sacrificed (MacKinnon 2004a:215). Because of their size, cattle are the preferred animal for sacrifice, labeled *opimi*¹⁰⁶ when fattened up for sacrifice.¹⁰⁷ Third-century antiquarian Aelian (*NA* 2.57) celebrates the ox as an animal that “graces the altars, gladdens festivals, and supplies a solemn banquet. Even when dead the ox is a splendid creature deserving our praise.”

Although men rely on cows to provide their principle supply of food,¹⁰⁸ sheep too pacify the gods with their meat, contribute agreeable tastes to tables, provide cheese and milk,¹⁰⁹ and also supply precious and profitable wool (Columella 7.2.1; Pliny *NH* 8.72.187).¹¹⁰ Caprines (sheep and goats) are often found together and, economically speaking, have much in common;¹¹¹ though sheep, perhaps partly due to their greater value in cloth production, are often found in greater number than goats at many sites

¹⁰⁶ Varro *RR* 2.1.20: *Sic boves atiles ad sacrificia publica saginati dicuntur opimi*. Columella 2.3.1-2 also comments on cows as an attractive species for sacrifice.

¹⁰⁷ Varro *RR* 2.5.10: *Tametsi quidam de Italicis, quos propter amplitudinem praestare dicunt, victimas faciunt atque ad deorum servant supplicia, qui sine dubio ad res divinas propter dignitatem amplitudinis et coloris praeponendi*. Varro (*RR* 2.5.11) also adds that it is not necessary to worry about the health of a cow if you are buying it for slaughter: *Eos cum emimus domitos, stipulamur sic: "illosce boves sanos esse noxisque praestari"; cum emimus indomitos, sic: "illosce iuencos sanos recte deque pecore sano esse noxisque praestari spondesne?" Paulo verbosius haec, qui Manili actiones secuntur lanii, qui ad cultrum bovem emunt; qui ad altaria, hostiae sanitatem non solent stipulari*.

¹⁰⁸ Beef, however, was presumably tough and therefore relatively inexpensive, according to Diocletian's Price Edict 4.2, which lists beef at 8 *denarii* per pound whereas other meats cost at least 12 *denarii* per pound.

¹⁰⁹ All fresh milk came almost exclusively from caprines. Martial *Epigrams* 3.58; Tibullus 2.5.35-38; Aelian *NA* 36.31. In Italy, milk from cattle was quite rare; Columella 6.24.2-5 comments that cow milk was reserved for calves. See MacKinnon (2004a:205).

¹¹⁰ Varro (*RR* 2.11.11) too comments on the profitability of sheep's wool.

¹¹¹ Varro *RR* 2.3.7; Aelian (*NA* 5.48).

where there is evidence of both species (MacKinnon 2004a:121). Sheep – and no doubt goats as well – could be bred and raised either by livestock farming or transhumant herding (MacKinnon 2004a:112; Frayn 1984).¹¹² Varro (*RR* 1.19.3) states that most farms kept sheep to provide the necessary manure used for the meadows. Sacrificial sheep were judged not by prescribed standards of wool or meat production, but rather by ritual qualifications requiring overall perfection in the animal.

Sheepfolds, according to ancient authors,¹¹³ should be built low, should face east (not south as Virgil recommends),¹¹⁴ be protected from the wind, be larger in length than in width, and include a closed courtyard area in the front (constructed with a high wall) so that the sheep can be outside during the summer heat. Flocks had to be kept within their folds until late spring when sacrifices¹¹⁵ were necessary to fumigate and purify sheep folds.¹¹⁶ The majority of caprines found at sites throughout Italy (not exclusively religious sites) were killed between 12 and 48 months old (MacKinnon 2004a:216).

Farmers commonly kept pigs¹¹⁷ and pork was the preferred meat in the Roman diet (MacKinnon 2004a:150). For Varro (*RR* 2.4.8-9), the natural end of the pig is the butcher, the intermediary necessary between the living animal and its meat and the

¹¹² Varro (*RR* 2.10.11) claims that in his transhumance herd were 700 sheep.

¹¹³ Varro *RR* 2.2.7; Columella 7.3.8; The stalls for goats should face sunrise in the winter to preserve heat (Varro *RR* 2.3.6).

¹¹⁴ *Georgics* 3.302-304.

¹¹⁵ Calpurnius *Sic.* 5.24-28, 103; Virgil *Georgics* 3.296. See below for a different seasonal sacrifice of sheep.

¹¹⁶ Ovid *Fasti* 4.735-748.

¹¹⁷ Varro asks what farm does not have swine (*RR* 2.4.3).

populace;¹¹⁸ Columella (7.9.3-4) reports that pigs were fattened and then sold at a nearby market.¹¹⁹ Ancient authors mention a number of regions in which pig production was especially common – Gaul,¹²⁰ Spain, and the northern fringes of the Roman Empire (MacKinnon 2001:659). Cato (cited in Varro *RR* 2.4.11) reports that within Italy, the largest production of ham and pork shoulder came from the area around Milan. Pork was also produced in Campania, Samnium, Bruttium, and Lucania.¹²¹ Pigs were mostly kept in rural areas, but there is some reference to their presence in urban centers as well, perhaps explaining their prevalence at S. Omobono in Rome.¹²² Pigs can eat almost anything, but in general they prefer to graze the ripened nuts and fruits fallen to the ground in woodlands (Columella 7.9.6) (MacKinnon 2004a:151). Pigs have a gestation period of 4 months; they mate in the spring and give birth in the summer. Sows could also have a second litter later in the year but these winter newborns did not fare well.¹²³ The species reached its maximum weight at 2-3 years (MacKinnon 2004a:216).

¹¹⁸ *Verris octo mensum incipit salire, permanet ut id recte facere possit ad trimum, deinde it retro, quoad pervenit ad lanium. Hic enim conciliator suillae carnis datus populo.*

¹¹⁹ Other authors also allude to the sacrifice of a fattened pig: Propertius 4.1a.21-24; Horace *Epist.* 1.16.58-59; Ovid *Fasti* 1.349-350.

¹²⁰ Strabo 5.1.12; Polybius 2.1.15.

¹²¹ Although both much later sources than the period I am considering, according to the Theodosian Code (Cod. Theod. 14.4.10.3) and references in Cassiodorus (Var. 11.39) these areas, especially Lucania, were heavily taxed in pork products.

¹²² Horace (*Epist.* 2.2.72-75) describes a muddled sow in a busy urban street (presumably in Rome?); Plautus (*Capt.* 4.1807-808) complains of pigs being kept by the mill.

¹²³ Varro *RR* 2.4.7, 2.4.13; Columella 7.9.3.

Pigs could be offered for sacrifice at 4 days old (Pliny *NH* 8.77.206). According to Varro (*RR* 2.4.9),¹²⁴ from the root of the Greek word “to sacrifice,” θύειν, comes the Greek word for pig, θῦς, and later ὕς; pigs, therefore, were believed to have been connected with the origins of Greek sacrifice. Furthermore, pigs were once called *sacres* because ten days after birth, they were deemed “pure” and fit for sacrifice.¹²⁵

In ancient literature, pigs are the only kind of livestock deliberately bred for the table (MacKinnon 2004a:206). The pig, the stupidest animal (according to Pliny), is the animal most commonly eaten by man, with up to fifty agreeable flavors, tastes, and dishes coming from the glands, stomach, testicles, etc.¹²⁶ Suckling-pig, salt pork, sow’s utter, sow’s matrix, and the liver of swine which has been fed on figs, are all expensive, luxury meats (MacKinnon 2004a:208; King 1999:169).¹²⁷ The myriad pork dishes mentioned in texts were also represented in art. For example, in Pompeii, painted in a cult niche of the house of Sutoria Primigenia (1.13.2) are the legs of a pig, a chaplet of sausages, a sausage on a spit, and 3 morsels of meat on sticks. These parts of a pig are also seen, along with its head and leg, in the cult area (near the furnace of the kitchen) of the house of C.

¹²⁴ *Sus graece dicitur hys, olim thys dictus ab illo verbo quod dicunt thyein, quod est immolare. Ab suillo enim pecore immolandi initium primum sumptum videtur, cuius vestigia, quod initiis Cereris porci immolantur, et quod initiis pacis, foedus cum feritur, porcus occiditur, et quod nuptiarum initio antiqui reges ac sublimes viri in Etruria in coniunctione nuptiali nova nupta et nouus maritus primum procum immolant.*

¹²⁵ Varro *RR* 2.4.16: *Cum porci depulsi sunt a mamma, a quibusdam delici appellantur neque iam lactantes dicuntur, qui a partu decimo die habentur puri, et ab eo appellantur ab antiquis sacres, quod tum ad sacrificium idonei dicuntur primum.* Varro *RR* 2.1.20: *E quis qui iam puri sunt ad sacrificium, ut immolentur, olim appellati sacres, quos appellat Plautus cum ait "quanti sunt porci sacres?" Sic boves altilis ad sacrificia publica saginati dicuntur opimi.*

¹²⁶ Varro *RR* 2.4.6: *Hoc pecus alitur maxime glande, deinde faba et hordeo et cetero frumento, quae res non modo pinguitudinem efficiunt, se etiam carnis iucundum saporem.*

¹²⁷ Although much later than the period I am considering, the Edict of Diocletian (4.46, 4.7, 4.5, 4.4, 4.6) relates the price of these types of meat as 12-16 *denarii* per pound.

Sulpicius Rufus (IX.9.c). Over time, specific words for certain kinds of specialist pork-sellers replace the more general *lanii*: for example, *porcinarius* (dealer in pork),¹²⁸ *pernarius* (dealer in ham),¹²⁹ *suarii* (dealer in swine),¹³⁰ and *confectorarius* (dealer in dried pork).¹³¹ And an inscription (CIL VI 1690) associates the word for pork-butchers, *confectuarii*, with the *suarii* in Rome.

Kitchens

While very few literary sources directly attest to a connection between sacrifice and an associated banquet, the presence of kitchen areas in sanctuaries, evidenced by epigraphic testimony¹³² as well as some archaeological remains, supports the inference of an institutionalized link between the ritual slaughtering of the animal and its cooking.¹³³ A brief survey of the evidence for kitchens within sanctuaries will allow us to more fully contextualize the process of preparing and consuming the sacrificial meat. Although

¹²⁸ CIL VI 33900.

¹²⁹ CIL VI 31120.

¹³⁰ CIL VI 31120.

¹³¹ CIL VI 9278.

¹³² Kitchens in sanctuaries: ILS 3119 and 5420 (Aquila: an *aedem*, three statues, a portico, and a kitchen had to be constructed to pay off a vow); 3452 (Tibur: a niche and a kitchen, with *aedem*, *zotbecam*, and *culinam*, were constructed in honor of Hercules Saxanus), 5419 (Aesernia: the sanctuary, portico, and kitchen are restored, for the occasion of a banquet of the *collegia* in honor of the *Genius*) 5561 (Capua: magistrates purchase land on which to build a portico, a kitchen and statues of Castor and Pollux) 6079 and 7931 (Rome). In Rome, the *magister pagi* is charged with constructing a kitchen (in addition to a portico, cella, and altar) (CIL I 1000). At Sulmo, a kitchen dedicated to Jupiter was offered (CIL IX 3075). At Peltuinum (CIL IX 3075) magistrates constructed a cella and a kitchen. CIL XII 1471 tells that land was purchased for the construction of a kitchen next to the temple of Fortuna at Praeneste.

¹³³ The question remains in many sanctuaries as to where the animals were carved, butchered, and cooked. In a drawing of an Attic black figure cup from the Salerno Museum (no number), a man carries a large section of a leg on his shoulder (the drawing was done by François Lissarrague, conserved in the photo archive of CID, “Anthrologie du Monde gréco-romain” and reproduced in Durand [1987:63]).

sparsely preserved and documented in the archaeological record (giving an impression that kitchens were, in fact, not very common), those kitchens for which we do have evidence clearly required a place for fire, for waste disposal, and a water source for the preparation and cooking of the raw animal flesh.¹³⁴ The kitchen communicates architecturally with the other sacred architecture of the sanctuary – with the cella, portico, and altar – *porticu(m) [ce]llam culinam/ [ar]am* (CIL VI, 2219).¹³⁵ And the Latin phrase *templum fecit solo et inpendio suo...et culinam subiunxit* (CIL III. 7954) highlights the clear hierarchy of rooms in a sacred area.

According to ancient authors (most notably Apicius in his recipes), Romans prepared meat by boiling (either in a stew or on its own), roasting,¹³⁶ frying, grilling, or baking.¹³⁷ These processes leave varying traces on the actual bone (MacKinnon 2004a:172-173). The cooking methods of meat may also have been seasonal, corresponding to the sacrificial calendar and its religious festivals and to the increase of ritual animal slaughter in the spring and summer months. In the spring, meat and vegetables were eaten with more frequency and meats were roasted and not boiled as they were in the winter months;

¹³⁴ At Cosa, evidence for sacred meals from late antiquity was found at the Temple of Liber-Pater on S, Abbondio (a space that incorporates a “food triclinium”) (Egelhaaf-Gaiser 2000: 313-314); here, *kantharoi* and a plate and its lid, blackened with fire, were found (Egelhaaf-Gaiser 2000: 315). Also in Pompeii, the Temple of Isis had a prescribed, designated area for the cleaning of the sacrificial animal (Egelhaaf-Gaiser 2000: 283). There also appears to have been a kitchen between the porticos at the Temple of Juno at Gabii (Coarelli 1993:45-52; Egelhaaf-Gaiser 2000:305).

¹³⁵ See also CIL IX, 2629 for a similar grouping of *cellam* and *culinam*.

¹³⁶ Varro mentions roasting *exta* on spits.

¹³⁷ Boiling and roasting are the most popular. Apicius lists over 50 recipes for boiling meat and over 40 for roasting meat (MacKinnon 2004a:175).

in the summer months, the meat was roasted; in the winter, only a small amount of boiled meat was consumed, along with large quantities of bread.¹³⁸

Varro (*LL* 5.98), Livy (41.15.2), Festus (Lindsay 1013:21-22), and Plautus (*Rudens* 132-135) state that ceramic jars, *olla*, found in both full-scale and miniature forms throughout archaic and Republican sanctuaries in Rome and Latium, were used for the boiling of the *exta* as well as the pieces of meat of sacrificial animals (Bouma 1996 Vol.1:223).¹³⁹ The *ollae* could have served as the receptacles for the offerings of *exta* and the portions of meat without bones (Siebert 1999:207).¹⁴⁰ Authors also often refer to the *lanx*, a flat plate on which the viscera of animals could be placed (Fless 1995:20).¹⁴¹ An inscription found near altar VI at the Sanctuary of the Thirteen Altars at Lavinium clearly suggests the use of jars as receptacles for sacrificial offerings. The inscription reads: *Cerere auliquoquibus Vespernam poro*, relating that Ceres was a goddess who was honored with offerings held in jars (*olla*, or *auliquoquibus*) and Vesperna was honored with offerings of leek (Bouma 1996 Vol.1: 224; Castagnoli 1975:86-87, 443ff.). There is a conspicuous scarcity of animal bones from the Sanctuary of the Thirteen Altars; the

¹³⁸ Celsus 1.3.33-35.

¹³⁹ Also see CIL VI.1.2104 for its use in the cult of the Arval Brothers. Virgili (1990:130) states that *ollae* were used for cooking the viscera of the animals. See (Festus *Epit.* 21): “*aulas antique dicebant quas nos dicimus ollas... itaque aulicocia exta, quae in ollis coquebantur dicebant id est elixa*” (in the past they used to call what we call ‘*ollae*’ ‘*aulae*’... and so they called the *exta* that were cooked in *ollae*, that is boiled, ‘*aulicocia*’; and Varro (*LL* V. 98): “*haec sunt, quorum in sacrificiis exta in olla non in veru coquuntur, quas et Accius scribit et in pontificiis libris videmus* (these are those whose vital organs are boiled in a pot and not roasted on a spit, about which Accius writes and which we see in the pontifical books; Loeb translation). See Chapter 3 for a discussion of specific *ollae* found in Republican Latial sanctuaries.

¹⁴⁰ At Satricum, the contents of *ollae* did contain bones, suggesting that the offerings were portions of meat containing bones.

¹⁴¹ Virgil *Georgics* 2.194; Ovid *Fasti* 1.453ff.; Virgil *Aen.* 12.213ff.

only faunal evidence comes from around altars VIII, IX, and X. Bouma therefore proposes (1996 Vol. 1:224) that at Lavinium meat offerings, which would have included the skeleton of the animal at the time of deposition, might not have been very frequent.

From the Republican period, six inscriptions referring to kitchens exist, only two of which can be correlated with archaeological evidence from specific sites – the sanctuary of Bona Dea at Ostia¹⁴² and the sanctuary of Santa Venera near Cassinum.¹⁴³ Both these sanctuaries are thought to be dedicated to female deities, a link that Torelli (1996:170) suggests might correspond to the religious rites practiced and the ritual meals prepared in the kitchen areas of the sanctuaries.¹⁴⁴ However, kitchens in Italy are also found in connection with non-female cults: a kitchen was dedicated to the Genius (ILS 5419) in Aesernia, a cooking area was in the collegia of *fabri* (ILS5548), and kitchens were linked to private funerary cults (ILS 7931). At the sanctuary to Bona Dea in Ostia, permanent traces of ritual meals have been found (Egelhaaf-Gaiser 2000:312). The inclusion of a kitchen and benches (presumably some sort of waiting hall) suggests that the sacred space could be used both for ritual and as a sort of “clubhouse” of a *collegium* under the patronage of the Bona Dea (Brouwer 1989:426). The inscription, likely dating to the second quarter of the 1st century B.C.E., was found in a room to the south of the temple; it was not *in situ* but rather reused in a pavement from an Imperial rebuilding of the Temple (Cébeillac 1973:521; Nonnis 2003:36). The 1st century B.C.E. date of the inscription would make this kitchen the earliest found in a Roman sanctuary. The

¹⁴² See Cébeillac (2004:78-79).

¹⁴³ AE 11996, 467. Torelli (1996:162, 170ff.); Shilling (1980:445-451).

¹⁴⁴ Other epigraphic evidence testifies to the connection of kitchens to female cult. For example, ILS 3119 (Juno), 3452 (Hercules Saxanus), 4341 (oriental deities).

inscription states that the cooking area of the sanctuary was offered by Octavia, the wife of the well-known Lucilius Gamala, the builder of the Quattro Tempietti (II, VIII, 2); she was therefore related to high magistrates (Brouwer 1989: 426).

An inscription thought to be from the Sanctuary of Venus near Cassinum states that the kitchen was offered to the goddess at the expense of the dedicants (titles insecure), perhaps even by *magistrae* of a female *collegia* (similar to those attested in nearby Minturnae) (Nonnis 2003: 25). It is unclear to which of two areas in the sanctuary the *culina* of the inscription pertains: in the southeast corner of the so-called “Rectangular Hall” evidence of meals and of Roman fabric tablewares was found; and in the “west wing” of the sanctuary, remains of a large hearth, ritual meals, and domestic tablewares have been discovered. Torelli states that the area in the “Rectangular Hall,” better suited for a communal ritual meal, is the more probable location of the kitchen mentioned in the inscription (1996:170).

Animal Sacrifice at S.Omobono (see Table 1)

The preceding inclusive and generalizing overview of the materially pertinent aspects of Roman animal sacrifice –animal breeding, the sale of livestock, the procedure of the sacrifice, the methods of slaughter and preparation of meats, and the distribution and consumption of the animal – provides the context for a discussion of the faunal evidence from S. Omobono, of how the specifics of animal sacrifice might correlate either positively or negatively with what we know of the customary patterns in agriculture, production, and consumption in Roman central Italy. By examining the ritual deposits excavated, recorded, and analyzed from the area directly to the east of the archaic altar of

Temple B (the so-called Temple of Mater Matuta), we can begin our approach to an investigation of an actual, topographically-situated, materially-documented sacrificial performance. We can see how the particular choice of sacrificial animal, its age, sex, and species was determined by the particular set of architectural and natural features of the sanctuary.

A thorough study of the faunal and vegetal remains excavated around the altar (from the 7th century strata to those of the early Republican-age) was undertaken by Giovanni Ioppolo in the early 1970s and Antonio Tagliacozzo in the late 1980s.¹⁴⁵ Over 2,096 faunal remains have been recorded and analyzed (NISP), some from pre-monumental strata but most belonging to 6th century B.C.E. phases of the sanctuary: the first phase of the archaic temple,¹⁴⁶ its destruction, the leveling of this first monumental temple, and the construction, over its site, of the enlarged podium of the second archaic temple (dating from the 2nd quarter of the 6th century-540 B.C.E.) (and the subsequent destruction and leveling of these structures).¹⁴⁷ The following analysis is based on the faunal assemblage excavated and analyzed by Ioppolo and further studied by Tagliacozzo. Ioppolo's collection of data, reflecting the excavation and methodological techniques of the 1960s and 70s, is unfortunately not as thorough or complete as one would hope for by the standards of current practice. However, it is quite a large assemblage for Republican Italy

¹⁴⁵ Ioppolo (1972); Tagliacozzo(1989). The initial investigation and typing of the osteological finds were conducted by Istituto di Paleontologia Umana, under the direction of Professor L. Cardini.

¹⁴⁶ Virgili's 1977-78's strata AB17-AB21 (1977:30-31) = Ioppolo's strata E11 and D11 (the upper level of E11, with the level of cacciopesto, represents the start of the construction of the 2nd phase of the archaic temple). **Figures 4 and 5** for Ioppolo's and Virgili's strata.

¹⁴⁷ Virgili's strata AB13-AB16 (1977:29-30) = Ioppolo's strata E7-10 and D7-10.

and the 1989 study by Tagliacozzo provides us with a careful and extensive analysis of the earlier finds, allowing us to be fairly comfortable drawing inferences from the data.

The greater part of the analyzed faunal material comes from Ioppolo's 1962-63 excavations, under the direction of Colini, in the area of the northernmost Imperial *taberna* (sector II and IV, **Figure 3**),¹⁴⁸ the area immediately to the east and in front of the Republican altar of Temple B.¹⁴⁹ Examination of dental remains helps to confirm the aging of the animals (Tagliacozzo 1989). The majority of the bones are mammalian; out of the total sample, only 9 bird bones,¹⁵⁰ 5 fish bones, 1 reptile bone, and 1 amphibian bone have been found (MacKinnon 2004:54, table 13).¹⁵¹ From one of the two trenches (IV) in the area of Ioppolo's excavation, in strata from the earliest, pre-temple phase of the sanctuary,¹⁵² that include ash, fine and more ordinary bucchero, architectonic terracottas (of burnt, red clay), and wheel-made impasto ware, there is limited evidence of faunal remains: 3 fragments from cattle;¹⁵³ 4 bone fragments from sheep or goat (a

¹⁴⁸ The *taberna* is dated to the Hadrianic period by brick stamps. Virgili (1977:20, no.1); Colini et al. (1978:422).

¹⁴⁹ The stratigraphic sequence can be reconstructed as follows: E13, 14, and 15 were cut during the construction of the frontal stairs of the Archaic temple, therefore preceding the first construction of a monumental temple. The fill of the foundation trench for the access stairs is designated as E12.

¹⁵⁰ In Roman custom, roosters or chickens could be sacrificed as well as serve in divinatory rites (Pliny *NH* 10.49).

¹⁵¹ Of the cattle types were found: *bos brachyceros* Ruet., *Bos Taurus* L.. The type of goat found was *capra hircus*. The breed of sheep was *Ovis aries* L., *Ovis vel Capra*. And the breed of pig was *Sus domesticus* L. Of the birds, a *Columba palumbus* L., *Gallus domesticus*. Of the reptiles, *Emis orbicularis* L., *Testudo* sp. Of the deer, *Cervus elaphus* L., *Cervus* sp. Of the horses, *Equus caballus*, *Equus* sp. A mouse, donkey, dog, beaver, rabbit, and a badger were also found. See Ioppolo (1972:11).

¹⁵² Virgili AB 27 and 28= Ioppolo E12-13.

¹⁵³ A tooth, a fragment of the lower jaw, and a fragment of the right radial bone (Ioppolo 1972:39).

small-size breed);¹⁵⁴ and 10 unidentified bones. Above these strata (E12, E12-13), just preceding the construction of the first archaic temple (E12, thought to be the level of the first archaic temple) and altar are the remains of fetuses and very young sheep/goats (fragments from the left and right front bones [radia, humerus, iliac], fragments of teeth, and a fragment of a cranium), fetuses and young pigs (including a cranial bone), and cattle (rib, phalange, and vertebrae). Contemporary with this earlier, pre-monumental phase, from the end of the 7th- beginning of the 6th century (dated by the Etruscan inscription found within the stratum), in the other sector (II, D12-13)¹⁵⁵ in the area of the Imperial *taberna*, 2m below the level of the Republican altar and in contact with the attested blocks of the archaic altar,¹⁵⁶ at the beaten earth level designated as the so-called sacrificial ditch, was a stratum with traces of carbon and ash and the faunal remains of cattle, sheep/goats, and pig.

With the first phase of the archaic temple and the construction of a monumental altar came a large increase in sacrificial deposits (from sector IV, trench E11-12).¹⁵⁷ In this sector, 6m below the Republican pavement were uncovered two of the frontal stairs to the

¹⁵⁴ Including a phalange, a tibia, a burnt metatarsal, and a fragment of a burnt rib (Ioppolo 1972:39).

¹⁵⁵ Ioppolo mistakenly places this stratum under D12, in sector II (1972:12-13) rather than in sounding C (Regoli in Terrenato et al. 2012:“Sector II”). Regoli states that Ioppolo only address section D for sector II and section E for sector IV, reconciling the structures and layers from all five soundings (A,B, and E for sector IV and C and D for sector II).

¹⁵⁶ Through an analysis of the data and drawings, Regoli (2012) states that layer D12 in facts covers some blocks of the altar and therefore cannot have preceded its construction. Therefore, if correct, D12 was instead associated with a preparation layer for the construction of the altar, used as a fill over the removal of some blocks of the altar after the abandonment of the first temple or during the reconstruction of the second temple.

¹⁵⁷ E10 is interpreted as the last level before the abandonment of the archaic temple. E11 abuts the original high podium of the first phase of the archaic temple, whereas the upper level of E11 abuts a covering of blocks which form the articulated molding (the *gola* and *torus*) of the 2nd podium (Ioppolo 1972:14).

first archaic temple. The following figures (and those reported in Table 1 and in the following discussion) are MNI calculations; calculations based on the NISP values for the percentage of animals at this site vary only slightly, by a percentage or two. The majority of the remains are of sheep (70%), followed by pig (22%), and only a small percentage of cattle (8%). Remains of a dog (1%), two scapula of a wild bird, and a fragment of a dove as well were found (Tagliacozzo 1989). In the next phases in the sanctuary (that is the destruction of the first archaic temple, the construction of the second archaic temple, and the destruction and leveling of this second temple, strata D7-11, E7-10 and the very top of E11) of the total assemblage there is a reduction in caprines from 70% to 57% and an increase in pig remains from 22% to 37%. Dog remains are still present in this phase at 2%, and some remains of a bird of unknown species (7 bones), a dove, a domestic donkey, and the remains of fish (5 in total – a sea bass, and a brown meagre); a tortoise shell was also uncovered, though it is likely a natural deposit and not an intentional sacrificial offering. In this phase of the temple, with the altar thought now to be incorporated into the temple steps (see Chapters 1 and 5), many bone fragments are said to be found in the area of the steps between the altar and the temple;¹⁵⁸ this area was most likely not tread upon as much as the steps on either side of the altar, which led directly, without any monumental impediment, to the temple podium (Ioppolo 1972:14).

Generally speaking, one cow yields the same amount of meat as five pigs and as many as 8.4 sheep or goats, using modern standardized weight values of 225kg for a cow, 26.8 kg for a sheep/goat and 45kg for a pig (MacKinnon 2004a: 189 and Bökönyi

¹⁵⁸ The area of the steps, sector IV A, was excavated on October 31th 1963; however, since no pertinent information is recorded, the source of Ioppolo's data for his assertion is unclear.

1984:102-103).¹⁵⁹ At S. Omobono, based on MacKinnon's revisions of these standard weights for Roman Italy which estimate the average meat weight of a cow at 200kg, a sheep/goat at 27.5kg, and a pig at 50kg, the average meat weight of cattle from the sanctuary from the complete faunal assemblage (over 2,042 bones) is 1,814kg; of caprines, 3,026kg; and of pig, 2,453kg (Mackinnon 2004a:229, appendix 13).¹⁶⁰ At S. Omobono, the computed percentage of cattle meat is 27.2%, caprine meat 38.8%, and pig meat 34.1% (Mackinnon 2004a:231). These calculations are based on NISP (number of identifiable specimens) frequencies.

See Table 1 for distribution of animals, percentages, and numbers of individuals.

Distribution and Marks on Bones

In both phases of the archaic temple, the distribution of anatomical types in the bone finds is fairly consistent. Of all the species, the parts of the skeleton most represented are the chest bones, with the rib bones ranging in size anywhere from 2-3 and 15 centimeters. Evidence for the consumption of meat can be seen in the remains of the part of the muscle between the dorsal vertebrae and the ribs, a part that is not usually considered a primary cut in the butchering of meat (Tagliacozzo 1989:69). From the cattle, there were mostly ribs, some front limbs, and fragments of the cranium. The ribs of the cattle reveal

¹⁵⁹ Mackinnon (2004a:191) established a weight constant, based on the data from Roman Italy. He proposes (2004a:190) these modified weight values based on examinations of a small pool of data that correlate withers' height and the live weight of animals. The measurements are only intended as estimates to serve as a general guide to the distribution of meat in Roman Italy.

¹⁶⁰ The meat-weight frequency for cattle, sheep/goat, and pig at S. Omobono, based on MNI values (minimum number of individuals) is 24.9% cattle, 41.5% sheep/goat, and 33.6% pig. The MNI of the site is 168.

butchery marks – clean, deep incisions from knives or cleavers (Tagliacozzo 1989). From sheep/goats, all parts of the skeleton are represented in the assemblage, but ribs and vertebrae predominate (around 300 of the total fragments from the first phase of the archaic temple, and around 400 of the second phase of the archaic temple). These types of bones from the adult caprines, like the samples from cattle, show traces of cutting or breaking, highlighting the process of offering portions or dividing the animal into smaller sections (Tagliacozzo 1989:69). Many more front limbs than hind limbs are documented for caprines;¹⁶¹ these include a large number (60) of fragments from the scapula, and many parts of the jaw (Tagliacozzo 1989:68). Even taking into consideration the preference for front limbs over hind limbs, it has been suggested that since the long bones of the caprines are largely complete and show no signs of butchery or carving, these animals may have been offered as whole animals or in large parts (halves or quarters) (Tagliacozzo 1989:69). There is only sparse evidence for phalanges, metapodials, and carpals from sheep/goats.

All parts of the skeletons of pigs are also found, with a majority of teeth and fragments of the head; with pig bones, there is a slight preference for the front limbs (in particular the shoulder) over the hind limbs. There are very few butchery marks on the young pigs, suggesting that they may have been offered whole or in quarters, as opposed to the smaller portions of adult pigs.¹⁶² Of the six older pigs (1-2 years and over 2 years), found in association with the first phase of the archaic temple, only one is female and the

¹⁶¹ 90 fragments of front limbs, such as parts of the humerus and radius, as opposed to 37 of hind limbs, such as from the tibia or femur.

¹⁶² A similar observation can be made for the young pigs sacrificed at Satricum. See Bouma (1996 Vol 1:235).

other five are male; this would seem to contradict the hypothesis that pregnant adult pigs were preferred for sacrifice (Tagliacozzo 1989:69). This departure from the theoretical model has been explained by the suggestion that there must have been another deposit of adult females somewhere else in the sanctuary, or that only portions of the adult animals remained in the *area sacra*, the rest removed and consumed elsewhere (Tagliacozzo 1989:69). It could also be the case that adults had miscarriages and then the fetal remains were sacrificed separately (Bouma 1996 Vol. 1:235; and see below).

The evidence of dog remains (the fourth most common species represented at S.Omobono) is not discordant with the evidence for the treatment of dogs and their representation in the ancient world. In Ancient Greece, although Plutarch (*Quaest. Rom.* 111, 290D) states that dogs were not ever sacrificed to Olympian gods and Pausanias (VI.2.2) states that dogs were not offered in divinatory ritual, dogs were nevertheless offered during purificatory rites (Plutarch *Quaest Rom.* III, 52, 68, 280C) since dogs were considered impure and their sacrifice a cathartic, “purifying agent” (De Grossi Mazzorin et al. 2006:63). Dogs could be therapeutic, and, sacred to the cult of Aesclepius (Pliny *NH* 29.58, 98-101, 11, 114, 117, 133), they could be rubbed on ill parts of a patients’ body (after which the animals were killed and ritually buried. Pliny *NH* 30.42, 64).¹⁶³ Dogs could also be used in deposits as piacular sacrifices associated with the closing of a ritual bothros or well.¹⁶⁴ The *Tabulae Iguvinae* describes the sacrifice of dogs as tied to lunar phases and especially to the culmination of the grain festival (Devoto 1937;

¹⁶³ This was also a common practice among the Gauls (De Grossi Mazzorin et al. 2006:64). Dog sacrifice was particularly popular throughout pre-Roman Gaul.

¹⁶⁴ The skeleton of a dog was found in a deposit in a bothroi at the sanctuary of Hera at Foce del Sele, perhaps signifying a closing of the pit.

Wilkens 2008:591). In this festival, the dogs should be slaughtered in the prone position, meat carved from the lower limbs, viscera removed with thin spits, and these spits placed over the fire and cooked while the remains of the dog were collected and buried (Wilkens 2008:591).

In Rome, literary evidence links dogs to sacred sites in close proximity to S. Omobono: dogs were forbidden to enter the Temple of Hercules in the Forum Boarium (Pliny *NH* 10.79) but they guarded the Temple of Jupiter Optimus Maximus on the Capitoline (De Grossi Mazzorin et al. 2006: 63). Dogs were also sacrificed during rites of passage and could therefore be associated with patron goddesses of birth and development. Thus, the puppies sacrificed at S.Omobono, in deposits of other young animals and votive objects thought to be linked to fertility, might be usefully compared with the dogs found in the deposit of a well of Temple A at Pyrgi, dedicated to the goddess Uni (the Phoenician goddess Astarte), a goddess associated with birth and fertility.¹⁶⁵ Dogs could also be sacrificed to other deities or for other reasons: female dogs could be sacrificed with a sheep in the festival of the Robigalia (Columella 10.337-347; Ovid *Fasti* IV. 905-942), a festival whose aim was to protect the harvest; puppies were sacrificed before planting; a puppy was a burnt offering near a gate of Rome, the so called Porta Catularia (Festus, 39. 50); and dogs were offered along with a goat to Faustus in the *Lupercalia*.

From the distribution of the faunal remains, it is not possible to determine how often the three main species sacrificed (sheep/goat, pig, and cattle) were sacrificed together, at

¹⁶⁵ Pliny (*NH* 29.58) and Plutarch (*Quaest. Rom.*, 52, 277) both link a puppy sacrifice to the goddess Genita Mana, an Italic goddess associated with the menstrual cycle and fertility.

the same event. From the staggering preponderance of caprines, however, it seems as though a traditional *suovetaurilia* was not a common sacrificial practice at S.Omobono. The earliest iconographic¹⁶⁶ and literary testimonies to *suovetauriliae* appear only in the 2nd century B.C.E. and no archaeological evidence from Rome confirms the simultaneous sacrifice of the three species (Bouma 1996 Vol 1:234).¹⁶⁷ Furthermore, the proportionally minor representation at S.Omobono of cattle as compared to caprines and pigs does not fit well with the description of a *suovetaurilia* in the *Tabulae Iguvinae*, which relates a sacrifice with a great majority of cattle (15) over the sheep (3) and pigs (6) (Wilkens 2008: 594-595).¹⁶⁸ In canonical depictions of marriage rites, sheep and pigs are the common offerings – sheep, whose hide was spread for the married couple and pig, a common animal offered as a preliminary rite (*piaculum*). Within the period of the first phase of the archaic temple and the construction of the second (Ioppolo's E11), the ratios between the remains of individuals aged 0-6 months and those over six months for the caprines and for pigs appear to be very similar.

¹⁶⁶ See Ryberg (1955:chapter 8). In such depictions, the correct order is that the pig is the animal closest to the altar. This ordering can be seen in the depiction of the *suovetaurilia* on the Ahenobarbus monument in the Louvre, which Ryberg (1955:109) states was the model for subsequent depictions. A *suovetaurilia* appears three separate times on the column of Trajan, after which time the popularity, pervasiveness, and quality of this type of representation starkly declined.

¹⁶⁷ There is evidence for a 1:1:1 ratio of sheep:goat:pig:cattle at Satricum V.D.II (Bouma 1996 Vol 1:233-34).

¹⁶⁸ A ceremony recorded in the *Tabulae Iguvinae* in which pigs and baby goats are sacrificed is the decuria ceremony, where for each decuria (20 are cited), one pig and one baby goat are offered (Wilkens 2008:595).

Vegetal Remains

Raw or burnt,¹⁶⁹ vegetal offering – lacking, to be sure, the cognitive impact of special, annual animal sacrifice, but no doubt the material focus of more typical and routine ritual performance and experience, as well as an attested part of the procedure of an animal sacrifice (the *immolatio* during which the *mola salsa*, the grain, is sprinkled on the animal's head) – is well attested at S. Omobono.¹⁷⁰ The following brief discussion of vegetal remains is intended to give a sense of the full scope of the sacrificial activity at this sanctuary. In total, the vegetal assemblage amounts to over 2,000 finds: cereal seeds, nuts, olive pits, grape vines, wooden shells of nuts, whole nuts, fig seeds, blackberry seeds, wood nuts, olives, vines, white spruce, and two types of oak.¹⁷¹ This collection was excavated in 1974-75 in the strata of the fill of sector I in the Imperial *tabernae*, immediately to the east of the Republican altar of Temple B.¹⁷² Of the crucial staple cereals from the 6th century strata associated with both phases of the archaic temple

¹⁶⁹ Plants, edible fruits, pulses, and cereals don't necessarily need to be burned for consumption (Robinson 2002:97). If burnt and deliberately deposited and buried, they can clearly be interpreted as offerings.

¹⁷⁰ The word for sacrifice in German, *Opfer*, and in Dutch, *offer*, are equally used for both animal and vegetable sacrifice. For vegetal offerings see Dumézil (1970:76, 557). From depictions in Roman art different bloodless offerings are attested: stone pine (as seen in a sculpture outside the amphitheater in Capua); a mosaic from Pompeii shows an altar with a stone pine cone, a white fig, a date and a cock; wall paintings show fruits, cereals, beans and cornfield flowers on altars. The depictions on *lararia* themselves tend to show egg, fruits, pine cones. See also See for example Robinson (2002) where he examines the burnt deposits (often deliberately buried in small pits) at the House of Amarantus at Pompeii and records figs, dates, pine cones, cereals, weed, and grass seeds. Some of these remains were found in contexts which contained burnt bone. At the House of the Vestals (VI.I.7) burnt figs and grapes were found with pig bones and miniature ceramics under the *tablinum* of the house, a deposit that is linked to a foundation ritual.

¹⁷¹ Rovira (2008) attempts to link certain plant and vegetal species to gods or a specific symbolism based on deposits from the Roman period throughout Europe. For example, he links *Triticum dicoccum* and *hordeum vulgare* with wealth, hope, fecundity, fertility, and resurrection; figs are linked to fertility and longevity; grapevines to longevity and hope.

¹⁷² The remains were obtained through many samples of the earth removed from sector I, from diverse strata. The earth was sieved through mesh.

(including the final destruction and leveling), kernels of wheat and barley were found. Cereals were often mentioned by ancient authors as appropriate burnt offerings (Robinson 2002:97). Wheat of the type *Triticum dicoccum* was among the most important, traditional, and earliest cereals cultivated by the early Latins, and went by the name *far* (spelt).¹⁷³ Seeds of spelt have been found in the Roman Forum in the area of the pre-urban tombs adjoining the *Equus Domitiani*, and in the sacred well of the Temple of Vesta, as well as at several other sites in central Italy (Costantini et al. 1989:61). The barley seeds, *Hordeum vulgare*, are a type of barley diffused throughout Italy during the prehistoric period. Like spelt, barley was particularly common in archaic Latium and southern Etruria. But over time, the popularity of barley decreased, and by the Roman period this type of barley was thought to be reserved for animals (Pliny *NH* 18.13-15).

Olive pits were the most common find among the vegetal remains, numbering over 1000 (this despite Latin authors' assertions that olive production in Italy was difficult. See Pliny *NH* 15.1). Olive cultivation was thought to have been introduced to Rome no earlier than the 6th century B.C.E. (Pliny *NH* 15.1 states that olives were present in Rome starting in the 173rd year of the city, i.e., 580 B.C.E.), but archaeological evidence throughout Italy attests to an earlier presence (Costantini et al. 1989:63). The 6th century B.C.E. deposits of olive pits at S. Omobono does, however, remain the earliest evidence for their cultivation in the Roman region itself (Costantini et al. 1989:63).

Of the other vegetal remains, whole nuts and shells of nuts, produced without calculated cultivation, were offered alongside cereals, grapes, and olives. Nuts were known in Italy from as early as the end of the Quaternary period, evidenced in the

¹⁷³ Pliny *NH* 18.19; Columella 2.6.

deposits from Saccopastore at the base of the valley of the Aeneas River. Grapevines, thought to have been once cultivated in the prehistoric period in Italy, have been found in Rome at the Lapis Niger as well as throughout Latium and southern Etruria, where their presence is tied to the beginnings of wine production at the end of the 8th century B.C.E..¹⁷⁴ Olives and grapes occur together at other sanctuaries, indicating their use in sacred rituals (at Pyrgi and Locri, for example). Seeds of sorrel and blackberry, plants that grow on the margins of populated areas, were also found.

Among the more exotic remains are fig seeds, found in the sediment from the active and destruction phases of the second archaic temple. Figs, a unique fruit, were very difficult to cultivate during this time period. As a number of depictions and sculptures show, figs were standard sacrificial offerings (Zach 2002:105); for example, the lararium painting from the *Caupona* of *Euxinus* (I.11.10-11) in Pompeii, which illustrates a snake approaching an altar topped with a fig (as well as with other offerings). The mythographers report that figs were cultivated in early Rome: fig trees were present along the Tiber, on the Palatine, by the Comitium; a dying fig tree, which shaded the perimeter of the Temple of Saturn at the foot of the Capitoline, was cut down; Romulus and Remus were nurtured under a fig tree (Pliny *NH* 15.20.77).

The coexistence of so many vegetal species (olives, cereals, vines, figs, and nuts) is rare for sanctuaries in Italy.¹⁷⁵ An assemblage displaying a similar variety, nuts excepted, has been found at only one site – the 6th- 5th century B.C.E. sanctuary in the

¹⁷⁴ There is evidence, however, for grapevines as early as the end of the Quaternary period as seen in the peaty sediment under the riverbed of the Tiber.

¹⁷⁵ Zach (2002:105) notes that nuts and fruits, cereals, legumes, and oil plants occur commonly at seven sacrificial sites from the Roman Empire.

area of Pantanello, far from Rome, near Metaponto. The enormous range of the animal and vegetal offerings deposited in strata from the archaic period next to the altar of Temple B suggests the particularity and variety of the ritual at S. Omobono, a monumental ritual center lying in the shadow of the sacred monuments on the Capitol and the Palatine and at the social and topographical intersection of port, marketplace, Tiber fjord, and entrance to the Roman Forum.

Putting together the fragments

To make sense of the faunal data, the osteological remains need to be set in their proper temporal, cultural, and architectural, and topographical context; they must be examined not just in relation to the trenches excavated by Ioppolo in the early 1960s, but also considered in terms of the larger physical setting of S.Omobono and the role played by the sanctuary in the material organization of Roman religious experience and cultural practices. The faunal assemblage at S. Omobono, for example, seems to be discordant with Roman habits and diet; in selecting specific animals selected for sacrifice inconsistent with contemporary dietary customs it would seem that instead the character of the sanctuary – the setting, altar, monuments, embedded memories of past practice – would have played the decisive role in choosing the animal. As discussed earlier in this chapter, sheep and goat make up only about one fifth of the Roman meat consumption (Mackinnon 2004a:194); but they are by far the most represented sacrificial species at S. Omobono. The scarcity of cattle bones at S. Omobono is also out of line with the data for contemporary consumption patterns, which, as previously mentioned, show beef accounting for 1/3 of the meat consumed in Roman Italy. On the other hand, the high

percentage of pig remains at the sanctuary (although less than those of sheep/goats) does correspond well with the pork-rich diet of the Romans (ranging from 1/3 to 1/2 of all meat consumed, and increasing in popularity in the late Republic and Empire).¹⁷⁶ The presence of all parts of the pig from the excavations at S. Omobono is consistent with the multiplicity of recipes for preparing pork and the tendency to eat the entirety of the animal. Nevertheless, the proportionally excessive presence of caprines at the sanctuary strongly suggests that the gods – and their naturally conservative tastes and preferences – were as important a consideration as the latest mortal dietary fashions in preparing the menu for the sacrificial feast.

Other characteristics of the typological distribution of the faunal assemblage at S.Omobono are similarly discordant with contemporary Roman norms. Cattle, though generally much more costly than caprines or pigs, were the ideal animals for sacrifice (Aelian *NA* 2.57). Cost cannot entirely account for the seeming infrequency of cattle sacrifice at S.Omobono, given the fact that the Forum Boarium abuts the sanctuary and cattle prices should, presumably, have been relatively low. Livy (1.7.12), Varro (*LL* 6.54), and Dionysius (1.39.40) mention that a heifer was sacrificed at the Ara Maxima. Furthermore, there is the well-known association of cattle and Hercules, a deity well represented in the area and in the statuary of the second phase of the archaic temple.

The overwhelming presence at S. Omobono of pigs under 4 months does not correlate with the 1-3 year age range of the majority of pigs offered elsewhere in Roman Italy (both in sanctuaries and in urban or rural non-religious, everyday settings) (MacKinnon

¹⁷⁶ These percentages come from MacKinnon's careful study of dietary and consumption habits throughout Italy in the Republican and Imperial eras. While they are necessarily therefore generalizing they do give an overall patterning to the privileging of certain animal species.

2004a:156); but the S. Omobono finds are consistent with the many references found in later Latin authors to the popular practice of sacrificing young pigs, as little as young days old.¹⁷⁷ The downward skewing of the ages of the animals sacrificed at S. Omobono in comparison with those at other sites in Italy (of roughly contemporary periods and chronology) can also be seen with the caprines: 0-6 months at S.Omobono versus 12-48 months at slaughter at sites in general throughout Italy (not only sanctuaries).¹⁷⁸ It was also during this period (continuing into the early Empire, when linen became popular), that wool was the dominant item in the textile market; hence, if reared for their wool, the sheep would have had to be slaughtered as adults (MacKinnon 2004b:55).

The distribution of species from other sanctuary assemblages in Republican Latium also tends to favor caprines in the manner seen at S.Omobono:¹⁷⁹ Tivoli/Aquoria,¹⁸⁰ Lanuvium/Juno Sospita, and Satricum/Mater Matuta.¹⁸¹ In particular, the faunal assemblages at S.Omobono ought to be compared to contemporary finds from neighboring sacred areas within the Roman Forum: the Lapis Niger, the archaic Temple to Castor and Pollux, and the Temple to Vesta. Differing from the general preference for sheep in Latial sanctuaries, pigs were the predominant sacrificial animal in the pre-500

¹⁷⁷ Pliny *NH* 8.77.206; Varro *RR* 2.1.20, 2.4.16.

¹⁷⁸ At Satricum, $\frac{3}{4}$ of caprines were over two years (as evidenced by their permanent teeth); $\frac{3}{4}$ of cattle were sacrificed under the age of two years; slightly under half of the pigs were under one year.

¹⁷⁹ However, at urban sites from the Republican period other than S. Omobono, pig is the predominant offering (over 50%), followed by sheep (over 30%), and cattle (around 15%) (MacKinnon 2004a:65, figure 8).

¹⁸⁰ Here, all the bones belonged to sheep (Bouma 1996 Vol.1:230).

¹⁸¹ At a ritual deposit at the Cannicella sanctuary at Orvieto, remains of young pigs (21) and young sheep/goats (19) greatly outnumber those of cattle (3) and other mammals. The only burnt bones come from sheep/goats and pigs. See Wilkins (2008).

B.C.E. phase of the Temple of Castor and Pollux (Bouma 1996 Vol.1:229).¹⁸² From the 7th century B.C.E. onwards, youth presided at the Lapis Niger, represented by a large quantity of young sheep, although young bulls and young pigs were also present. Notably, the earliest phases of an archaic ditch in the Temple of Vesta (mainly late 7th century- first half of the 6th century), show no evidence at all of caprine sacrifice but only that of cattle, horse, and pig. Sheep appear in a later phase of this temple. The deposit, from 560 B.C.E. onwards, located against the platform of the building, included all postcranial parts of the sheep; at S.Omobono, there was a preference for foreparts. Of the caprines found at both the Temple of Vesta and S.Omobono, mainly young individuals were offered, whereas the cattle at both sites tended to be of adult age. As at S.Omobono, at the Lapis Niger there were also a limited number of dog, wolf, and chicken remains (Bouma 1996 Vol 1: 229; Gjerstad 1960:252)¹⁸³ and from the Temple to Vesta there is some meager evidence for horse, dog, weasel, hare, bird, beaver, badger, turtle, and fish.

Following Bouma (1996 Vol 1), a comparison of the faunal sample at the altar of Temple B (supposedly dedicate to Mater Matuta) at S. Omobono with that from the sanctuary of Mater Matuta at Satricum is especially revealing. At the latter, from a roughly contemporary deposit (VD II, strata 2 and 3, dating to a pre-530 B.C.E. phase and to 490-450 B.C.E., respectively, cattle (at 12.7%) were more common than pig (at 7.2%). Sheep were the most common (at 79.9%). At S.Omobono, however, cattle were only barely represented. At both sites, since all parts of the sacrificial caprines and pigs

¹⁸² At the Republican sanctuary at Campochiaro, pigs were 72% of the assemblage, followed by 27% sheep (MacKinnon 2004a:62, table 14).

¹⁸³ The most extraordinary find in the deposit at the Lapis Niger was three bones, with deep incisions, all from a single, large vulture, a bird that is not particularly edible and is difficult to capture (Blanc 1958:66).

were represented and were deposited collectively without regard to either animal or skeletal type, we may reasonably infer that whole or mostly whole animals were likely offered and that different types of animal may sometimes have been offered at a single ritual event. At S.Omobono and at Satricum, there appear to be differences in the distribution of the skeleton parts in the two assemblages. For example, at S.Omobono there are many more forelimbs of pigs than at Satricum, where there is a preference for hind quarters. For caprines, the forelimb again prevails at S.Omobono, whereas at Satricum, the whole skeletons of largely adult victims were deposited. At S.Omobono, cattle ribs were the main offering from this species while at Satricum, all postcranial parts of the animal were offered. Unlike the seasonal character of annual sacrifice at S.Omobono (indicated by the young ages of animals), the practice at Satricum was continuous throughout the year: caprines could be offered in winter, spring, or summer, but not the fall; cattle (of different ages) could be sacrificed in any season; the annual variations in pig sacrifice are unknown (Bouma 1996 Vol. 1:233, 433-434).

Seasonal Sacrifice

The consensus among modern scholars, basing their opinions on breeding patterns and gestation periods, is that there was an annual sacrifice at S.Omobono in the spring or summer months. The festival of the Fordicidia to Tellus, celebrated on April 15th (in the Augustan calendar), in which pregnant cows and young animals were slaughtered (Varro *LL* 6.15), is often used as a comparative example for the supposed spring/summer sacrifice of young animals at S.Omobono (Ioppolo 1972:27). However, I would like to suggest the possibility that the sacrifice may have taken place in the winter months. This

alternative follows from the breeding patterns of the two main species offered at this sanctuary – pigs and caprines. Pigs can give birth both in the summer and in the winter¹⁸⁴ and sheep can give birth from mid-September to mid-December (despite our modern associations of lambs with spring time and the Easter and Passover holidays).¹⁸⁵ Varro and Columella¹⁸⁶ state that the newborn pigs born in the winter months did not fare very well. Perhaps it was for this very reason that so many young pigs (aged 0-4 months) and fetuses were offered at S.Omobono – it was economically sensible to slaughter the pigs that might not otherwise survive the winter months and that would deplete the stored feed, or wither away on a winter acorn diet. Those born in the summer months, however, could more easily be raised and could grow to reach their maximum economic potential (at 2-3 years). It is also tempting to reconcile the large number of fetal remains and the absence of many adult female pigs (only one out of the six adult individuals) by viewing the fetuses as miscarriages caused by the severity of a winter birth.

Sheep were born in late fall and winter months; there was a preference for lambs born in these seasons over those born in the spring to ewes who had to endure typical winter food deprivations. Columella (VII.3.11) states this most explicitly, remarking that *Nam melior est autumnalis verno, sicut ait verissime Celsus, quia magis ad rem pertinet, ut ante aestivum quam hibernum solstitium convalescat, solusque ex omnibus animalibus*

¹⁸⁴ MacKinnon (2004a:156-57) presents the data in support of both annual and biannual breeding. For this typology see Columella 7.9.4. The zooarchaeological data that MacKinnon presents reveal no site conforming to a strict semi-annual or annual breeding scheme. If urban demand for pork was high, biannual breeding would necessarily increase the stock of meat for the year.

¹⁸⁵ Pliny *NH* 8.72.187; Varro *RR* 2.1.19, 2.2.14. Ewes were not allowed to breed if they were under two years old and three years was the preferred age Varro *RR* 2.2.14; Pliny *NH* 8.72.187.

¹⁸⁶ Varro *RR* 2.4.7, 2.4.13; Columella 7.9.3.

bruma commode nascitur.¹⁸⁷ This fits well with the predominance of caprine remains aged 0-6 months at S. Omobono. A summer or spring sacrifice at S.Omobono would have meant that the majority of the faunal remains of caprines would have been dated to 7-12 months age (which is, tellingly, a particularly common age for slaughter as evidenced at sites throughout Roman Italy, see Mackinnon 2004b). Pliny (*NH* 8.72.187) even states that sheep are best born in the winter, since they are bred to have to be large and strong enough to trek to upland pastures by mid-summer. Since only two of the nine cattle found at S. Omobono were aged 0-6 months, the breeding patterns of cattle (usually born in late spring) do not necessarily offer any insight into the season of sacrifice at S. Omobono.

The reigning assumption that sacrifice occurred at S.Omobono during the late spring or early summer birth cycles finds its principal support in the observation that the *Matralia*, a festival in honor of a mother goddess and therefore appropriate to Mater Matuta, was held on June 11th. Plutarch¹⁸⁸ and Ovid¹⁸⁹ describe rites during this festival that emphasize fertility and the preservation of young children, fitting practices for the worship of a matron goddess (and for the sacrifice of young animals). In one rite, a slave girl, normally forbidden to enter the temple, is brought inside the precinct only to be driven out with rods by matrons who have been married just once and who offer special

¹⁸⁷ The Latin text of all Columella passages in this chapter comes from thelatinlibrary.com (which come from the edition of V. Lundström, 1902-1917). Translation is as follows: “For an autumn lamb is better than a spring lamb, as Celsus very truly remarks, because it is more important that it should grow strong before the summer solstice than before the winter solstice, and only it of all animals can be born without risk in mid-winter.”

¹⁸⁸ *Camillilis* 5.2, *Queast. Rom.* 16, 17; *Mor.* 492D.

¹⁸⁹ *Fasti* 6.551-561.

sacrificial cakes (like those represented in the pottery deposits on the site). The second rite described includes these same matrons presenting their nephews and nieces and saying a prayer for them.

A problem with the *Matralia* hypothesis, however, is that during the archaic period, the period from which come most of the analyzed faunal remains, the assumed dedication to Mater Matuta of the temple and its altar is itself not at all secure and, in consequence, the resulting chain of argument in favor of spring sacrifice leaves much to be desired. Furthermore, as discussed above, the ages of the animals recorded, documented, and analyzed by Ioppolo and Tagliacozzo, with the majority of sheep, goat, and pigs aged under 6 months, do not make sense with a sacrifice on June 11th. Piglets, if they were summer-cycle arrivals, were presumably born in July¹⁹⁰ and, therefore, they would not have been available to meet the mid-June *Matralia*'s seeming requirement for piglets, particularly supple and fit for offering, aged ten days.¹⁹¹ On the other hand, if the pigs were born in the winter months, they would have been 6 months or older at the time of the *Matralia* and quite past the under 4-month figure that predominates in the faunal evidence from S.Omobono. Similarly, caprines born from mid-September to mid-December would also, at the time of the *Matralia*, have been beyond the 0-6 month range that characterizes the data for these animals at the site.

When, then, if not on the *Matralia*? To answer that question, we must consider the faunal remains in their actual topographic context, abutting the easterly facing side of the

¹⁹⁰ Columella 7.94 states that July was the best period for a sow to give birth because she would have plenty of milk and much food available.

¹⁹¹ Varro *RR* 2.4.16.

archaic altar,¹⁹² the side faced by the celebrant standing in the altar's U-shaped enclosure with the temple to his left. If the typology of sacrificial animals did, in effect, determine the character of ritual, if the space itself demanded a particular age or species of animals, we must then consider these faunal remains as an essential material component of the architectural setting and sacrifice. Measurements of the orientation of the altar (to be discussed in detail in Chapter 5) show that, in the sixth century, the celebrant would have faced the rising sun on the day of the astronomical year that quite nearly coincides with the day, in Varro's astronomical terminology, when the sun would have entered its 23rd day in the constellation Scorpius;¹⁹³ Varro describes this day as the conventional first day of the winter agricultural season (*RR* 1.1.28). It would seem reasonable, therefore, to pursue the hypothesis that an important sacrifice at S. Omobono, timed by some elementary observation of stellar phenomena that was in keeping with the astronomical knowledge likely available in Rome in the archaic period (see Chapter 5), and marked by the precise architectural orientation of the altar, would have celebrated the start of the winter agricultural season. Sacrifice to celebrate agricultural seasons or events was common in Republican Rome. For example, concerning private sacrifice, Cato, in his 2nd century B.C.E. *De Agricultura*, refers to sacrifices for the preliminary rites for agricultural labor or for harvesting (50; 132, 134), to sacrifices enacted for a reclamation

¹⁹² At about 22 degrees (see next chapter) south of east, almost exactly east-southeast.

¹⁹³ Varro gives the Julian date of November 10, roughly November 6 in the modern calendar. Though unstated by Varro, contemporary professional astronomers, like the designers of the Julian calendar, would no doubt have understood that this day was exactly midway between the autumn equinox and the winter solstice.

of the land in a sacred wood (139-141), to a votive sacrifice performed for the health of cows (83), and to a sacrifice for a *lustratio* of a field (134).

As an example of the importance of material context in the study of sacrifice, we have seen how, acting in combination, an archaeozoological and economic analysis, a survey of the relevant literary and inscriptional record, and a thorough knowledge of the data for other sites in the region can together be brought to bear on the evidence from a single site and can lead, quite straightforwardly, to the surprising and significant inference that winter – and not spring – was the primary season for animal sacrifice at S. Omobono. We can both find support for this inference of a winter festival and even get a glimpse of what this winter festival might be by approaching, as we will in the next chapter, the question of context from yet another direction – so to speak – that of architectural alignments and orientations.

TABLE 4.1: FAUNAL REMAINS FROM S. OMOBONO

6th century B.C.E: 1st phase of archaic temple

	Fetus	Fetuses at Term	0-6month	6-12 month	12-24 months	Over 24 months	Total remains of bones NISP	Number of Individuals MNI	
Sheep/Goat (MNI)	1	6	52-60	6-9	2-3	3-4	659	70-83	
Sheep/Goat (percentage)	1.5%	8.5%	74%	8.5%	3%	4.5%			

Observations: Over 80% are under six months of age, and only 7% above one year.

	Fetus	Fetuses at Term	0-3month	4-12 month	12-24 months	Over 24 months	Total remains of bones NISP	Number of Individuals MNI	
Pig (MNI)	2-3	5	7-12	2-3	2-4	2	418	20-29	
Pig (percentage)	10%	25%	35%	10%	10%	10%			

Observations: 70% are less than four months old

	Fetus	Fetuses at Term	1-6month	6-12 month	12-24 months	Over 24 months	Total remains of bones NISP	Number of Individuals MNI	
Cow (MNI)	-	-	1	1		3-4	75*	5-8	

*72 of these fragments belong to strata AB 19-20 Virgili from which numerous votives (amber, necklaces, loom weights) were found.

Observations: The fragments mostly come from rib bones (89 total fragments). The ribs of the cattle reveal butchery marks, clean, deep incisions from knives or cleavers (Tagliacozzo 1989).

6th century B.C.E destruction of the first archaic temple, the construction of the second archaic temple, and the destruction and leveling of this second temple

	Fetus	Fetuses at Term	0-6month	6-12 month	12-24 months	Over 24 months	Total remains of bones NISP	Number of Individuals MNI	
Sheep/Goat (MNI)	2-4	2-5	24-32	5-7	2-3	5-8	635	40-59	
Sheep/Goat (percentage)	5%	5%	60%	12.5%	5%	15.5%			

Observations: In area II section D bones of sheep/goats under the age of 6 months are most present in the second phase of the archaic temple (and almost non-existent in the 1st phase of the archaic temple). This pattern does not hold true for sheep/goats over the age of 6 months (which have their highest frequency in the 1st phase of the archaic temple), or for section E. Adult sheep have their highest frequency in trench IV, section E, during the first archaic temple and the construction of the second archaic temple

	Fetus	Fetuses at Term	0-3month	4-12 month	12-24 months	Over 24 months	Total remains of bones NISP	Number of Individuals MNI	
Pig (MNI)	2-3	5-8	8-12	3-4	6-10	5-7	406	29-44	
Pig (percentage)	7%	17%	28%	10%	21%	17%			

Observations: In area II section D pig bones (of all ages) are much more prevalent in the second phase of the archaic temple than during the first (in fact, during the 1st phase of the archaic temple, there are almost no pig remains under 6 months). This pattern does not hold true for area IV section E. Pigs over one year old are most significantly represented in the first phase and construction of the second phase of the archaic temple (Ioppolo's E11) as well as in the end of the phase of the second temple (E9).

	Fetus	Fetuses at Term	1-6month	6-12 month	12-24 months	Over 24 months	Total remains of bones NISP	Number of Individuals MNI	
Cow (MNI)	-	-	1		1	2-3		4-6	

Observations: The fragments mostly come from rib bones (88 total fragments). The ribs of the cattle reveal butchery marks, clean, deep incisions from knives or cleavers (Tagliacozzo 1989).

CHAPTER 5

Orientation

Precisely situated within a carefully demarcated sacred space, the altar is the essential, integrating element of the natural and architectural topography of a Roman sanctuary. Having seen how continuous constructions and changing boundaries of a space, how carefully selected votive and animal offering might govern or inform the character of sacrifice, we will now turn to the altars themselves and explore the question of how the specific placements and orientations of these monuments influence the performance of the ritual over which they preside. Vitruvius (IV.5, 1) famously prescribes that altars should be on direct axis with their temples and face due east, in other words, *more or less* toward the rising sun (**Figure 1**).¹ However conscientiously this blanket prescription may have been applied in later periods, such a rule was far from the norm of actual Roman construction practice at the time of Vitruvius in the late first century B.C.E., and even less so in early and middle Republican Rome and Latium. But what Vitruvius' rigorous dictum does emphatically signal for us is a tradition of concern

¹ The actual range of variation is substantial: sunrise cycles seasonally between points on the horizon known as solstices – at the latitudes of Latium these points lie about 32° north and south of east. Vitruvius' selection of the equinoctial mid-point of this cycle provides a sound, general solution to the architectural problem of orienting routine, everyday ritual to an approximate sunrise. On the other hand – and especially before the introduction of the reliable, Julian solar calendar – universalizing formulas of any sort would have been quite unsuitable for achieving the kind of precise coordination of seasonal and astronomical phenomena required by specialized annual agricultural festivals.

for the precise coordination of the placement and orientation of Roman altars with the movements of celestial objects. Though Augustan-era theories of religious architecture, like the Republican ritual calendar with its non-lunar months, may have lost contact with the actual close observation of astronomical events, the original underlying principle of respect for orientation retained its authority. Although the function and significance of the original orientation of an altar may be forgotten over the centuries of use, the memory of this material agency would persist and would have still, in subtle ways, certainly affected the experience of the ritual. Even after having lost its function as a time marker in the cycle of the ritual year due to the introduction of calendar innovations, the coordination between the orientation of an altar and a specific celestial event would have an enduring significance.

This chapter will explore the intersection of ritual, the precise placement of altars, astronomy, and the introduction of Republican-era calendars. Careful placement is particularly evident in sanctuaries in which the altar is situated obliquely with respect to the temple or with the general plan of the sanctuary space, or when the altars are free-standing monuments. The orientation of such altars must be understood as clearly intentional and independent of the more architecturally and topographically privileged symmetries of the sanctuary. The alignments of these monuments can be more securely associated either with the preservation of the location of a preceding, ritually buried altar, or, as will be shown below, with the occurrence of specific celestial phenomena linked to calendrically-dictated annual festivals. While the focus of this chapter is on Area A at Fosso dell’Incastro at Ardea, the altars and their orientations at S. Omobono and at Lavinium will play an important complementary, supportive role. The chapter begins

with a brief discussion of what we know, or can surmise from archaeology and texts about religious and agricultural calendars, their mutual interaction,² and related astronomical knowledge in Latium from the late archaic period to the period of the latest altars considered in this chapter – those of the 4th- 2nd century B.C.E. at Fosso dell’Incastro at Ardea. Finally, the chapter closely examines the orientations of the altars at S. Omobono, Ardea, and Lavinium and the marked correspondence of these altars’ specific placements with astronomical phenomena.

Ritual and the Calendar: “the calendar’s function is essentially the sacral evaluation of non-sacral actions” (Rüpke 2011:46).

Organized ritual requires scheduling. Such religious ceremonies were linked to specific days, months and seasons. As Plato recognized (*Laws* 809c-d), ritual in an organized agricultural community requires an understanding of “the courses of the heavenly bodies – stars and sun and moon – in so far as every State is obliged to take them into account. ...the arranging of days into monthly periods, and of months into a year, in each instance so that the seasons, with their respective sacrifices and feasts, may each be assigned its due position by being held as nature dictates” (Isager and Skydsgaard 1992:164).³ The evidence for the linking of lunar calendars and ritual in the Greek,

² Republican-era civil calendars will be seen to play an archaeologically visible role only in the later phases of the altars at Lavinium.

³ Translation from *Plato in Twelve Volumes, Vols. 10 & 11* translated by R.G. Bury. Cambridge: Harvard University Press; London: William Heinemann Ltd. 1967 & 1968.
<http://www.perseus.tufts.edu/hopper/text?doc=Plat.+Laws+809&fromdoc=Perseus%3Atext%3A1999.01.0166>

Etruscan,⁴ and Roman worlds is plentiful. A ritual calendar year consisting of a sequence of 12 lunar months punctuated by new, quarter, and full moons – roughly 354 days on average – would have made for a usefully-structured short-term approximation to the 365 or so-day cycle of the seasons.⁵ For example, in contrast to the seasonal and agricultural-based month names of Mesopotamia (Hannah 2005:27), in Greece and Italy there is a conspicuous naming of the months after gods and religious festivals;⁶ though even in this respect, Italic practice is distinct – only six Roman months bear divine eponyms.⁷

Farmers making seasonally sensitive sacrifices or architects wishing to exploit the idea of a connection between religious monuments and celestial phenomena would have not relied on sunset observations of lunar phases for synchronizing ritual but rather on sunrise events.⁸ For non-religious purposes, moreover, a simple 12-month lunar calendar would have been even more problematic – the roughly 11-day difference between the seasonal and lunar years would shift the calendar almost a quarter-year, a whole season,

⁴ Etruscan calendars relate a system of names of the months that appear similar to those known from Rome (Rüpke 2011:43); though unlike Roman calendars, those from Etruria counted all the days of the months incrementally (like the Greeks). Etruscan calendars list months with no more than thirty days, suggesting that Etruscans maintained a lunisolar calendar; furthermore, in the *Iguvine Tablets* observations of the first crescent moon and the full moon were highlighted, indicating the use of lunar months (Turfa 2012:25; Devoto 1937).

⁵ These lunar months had an internal structure that was based on four marked, ritual days (Rüpke 2012:85). For example, the actual lunar events whose names are preserved in the *kalends*, *nones*, and *ides* of the calendar of the Roman Republic (Rüpke 2011:23-24). Furthermore, it may be that the accompanying display of astronomical knowledge and of observational control over the regularities of the phases of the moon would have contributed greatly to the status of the religious authorities.

⁶ A Greek reference designating the lunar year as κατὰ τὸν θεόν underscores this fundamental relationship between the worship of the gods and lunar months (Reich 1989:37).

⁷ For a thorough discussion of lunar calendars, see in general, Samuel (1972) and for Rome, Rüpke (2011:23).

⁸ See Rüpke (2011:24ff.) for observation of the moon by the pontifex minor or other ritual officials. See also Rüpke (2012:85-89).

in as little as eight years (see below for a discussion of the Lavinian altars in relation to this disparity).⁹ By the Republican period, the lack of synchronization between the archaic ritual lunar year and the agricultural seasonal year would have become a problem of increasing importance. Agricultural planning in the expanding economies of the archaic Mediterranean world, along with the ritual sacrifice of the time-sensitive, seasonal first fruits of this careful coordination of production, would require a manifestly better means of annual timekeeping.

This study is not the place for a review of the familiar history of how – through such devices as systematic monthly intercalation (the technical term for adding a 29 or 30-day leap month) and the coordination of lunar observations with solar regularities – the need to reconcile the lunar and seasonal year was met by the transformation of lunar ritual calendars into luni-solar civil calendars and into the solar-like pre-Julian calendar of the Roman Republic.¹⁰ The focus here, in this study of the archaeology of sacrifice and how the objects and settings inform the character of the ritual, is not so much the competition between religious and civil authority for control of the calendar but is, rather, an attempt to establish an understanding of how the ritual coordination of seasonal sacrifice was managed in the period before the introduction of reliable calendars which could take sufficient account of the solar character of the year.

⁹ Hannah (2005:81; 35-41).

¹⁰ See Samuel (1972) and Hannah (2005) for a general discussion of the development of lunisolar calendars. For Rome specifically, see Michels (1967) and Rüpke (2011).

Timing of Sacrifice

From later literary evidence, it can be inferred that the traditional time at which Roman sacrifice occurred was the start of the day, at the rising of the sun.¹¹ A sacrifice that occurred at day break would ensure the time (and light) necessary for the preparation, cooking, and festive communal consumption of the meat. Literary accounts of the sacrifice to the Dea Dia in 240 C.E. relate that: “on the sixth day before the Kalends of June, in the home of the vice-president Fabius Fortunatus, which is situated on the Capsaria street on the greater Aventine, began the sacrifice to Dea Dia at sunrise” (translation taken from Scheid 2003:88). Details concerning the day by day procedures of this three-day sacrifice to Dea Dia report that on the second day of the sacrifice, the *magister* arrived at the sacred wood before sunrise, the other participants throughout the morning (Scheid 2005b:27). In another example, during the secular games, on the day of June 2nd, the ceremony began before the start of the day, after sacrifices and nocturnal games, concluding with further daytime sacrifices (Scheid 2005b:108. Also see CIL VI.32323 lines 119-122 or for all the rites associated with the games, lines 90-168). The link between sunrise and the time of sacrifice is further supported by Vitruvius’ (IV.5.1) dictum, mentioned above, that altars should face east, toward the rising sun.

The east and sunrise are associated, in ancient Italy, with the left side.¹² Pliny (*NH* 2.142) states that lightning on the left is considered favorable because the sunrise comes

¹¹ Those sacrifices that were considered magic were practiced at night. See Scheid (2007a:263).

¹² This “leftist” tradition seems to have originated in Etruria. See below for a discussion of this phenomenon at S. Omobono, which would certainly have been within the sphere of influence of such Etruscan astronomical notions. The emphasis on the left is particularly relevant in the relationship between the archaic altar and temple at S. Omobono. An officiant standing in the arms of the U of the altar would have the temple at 90° to his left. From this observation, I would hypothesize that in fact the orientation of

from the left side of the sky (as one faces conventionally south – toward the path of the sun).¹³ In contrast to the preference for the right side among Greeks and Barbarians (Cicero *de div.* 2.82: *ita nobis sinistra videntur (Graecis et barbaris dextra) meliora*), Latin authors repeatedly emphasize the left as favorable for auspices.¹⁴ Most likely discussing the division of the Etruscan sky and the seats of the gods,¹⁵ Varro (1.V epistolicarum quaestionum, also quoted by Festus 454 L OR 339) also reportedly observed: *a deorum sede cum in meridiem spectes ad sinistram sunt partes mundi exorientes, ad dexteram occidentes; factum arbitror ut sinistra meliora auspicial quam dextera existimentur*.¹⁶ A late witness, Isidore of Seville (560-633 C.E.) (15.4.7), reports a traditional view that “when a temple was constructed it faced the equinoctial east... in order that he who

the temple may have actually been determined by the orientation of the altar itself – a monument superimposed on an earlier site of sacrificial activity, the so-called “sacrificial ditch,” active in a period in which there was no monumental temple structure. See Chapter 1 for a history of the site.

¹³ *laeva prospera existimantur, quoniam laeva parte mundi ortus est. nec tamen adventus spectatur quam reditus, sive ab ictu resilit ignis sive opere confecto aut igne consumpto spiritus remeat.*

¹⁴ Pliny *NH* 2.142; Festus 476L. See also Dionysius of Halicarnassus II.5, discussing the tradition of the left as favorable and the origin for such belief: “Their [The Etruscans] reason is, in my opinion, that the best seat and station for those who take the auspices is that which looks toward the east, from whence both the sun and the moon rise as well as the planets and fixed stars; and the revolution of the firmament, by which all things contained in it are sometimes above the earth and sometimes beneath it, begins its circular motion thence. 3 Now to those who look toward the east the parts facing toward the north are on the left and those extending toward the south are on the right, and the former are by nature more honourable than the latter. For in the northern parts the pole of the axis upon which the firmament turns is elevated, and of the five zones which girdle the sphere the one called the arctic zone is always visible on this side; whereas in the southern parts the other zone, called the Antarctic, is depressed and invisible on that side. 4 So it is reasonable to assume that those signs in the heavens and in mid-air are the best which appear on the best side; and since the parts that are turned toward the east have preeminence over the western parts, and, of the eastern parts themselves, the northern are higher than the southern, the former would seem to be the best” (translation taken from Lacus Curtius: http://penelope.uchicago.edu/Thayer/E/Roman/Texts/Dionysius_of_Halicarnassus/2A*.html).

¹⁵ Maggiani (1982:62), commenting on Weinstock (1946), states that Varro could not be discussing the Roman division of the sky since Romans did not have a theory related to the assigned seats of the gods in particular parts of the sky.

¹⁶ “When you look from the house of the gods to the south, to the left are the eastern parts of the world (favorable), the western parts to the right (unfavorable).” See also Servius *Ad Aen.* 2.693; Livy 1.18.7.

consulted and prayed faced due east” (*unde et quando templum construebant, orientem spectabant aequinoctialem... ut qui consuleret atque precaretur rectum aspiceret orientem*).

While some of the altars investigated in other chapters of this study do indeed face proper Italic east – those, for example, at Largo Argentina, the 5th century B.C.E. altars of Temples A and B at S. Omobono in the first period of the twin temples and, perhaps, that of Temple of Hercules at the Sacred Area of the Republican Temples at Ostia – most of the Latial altars examined in this chapter, as will be discussed in detail below, are oriented to a variety of different, albeit somewhat easterly, directions ranging from roughly northeast to roughly east-south-east. Considering the evidence for a preference in Italy both for sunrise sacrifice and for exacting directionality, it is reasonable to infer that although any more-or-less easterly-facing altar of this type could easily accommodate ordinary, everyday kinds of sunrise rituals, these off-cardinal Latial altars were, nevertheless, not oriented haphazardly but instead were positioned in a way that exercised a highly specific and authoritative influence on the character of sacrifice performed at these monuments. Quite probably, these monuments were deliberately aligned with some annually occurring sunrise or stellar event that would signal the beginning of some very particular seasonal festival, reinforcing the experience of the special yearly ritual by providing a dramatically-lit background for the lavish sacrificial spectacle.¹⁷

¹⁷ See Gottarelli (2003) for a discussion of orientation of temples modeled on celestial observations.

Astronomical Knowledge and Republican Latium

This chapter will investigate the question of how, at the sanctuaries of ancient Latium, in the absence of a calendar reliably coordinated with the annual movements of the sun, religious authorities could identify the one very particular sunrise in the cycle of the agricultural year that would signal the start of an elaborate ritual centered on the sacrifice of time-sensitive, seasonal first fruits. The answer will be seen to lie in the close correspondences between the alignments of the sanctuaries' altars and knowledge of the synchrony of the position of sunrise with the yearly cycle of risings and settings of certain bright and conspicuous stars and of the constellations in which these stars reside.

Though evidenced textually much earlier in Mesopotamia,¹⁸ astronomical knowledge of this kind of star-calendar in archaic Greece is first represented in the farmers' lore contained in Homer (*Illiad* 18.483-9)¹⁹ and, most particularly, in Hesiod's *Works and*

¹⁸ The quite early use of the risings and settings of stars as a chronological device is attested in MUL.APIN, an early first-millennium astronomical catalog (known from versions at Assur and Nineveh), including (among other lists) a star list, a list of heliacal rising dates, and a list of constellations in connection with the phases of the moon (Lehoux 2007:106). There were even Mesopotamian lunar-stellar reconciliation schemes which, if known in archaic Greece and Italy, could – just possibly – account for Hesiod's report of a seasonally stable lunar festival (see below) and suggest a solution to the more puzzling general problem of the coexistence of seasonal and lunar rituals. In MUL.APIN there are specific rules listed for making such intercalations, one of which is based on the conjunctions of the moon's position with the Pleiades (Hannah 2005:31; Lehoux 2007:106; 110-111). According to Horowitz (1996), heliacal risings of certain fixed stars determined whether or not a certain year had 12 or 13 months (also see Lehoux 2007:103). It is also possible that intercalations were determined by the observation of agricultural and meteorological phenomena (Lehoux 2007:103). There is another Mesopotamian source for astrometeorology called the *Enūma Anu Enlil* (Lehoux 2007: 107ff.). According to Koch-Westenholz (1995:33) as early as the 3rd millennium B.C.E., in the Sumerian period, astronomy was closely connected with the control of agricultural seasons: the goddess Nisaba “was mainly concerned with the management of agriculture and the timing of activities that were dependent on the yearly seasons, The knowledge of astronomy...attributed to her was used to correct the vagaries of the lunar calendar.”

¹⁹ Here, Homer describes the shield of Achilles, decorated with astronomical features that are thought to correspond to specific seasons (for example, Homer states that the summer harvest may have been signaled by the rising of the Bear) (Hannah 2002:113).

Days.²⁰ Uncovering supporting textual evidence for the existence of Italian equivalents²¹ of these archaic Greek star calendars will not be quite so straightforward. After Hesiod, evidence for astrometeorological almanacs in the Greek world is associated mostly with *parapegmata*, stone calendar devices first appearing in the late 5th century B.C.E.²² and becoming more widespread in the 3rd century B.C.E..²³ These devices required the daily moving of a peg into a series of holes drilled into an inscribed list of star risings and settings accompanied by corresponding weather predictions (Lehoux 2007:12ff). A few fragmentary remains of actual astrometeorological *parapegmata* dating from the 1st cent B.C.E. from Miletus have survived (Lehoux 2007:13; 23);²⁴ but our modern knowledge of the character of the most ancient, 5th century B.C.E. astrometeorological information comes not from these stone inscriptions themselves but rather principally from later literary reports of *parapegmata* – particularly the list appended to Geminus of Rhodes’

²⁰ Hesiod, in *Works and Days*, through nine observations of the risings or settings of five stars or star clusters, explicitly links agricultural seasons to astral events: the setting of the Pleiades, the Hyades, and Orion, the culmination of the Bear determines the beginning of the season of winter plowing (lines 614-617); the setting of Orion and Sirius and, of special interest for Lavinium (see below), the morning rising of Arcturus signal the season of grape harvesting in September (lines 609-611).

²¹ Not explicitly connected to stellar phases or agriculture, calendars from Etruria during the late archaic and early Republican period were closely linked to meteorological phenomena. For example, the Etruscan brontoscopic calendar correlates observations of thunder prophesies with particular days of the year; the calendar acts as a reference for those priests whose job it was to interpret the phenomenon of thunder. The 360 prophesies are thought to have been written down before the mid-7th century B.C.E. either in monumental form or on linen for the priests (Turfa 2007). However, the only form that survived was a Latin translation by Lydus in the 6th century C.E., originally by Publius Nigidius Figulus of the late Republic.²¹ This calendar is arranged according to the lunar month and covers twelve months, each with thirty somewhat arbitrary days, and starts with the month of June, much like the starting month of the ancient Mesopotamian Standard Calendar (Turfa 2012:107).

²² A fragment from Keramikos in Athens, *IG ii*² 2782. It may have been neither astronomical nor astrometeorological. See Lehoux (2007:22, note 49).

²³ For Greek stellar calendars, see the detailed publication and discussion of “*parapēgma*,” in Lehoux 2007.

²⁴ The inscribed *parapegmata* are predated by literary astrometeorological *parapegmata* such as P. Hibeh 27 in the 3rd century B.C.E. (see Lehoux 2007:23 note 51 and Lehoux 2007: A.i Catalog).

early 1st century B.C.E. *Introduction to the Phenomena*.²⁵ The *parapegmata* provided by Geminus' unknown source²⁶ and other such astrometeorological listings, whether literary or epigraphic, make attributions to canonical 5th - 4th century authorities in astronomy like Euctemon and Eudoxus.²⁷ However, these listings of older *parapegmata* show evidence of a later, anachronistic reorganization of the original accounts of stellar risings and settings in terms of a later astronomical model – the zodiac. Later Greek astronomy's (and astrology's) privileging of this alternate canon of constellations²⁸ followed neither from the brightness nor from the astrometeorological importance of the zodiacal stars, but rather from their proximity to the annual path of the rising and setting sun. This sophisticated innovation in annual stellar timekeeping, organized around the zodiac, was based on Babylonian prototypes and entered Greek astronomical practice sometime between the 4th and 3rd centuries B.C.E. (Hannah 2002:114ff; Lehoux 2007:77-79, 141-142).²⁹

²⁵ For the dating of Geminus' work see Jones (1999).

²⁶ For a discussion of Geminus' sources see Evans and Berggren (2006:275ff.), Hannah (2002) and Lehoux (2007:181-187). Evans and Berggren (2006: Appendix 2 and 288-89) argue that Geminus' principal source was a compiler who began with a collection Callippus' *parapegmata*, which had already been set into a zodiacal framework; then, counting days from equinox or solstice, he placed the *parapegmata* of Euctemon and Eudoxos into what he believed to be the appropriate place in Callippus' scheme.

²⁷ Euctemon, an astronomer of the late 5th century, was a colleague of Meton, whose name is famously associated with the Metonic lunisolar calendar. The astronomical works of the mathematician Eudoxus of Cnidus (4th century B.C.E.) are lost today but known to some extent through secondary works such as lists of *parapegmata*, Aratus' *Phenomena* and Hipparchus' *Commentary* on this poem.

²⁸ For example, the source for Geminus' *parapegma* list organizes pre-existing *parapegmata* around a year divided into zodiacal signs, with each sign introduced by the phrase "the sun traverses [the specific sign name] in x days" (Lehoux 2007:81-82, 84; Evans 2006).

²⁹ Astrological as well as astronomical factors played a significant role in the development of the Babylonian prototypes of the zodiac (Lehoux 2007:Chapter 5, and 65ff.). There is no evidence for zodiacal months in either Euctemon or in Callippus (Lehoux 2007:78). Planets too make their eponymous

Literary evidence for the actual practical use of these *parapegmata*, whether in their material or in their textual form, is scant but the 5th century historian Thucydides is thought to have employed a stellar agricultural and seasonal calendar of a type related to Euctemon's *parapegmata* as a corrective to the confusion of local civil and religious calendars.³⁰ Apart, then, from Hesiod's archaic almanac and from reports of 5th-3rd century *parapegmata*, our knowledge of ancient farmer astral lore derives more from Latin literature than from Greek literary sources (Hannah 2005:26; Lehoux 2007:24, 51). However, as is the case with the reworked star calendar reported by Geminus, the accounts of time-honored native Italic astro-agricultural traditions appearing in later Latin works (written after the institution of the Julian calendar in 45 B.C.E.) will need to be carefully pruned of both the many anachronisms and the foreign meteorological assumptions acquired under the influence of the literature of late Hellenistic astronomical theory. The frequent reliance of Roman authors on the constellations of the zodiac to model their accounts of rustic stellar folklore will need to be carefully taken into account (Lehoux 2007:138). We shall have to face, as Neugebauer (1975:629) put it, "the possibility that a Roman version of a Greek calendric pattern, may no longer, a century after Hipparchus, reflect a situation two centuries before Hipparchus."³¹

"wandering" movements close to the path of the sun and the prediction of the "ominous" conjunctions and oppositions of these bodies with the sun, moon, and each other was an important consideration in Mesopotamia (Lehoux 2007:106, 110-111). However, early Greek astronomy showed little interest in planetary motion (Lehoux 2007:27, following Bowen and Goldstein 1988).

³⁰ 5.20. And see Pritchett (1961).

³¹ For a discussion of Greek astronomy versus Roman farming traditions in the Roman agronomists see Wenskus 1998 (cited by Lehoux 2007: 80).

Though the relevance of the astronomical details appearing in the works of post-Julian Roman agronomists to archaic and Republican Italy may be problematic, the continuing respect in Italy for the authority of ancient stellar calendrics is quite evident. In the last generation of the Republic, there was a significant flurry of scientific literature aimed at the general educated reader; these common-sense writers possessed in a fairly high level of scientific knowledge, conferring on their writings a validity and authority. The following passage from Columella (9.14.12) embraces the traditional methods of “the old astronomers,” preserving a memory of a bygone time when agricultural star calendars were “adapted to the public sacrifices”: *verum in hac ruris disciplina sequor nunc eudoxi et metonis antiquorumque fastus astrologorum, qui sunt aptati publicis sacrificiis, quia et notior est ista vetus agricolis concepta opinio, nec tamen hipparchi subtilitas pinguioribus, ut aiunt, rusticorum litteris necessaria est.*³² Vitruvius (IX.6.3), though more concerned with weather prediction than with the agricultural seasons, endorses the astral methods underlying *parapegmata* as divine-like: *Quorum inventa secuti siderum et occasus tempestatumque significatus Eudoxus, Eudemus, Callippus, Meto, Philippus, Hipparchus, Aratus ceterique ex astrologia parapegmatorum disciplinis invenerunt et eas posteris explicatas reliquerunt. Quorum scientiae sunt hominibus suspiciendae, quod tanta cura fuerunt, ut etiam videantur divina mente tempestatum significatus post futuros ante pronuntiare. Quas ob res haec eorum curis studiisque sunt*

³² The Latin text of all Columella passages in this chapter comes from thelatinlibrary.com (which come from the edition of V. Lundström, 1902-1917). Translation of the passage is as follows: “Indeed, in this discipline of agriculture I follow now the calendars of Eudoxos and Meton and of the old astronomers, which are adapted to the public sacrifices, because that old opinion, understood by farmers, is better known, and also, as they say, the subtlety of Hipparchus is not necessary for the duller learning of agriculture.”

concedenda.³³ Varro, anachronistically disregarding the movements of the sun, its equinoxes, and solstices, assures us that the stars are what delimit the seasons (*RR* 1.28). Ovid (*Fasti* IV.913ff.) too notes that the crops are “nourished by the stars.” And in a passage from Pliny (18.56.205-206), solar phenomena, again, are notably absent from a discussion of the seasons, and farmers and poets take precedence even over astronomers among those who know the stars: *res geratur inter rusticos litterarumque expertes, non modo siderum. et confitendum est caelo maxime constare ea, quippe Vergilio iubente praedisci ventos ante omnia ac siderum mores neque aliter quam navigantibus servari*.³⁴

It would seem then, for the periods of this project’s earliest, 6th-century sanctuaries (S. Omobono and Lavinium), we may reasonably be led to infer – from month and festival names, from farmers’ almanacs, from incidental references in epic poetry, and from comparisons made with detailed evidence of similar circumstances in Mesopotamia several centuries earlier³⁵ – the likelihood of a widespread Graeco-Italian coexistence and cultural distribution of seasonally-unstable lunar ritual calendars, seasonally-stable agricultural stellar calendars, and an elementary recognition of the importance of the link

³³ “Following upon their discoveries, Eudoxus, Euctemon, Callipus, Meton, Philippus, Hipparchus, Aratus, and the rest discovered the rising and settings of the constellations and the meaning of the seasons on the basis of the teachings of astrology and the readings of the astronomical tables, and bequeathed explanations of these to later generations. The findings of these sages should be admired by people today, because they were made with such care that, as if guided by divine intelligence, they still seem to predict the signs of times yet to come before the fact. For this reason deference must be shown to their diligence and study.” Translation from Rowland (1999:115).

³⁴ “So the matter is treated by farmers and literary men, not only those who know the stars. But it is acknowledged that it is mostly dependent on the heavens, as Vergil, to be sure, tells us to have foreknowledge of the winds from the habits of the stars above all, just as they are used for navigation.”

³⁵ For a thorough discussion see Stern (2012) and Lehoux (2007:101ff.). Luni-stellar intercalation schemes, documented as early as the second millennium in Mesopotamia, are known to have preceded the luni-solar kind and are found in neo-Babylonian versions (see Lehoux 2007:101-112 for details) and throughout the Achaemenid Empire in the later 6th century B.C.E. (Stern 2012: 95-99).

between the changes of the seasons and the solstices (turning points in the annual cycling of the position of sunrise) (these features appear in Hesiod's *Works and Days* 479, 564, 663).³⁶ If we now add archaeological evidence for the ritual use of stellar calendars to this disparate and centuries-away-from-being-reconciled intermingling of religion, agriculture, and astronomy, we raise some unavoidable but practically unanswerable questions about how stellar seasonal "corrections" to lunar-regulated ritual might have been realized in Italic practice.

Calendrical Drifts and Stellar Risings and Settings

Lunistellar or Lunisolar intercalation may set limits to calendric drift and anchor lunar festivals to their proper climatic seasons in an approximate way (and, in the solar case, still do). Nevertheless, even when so embedded in a regulated seasonal year, lunar festivals remain inconveniently "movable feasts."³⁷ So the question arises as to whether any of the standard ancient lunar-seasonal correctional schemes, all of which merely succeeded in confining a lunar festival to a range of roughly 30 days – a full third of a

³⁶ Despite Ovid's statement (*Fasti* 1.29) *scilicet arma magis quam sidera, Romule, noras* (certainly, you are more knowledgeable in swords than stars, Romulus), Magini (2001:109) argues that the Republican Romans would have had some knowledge of lunar stations, the movement of the stars (noted in the festival on February 23rd of Terminalia and the evening rising of the star Arcturus).

³⁷ Think, for example, of the modern full moon festivals of Passover and Easter. Passover, a full moon festival regulated by a Metonic-like lunisolar calendar with 7 monthly intercalations every 19 years, can fall on any day between March 21 and April 20 in the modern Gregorian solar year. Likewise Easter, falling on the first Sunday after the first full moon after the spring equinox (taken conventionally as March 21) can fall anytime between March 22 and April 25. The Athenian astronomer, Meton, around 430 B.C.E., is most often credited with developing a widely imitated lunisolar intercalational scheme having a nineteen-year 12 month lunar cycle requiring an additional seven intercalary months (Samuel 1972: 48 n.2). The months of this "Metonic cycle" are alternately "full," 30 days, and "hollow," 29 days, entailing no observational corrections. A similar Babylonian 19 year scheme is known to have existed in the 4th century B.C.E. (the Uruk scheme) (Lehoux 2007:102). There have been some attempts to link the Metonic cycle and Uruk scheme to a common Mesopotamian "precursor" employing the dates of solstices, equinoxes, and phases of Sirius in a 19-year lunistellar calendar cycle (Lehoux 2007:89). See Lehoux (2007:88-89) for a discussion.

climatic season – could meet the ritual needs of agricultural harvesters and breeders who required a more closely focused and time-sensitive scheduling of ritual sacrifices.

Breeding and birthing seasons were quite short. Pigs, for example, have a gestation period of only 4 months – they mate in the spring and give birth in the summer (see Chapter 4 for a full discussion). And ancient authors testify to precise distinctions in the age of newborn animals, measured and accounted for in terms of numbers of days (not months), particularly in relation to the optimal age for sacrifice and slaughter. According to Pliny, pigs could be offered for sacrifice at 4 days old (*NH* 8.77.206). In a passage in *de Re Rustica* (2.4.16-20), Varro distinguishes between the different names for newborn pigs depending on their age in days: when taken from their mothers, they are no longer deemed “suckling pigs” but instead called *delici* (*Cum porci depulsi sunt a mamma, a quibusdam delici appellantur neque iam lactantes dicuntur*); ten days after birth, pigs are often called *sacres* because they were deemed “pure” and fit for sacrifice. It is after ten days that they are taken from their mothers and have to feed on their own (*partu decem diebus proximis non producant ex haris matrem, praeterquam potum*);³⁸ after they have outgrown the name *lacantes*, they are called *nefrendes* because they are not able to crush beans (*amisso nomine lactantes dicuntur nefrendes ab eo quod nondum fabam frendere possunt*). The highly particular terminology assigned to the different ages of the newborn pigs serves to underscore the fact that a difference of as much as thirty days for the celebration of a seasonal festival would be extremely important and would have

³⁸ All Latin texts of Varro in this chapter are taken from thelatinlibrary.com. Varro *RR* 2.4.16: *Cum porci depulsi sunt a mamma, a quibusdam delici appellantur neque iam lactantes dicuntur, qui a partu decimo die habentur puri, et ab eo appellantur ab antiquis sacres, quod tum ad sacrificium idonei dicuntur primum*. Varro *RR* 2.1.20: *E quis qui iam puri sunt ad sacrificium, ut immolentur, olim appellati sacres, quos appellat Plautus cum ait " quanti sunt porci sacres?" Sic boves altilis ad sacrificia publica saginati dicuntur opimi*.

significant implications for the sacrificial animals being offered at the festival. Varro (*RR* 2.1.18), moreover, connects the breeding patterns of the three prominent species of Roman sacrificial animals (caprines and pigs) to astronomical cycles, stating: *Quare primum videndum de admissione, quo quaeque tempore ut ineant facere oporteat. Nam ut suillo pecori a favonio ad aequinoctium vernum putant aptum, sic ovillo ab arcturi occasu usque ad aquilae occasum.*³⁹ It would seem, then, quite conceivable that at least on some special occasions in the ritual year, the stars and nature could combine to overrule the moon in determining the day of seasonal sacrificial festival.

Before moving to the specific case studies examined in this chapter, it might be helpful to begin with a brief explanation, in modern astronomical terms, of how star risings and settings can be used as a simple substitute for seasonal solar timekeeping. The particular assortment of stars that we will be able to see from some given location on earth will appear to make a daily circuit of the sky. Some will be so far north of us that they never rise or set but most stars will cross the horizon twice a day, just as the sun does. They rise somewhere north or south of east, reach a high point when they are due south, set below the horizon in the west, and continue their daily journey out of our sight until their next rising on the following day (Figure 1). The daily risings or settings of stars occur not only at night but throughout the 24-hour day; these events however will be unobservable in daytime against the bright background of the blue sky.⁴⁰

³⁹ “The first point to be observed, therefore, is that of mating – the time at which opportunity for coition should be allowed each species; thus, the period from the beginning of the west wind to the vernal equinox is deemed best suited to swine, while that from the setting of Arcturus to the setting of Aquila is considered best for sheep.”

⁴⁰ For a good, illustrated introductory chapter on the relevant astronomy in a historical survey see, for example, Samuels 1972 and Hannah 2005. A brief, excellent, authoritative, and superbly illustrated non-

As the Earth both rotates on its axis once a day and moves around the sun, the planet is continuously changing its position with respect to the stars, resulting in a daily shift in stellar rising and setting times (**Figure 2**). Each day, in an annual cycle, the stars cross the horizon about 4 minutes earlier than they did the previous day.⁴¹ Occurring in close coordination with the apparent movements of the sun, stellar rising and setting times have served for millennia as conspicuous and useful markers for seasonal timekeeping. The most significant, for sunrise ritual purposes, of these four special astral horizon crossings, is a star's "morning rising" (also known as *the* rising, the heliacal rising, or the first visibility); this denotes the first appearance of the star in the twilight before sunrise after a period of invisible daylight risings (Lehoux 2007:10-11). The phenomenon of annual "morning rising" and those of the three other synchronous star-sun horizon crossings – the "evening rising" (apparent acronychal rising, the last visible rising after sunset), the "morning setting" (the apparent cosmical setting, the first visible setting before sunrise), and the "evening setting" (*the* setting, the heliacal setting, last visibility, or the last visible setting after sunset) – are all well attested as seasonal markers in ancient literature (Hannah 2005:11ff.). I am inclined to believe, however, that in matters of sunrise ritual sacrifice (see discussion above), the morning rising and, secondarily, the morning setting, would have been singled out as particularly privileged markers of these special occasions.

historical introductory discussion can found at the web site maintained by astronomer and standard textbook author James Kaler: <http://stars.astro.illinois.edu/celsph.html>.

⁴¹ Equivalently, the position of the sun with respect to the sphere of fixed stars is said to move *east* at the rate of 4 minutes per day along a path called the ecliptic. The phenomenon is accounted for, in modern terms, by the combination of the daily rotation of the earth and its annual motion around the sun. The one "day" it takes a point on the earth's surface to return to its original orientation with respect to the sun is 4 minutes longer than the time taken for it to return to its orientation with respect to the stars. A good illustrated explanation can be found at http://astro.unl.edu/naap/motion3/sidereal_synodic.html.

As I will discuss below, the natural requirements and constraints of seasonal animal sacrifice (seen through the faunal data excavated from specific altars at certain sanctuaries) can be brought to bear to help confirm the likelihood that it is, indeed, the date of the morning rising or setting rather than that of the evening stellar risings and settings that should be associated with an altar's orientation. Here, natural phenomena along with the structure of the altar itself craft the character and form of the enacted sacrifice.

Etruscan Temples and Orientation

There has been a fair amount of scholarly attention paid to the orientation of Etruscan temples and altars and their relationship to the sun and to distinct regions of the sky in which different deities reside. And while none of the five case studies examined in this project is strictly speaking Etruscan, they are all nonetheless contemporary sanctuaries in neighboring regions, with many exhibiting clear Etruscan influences and characteristics (S. Omobono most evidently, for example). Though the fundamental importance placed on orientation in Etruscan religion is evidenced mostly in matters of augury rather than in sacrifice,⁴² a profound concern for directionality in religious architecture is unmistakable.

⁴² An Etruscan augur would face south. With the sun at its highest point, the cardinal, north-south orientation line determined the division of the sky with the eastern part of the sky (to the augur's left) favorable for auspices, and the western part (to the augur's right) unfavorable. When these four quadrants are placed in a circle such that the diagonal lines coincide with the *Cardo* and the *Decumanus*, the *templum* in the sky can effectively be set on the earth. It has been conjectured that, for architectural purposes, the north-south line of the sky may have been determined by sophisticated methods: use of a line perpendicular to the sunrise/sunset at the equinox, or defined as the median line between the sunrise and sunset points at the summer and winter solstices, or defined in time as the halfway point between the two solstices (Aveni and Romano 1994:555).

Unlike the Romans' division of the sky into four quadrants,⁴³ the Etruscans subdivided the sky into sixteen, equally-sized sectors, each 22.5 degrees.⁴⁴ The *disciplina etrusca* discusses each of these different regions, assigning each to a particular divinity or type of divinity. Such designations have encouraged many scholars to use the orientation of Etruscan altars and temples as a means to assign a specific deity or dedication to a monument.⁴⁵ The Etruscans clearly took celestial observations closely into account in the orientation of their altars and temples. Such awareness and coordination must be kept in mind as we consider, in the following section, the orientation of Latial altars and the closeness of the correlation of their placements with particular astronomical events and ritual festivals.

Altars, Orientation: What shifts, what stays the same?

With the heightened Roman concern for axuality and precision, the often asymmetrical placement of altars with respect to the typically careful architectural planning of their sanctuaries cannot be accounted for as mere accidents of later

⁴³ Cicero *De Div.* 2.42, Pliny *NH* 2.143; Varro as well notes a division in the sky (*LL* VII.10): “of this temple [i.e. in the sky] the four parts are named, the left quarter to the east, the right quarter to the west, the front quarter to the south, the back quarter to the north” (*Eius templi partes quattuor dicuntur, sinistra ab oriente, dextra ab occasu, antica ad meridiem, postica ad septentrionem*). For the division of the Etruscan sky see also Frontinus, *De limitibus* in *Corpus Agrimensorum Romanorum* 1, 1; Hyginus, *de limitibus constituendis*, in *Corpus Agrimensorum Romanorum*; Dolabella, in *Gromatici Veteres*.

⁴⁴ Pliny (*NH* 2.55.143) too relates this strict division into sixteen parts: “for this observation, the Etruscans have divided the sky into sixteen parts. The first is from the north to the equinoctial sunrise, the second to the south, the third to the equinoctial sunset, the fourth pertains to that which is left from the sunset to the north. They have further divided these into four zones, of these they have called the eight from the sunrise “left,” and those from the opposite side “right.”” In another passage discussing the regions of the winds in the four parts of the sky (*NH* 2.119), Pliny also subdivides the sky.

⁴⁵ See for example: Aveni and Romano (1994); Castagnoli (1993); Gottarelli (2003); Maggiani (1982); Pallottino (1956); Prayon (1991, 1997); Stevens 2009 (for full bibliography).

construction phases, but rather, in their defiance of the constraints of the architectural space, these altars were demonstrably reliant on nature and celestial phenomena as determining factors in their alignments. Such a reliance in turn influenced the character of the emplaced sacrifice. The architectural layout of a sanctuary may change over the centuries of construction; temples are often re-located within the defined space, enlarged and aggrandized, even shifted in direction or placement. An altar whose orientation relies on a temple or some other built landscape is, therefore, part of an unstable, impermanent spatial relationship, always susceptible to changes in temple design or sanctuary layout. On the other hand, an altar whose orientation relies on stellar events is more secure and permanent in its placement, creating the basis for a stable, authoritative role over sacrifice.⁴⁶ The intrinsic relationship, therefore, among the altar, its particular placement, and a specific astral phenomenon (as well as the accompanying ritual) remains preserved throughout centuries of construction and the continuing development and adaptation of the sacred space.

This observation can perhaps help account for the nearly complete absence of evidence for shifts in the orientations of Roman altars over time.⁴⁷ Altars don't move. When a site is destroyed by fire, rebuilt, adapted, or developed, altars tend to respect quite closely the locations of their predecessors, regardless of new monumental innovations or constructions within the sanctuary. On the other hand, in subsequent

⁴⁶ My sampling of astronomical software estimates of stellar rise data (see note 70 below) suggests that for Latium in the archaic period these predictions generally vary by no more than a day in time and a degree in azimuth over periods of about one hundred years.

⁴⁷ See below for the only two examples in the Roman world I could find: that of S. Omobono and the altar in front of the Temple of the Round Altar at the Sanctuary of the Republican Temples at Ostia.

building projects, temples do move, shifting their orientations, enlarging their podia, altering their platforms to include additional temples or structures. Throughout Italy, there is evidence for a number of temples that shift their orientations or placements in successive building campaigns, even if just slightly.⁴⁸ For example, at the sanctuary of Fosso dell’Incastro at Ardea, Temple A, in its first phase during the second half of the 3rd century B.C.E., was oriented NE-SW. In the 2nd century B.C.E., the length of the podium was shortened along its inner side. This alteration led to a change in the orientation of the temple slightly to the southwest and a consequential repositioning of the temple’s stairs slightly to the northeast (i.e., opposite to the direction of the shift of the podium). Also in Latium, the late Republican temple of Juno Sospita at Lanuvium was preceded by earlier cult places on the same site: an 8th century *oikos*, an archaic temple, and a mid-Republican temple. The mid-Republican temple maintained the westwards orientation of the archaic temple. The 8th century B.C.E. rectangular *oikos*, however, under the later temples, had another, distinctly different orientation defined by the oblique wall oriented SW-NE under the archaic steps of the temple and corresponding to the slope of the hill (not visible to us today). Contemporary monuments on the hill, sharing the orientation of the *oikos*, kept their alignments most likely until the mid-6th century B.C.E. (Zevi et al. 2010: 291).⁴⁹ At nearby Satricum, the late archaic temple is oriented towards the west-south-west, following the orientation of the so-called earlier sacellum (Bouma 1996

⁴⁸ While not definitively “temples,” the sacred monuments of the Regia in the Roman Forum also change their orientation over the course of the 6th century B.C.E.. See Prayon (1991:1286).

⁴⁹ The presence of an oblique wall belonging to an earlier cult structure under the steps of a later temple finds parallels at Satricum, the suburban sanctuary at Gabii, and structures under the Temple of Stimate at Velletri (Zevi et al. 2010:291).

Vol.1). The later temple, however, on the same site, shifts its orientation to the south. The temple of Celle (the so-called temple of Juno-Curites)⁵⁰ at Falerii Veteres shifts its orientation over time, from the original, late-archaic sacellum's orientation of south-south-west (137°) to the 4th century B.C.E. monumental temple's shift 90° to the southeast (Colonna 1985:110ff.; Prayon 1991:1286).⁵¹ At Cosa as well, an earlier sacred structure had a markedly different orientation than later temple constructions on the same site. On the Arx, there was a small orthogonal building, dating to the 3rd century B.C.E., found under the south and central cellas of the Capitolium.⁵² This structure, conforming to the natural plateau of bedrock, at an orientation distinct from that of the later Capitolium (constructed from the 2nd quarter of the 2nd century B.C.E.-150 B.C.E.), was aligned with the original altar on the site (Taylor 2002:66, 67 fig.8), conforming to the pattern of natural planes and fissures in the rock of the Arx. Shifts in the orientation of temples can also be seen in temples throughout Etruria. In the sanctuary on the acropolis of Poggio Colla, the temple of the first phase was oriented roughly north-south, whereas the second phase temple constructed in the 5th century B.C.E. was reoriented to the natural, rectangular terrace of the arx, oriented roughly northwest-southeast (Warden 2009:111). The rectangular altar dating to this second phase temple respected both the orientation of the so-called courtyard or platform structure around it and the two-roomed structure to its west (Rask, public presentation AIAs, 2013). Also in Etruria, Temple I of

⁵⁰ Ovid *Amores* 3.13.1ff.

⁵¹ This shift positions the temple across the major slope of the terrain, like the Argive Heraion, a sanctuary compared by Dionysius of Halicarnasus to the Temple of Juno Curite at Falerii (I.21.2) (Zevi et al. 2010).

⁵² This building was originally interpreted by Brown as an open-air *auguraculum*; more recently it has been reconstructed by Taylor as a small, roofed temple.

the archaic phase (1st half of the 6th century B.C.E.) of the sanctuary of Ara della Regina is oriented exactly east-west (Bagnasco Gianni 2011:48); the 4th century B.C.E. temple at Ara della Regina was oriented east-south-east (108°) (Colonna 1985:70-71).

Temples may shift slightly in continuous rebuilding projects but the original place of the altar tends to be preserved even in the period of transition from the Republic to Empire. Over centuries of rebuilding and reconstruction, later altars respect not only the precise location of the original altar but also its initial orientation, and, at times, even its form, materials, or architectural relation to the sanctuary. Such a respect and preservation realized in materials can be seen as an enduring guide to the performance of sacrifice. For example, the mid-Republican altars to Temples A and B at S. Omobono⁵³ retain their position over the centuries of reconstruction from the re-paving in the mid-late Republican period (after the fire in 213 B.C.E., for example) to the major Hadrianic rebuilding of the area. As will be discussed in following chapter on memory, the continual superposition of the altars of Temples A and C at Largo Argentina, or the placement of altar IX at Lavinium directly over the earlier, archaic altar, or the sequence of superimposed structures at the Lapis Niger taken together argue for the prominence of the preservation of placement as a guiding principle in the reconstruction of altars, and consequently, the determining principle in the form, style, and character of the sacrifice.

While outside the geographic scope of this project, a paradigm of the permanence of altar placement can be seen with the continual rebuildings of the altar of Hera on Samos. The earliest altar on the site, consisting of a low, rectangular enclosure of flat stones,

⁵³ The archaic altar, an exception to this rule, will be discussed in depth below.

dating to the mid-10th century B.C.E., was oriented south-east (Dinsmoor 1950:39). Directly superimposed on this early altar were six subsequent monuments (dating to 850, 775, 750, 725, 675, and 625 B.C.E.), all respecting the orientation of the original altar (and unrelated to the easterly-oriented succession of temples). The monumental altar within the sanctuary reached maximum dimensions of 19.5 by 43 feet in the 7th century (around 675 B.C.E.). Even the limestone of the archaic altar (constructed perhaps by Rhoikos) was replaced with marble during the Roman era, its archaic reliefs copied but in more modern materials.⁵⁴

From this brief survey of examples, we can see that altar placement was rarely altered over centuries of construction and subsequent building projects. Later altars, respecting the placement and orientation of their predecessors, may appear to be at odds with the contemporary architectural layout of the sanctuary; but these altars nevertheless physically and visibly preserve the sacred character of the earliest structures underlying the space.⁵⁵ Therefore, altars off-axis with a temple, such as those in front of the Capitolium at Cosa, the Heraion at Samos, or perhaps even the altars in front of Temple B at Fosso dell’Incastro at Ardea (discussed below), should not be understood as monuments whose placements are haphazard or inexplicable; rather they are structures that serve to memorialize the original ritual that occurred in the sanctuary or preserve and

⁵⁴ See Kyrieleis (1981:84-88).

⁵⁵ Without a doubt we must here raise the question of what might happen to a deconsecrated altar. If an altar was deconsecrated, would it be buried and forgotten? Would a new altar be built in its same or different location? These are questions to keep in mind and consider thorough this chapter and the following chapter on memory. This dissertation will not focus on this issue explicitly however.

allude to a previous spatial relationship that existed between a different, earlier temple and its altar.

What remains problematic then are the altars that do shift their location or orientation. In my survey of sanctuaries in Central Italy, I have only come across only two such examples – the altars of the Temple of the Round Altar in the Sacred Area of the Republican Temples at Ostia (**Figure 3**) and the archaic altar at S. Omobono (**Figure 4**).⁵⁶ These two cases however should not be indiscriminately linked: at Ostia, the form and style of successive altars change with the corresponding temple reconstructions, but the altars' orientations largely remain the same; at S. Omobono, it is the form of the altars that arguably remains the same over repeated rebuildings within the sanctuary while their orientations (and, to some extent, their placements) are noticeably altered. The original altar at the Temple of the Round Altar at Ostia, dated to the end of the 3rd or beginning of the 2nd century B.C.E., was set on a rectangular platform placed on axis and a short distance from the temple. When this altar was removed, sometime in the last Republican phase of the temple, a new, stuccoed, peperino altar of cylindrical form (diameter 78cm) was constructed in its place, though it was not perfectly centered (Pensabene 2007:56; Zevi 1970:105). While this new altar changed considerably in style from the previous rectangular monument, its change in location is slight.

How does the discourse about orientation change when we are examining a cylindrical altar? In some respects, I would like to argue that the switch from rectangular to cylindrical form can be seen as a way of sidestepping – so to speak – problems arising

⁵⁶ Though outside the category of “altar” the Regia in the Roman Forum too shifts in orientation in the later 6th century B.C.E..

from shifts in orientation. Therefore, perhaps the late Republican builders of the Temple of the Round Altar made a conscious choice to alter the appearance of the sacred space while still, by not demonstrably changing either the orientation or placement of the altar, respecting and preserving the original sacrality of the area. This negotiation of the needs of past and present can be seen as well in the next construction phase of the altar. In the beginning of the Imperial period when the temple was refashioned and expanded, the late Republican, cylindrical, peperino altar was destroyed (covered over by the frontal extension of the temple's podium) and a new platform in a different location was created for a marble altar. With this phase, the placement, form, and orientation changed. After the ground level was raised by 1 meter during the Flavian period this altar was buried and a new rectangular altar was constructed, once again on direct axis with the temple's façade (See Chapter 2).

The series of altar constructions in the forecourt of this temple is intimately linked to corresponding phases of temple building; the altars from the Imperial phases are necessarily repositioned in order to accommodate the frontal enlargement of the temple. But while the various altars seem to gesture toward the concept of preserving the form, orientation, or placement of the earlier altars, they never fully ascribe to any of these constraints. Innovation trumps, in some respects, the recalling of the preceding altar. The shift from rectangular to cylindrical and back to rectangular reveals a resistance to convention consistent with the developing stylistic and architectonic changes of the temple itself.

The Late Republican and Early Imperial compromises with innovation at Ostia are, perhaps, not as surprising as the seemingly complete indifference to the precedence of the

archaic altar(s) shown by the turn to the east of the Republican altars of the Temples A and B at S. Omobono (**Figure 4, 5**).⁵⁷ From the layout of other contemporary sanctuaries in the area, it is reasonable to assume that the twin U-shaped altars in-situ today, dating to the early 4th century re-paving of the sanctuary, correspond closely in placement and alignment with the altars of the early-5th century phase of the sanctuary, on direct axis with their temples. This change in orientation with respect to both the archaic temple and its altar has never been addressed with anything other than a passing comment or observation. The archaic altar at S. Omobono is oriented roughly south-southeast (109° east of north, see below). The Republican altars shift their orientations about 19° to face directly east. Just as the changes in the altars at Ostia are linked with corresponding temple phases and reconstructions, so too at S. Omobono, the shift in orientation and slight adjustment in its placement accompany the reconstruction, enlargement, and re-orientation of the twin temples on a shared podium in the beginning of the 5th century B.C.E..

Unfortunately, nothing definitive can be said about the shift in the placement from the archaic altars to the early Republican altars at S. Omobono since the *exact* placement and form of the archaic altars from the two phases of the archaic temples remain somewhat unclear. The documentation from Ippolo's excavations in the late 1960s and early 1970s noted only the foundation of the first archaic altar, the monument itself having already been disturbed in the later archaic period. A surface of tufa fragments from sector II

⁵⁷ At this point in the excavations of the sanctuary, we have only evidence for an archaic altar belonging to the eastern temple (the so-called Temple of Mater Matuta) and not to Temple A (the so-called Temple of Fortuna). However, it is more than reasonable to assume that, given the archaic strata excavated within the cella of Temple A, in the archaic period there existed a twin-temple sanctuary complex, with each temple having its own altar.

(corresponding with level D12, see chapter 4 on the faunal remains from this phase) has been interpreted as the preparation level for the first archaic altar (**Figure 6**).⁵⁸ The evidence we do have suggests that the altar of the first phase of the archaic temple was 2.3m from the steps of the archaic temple (Colonna 1991:53). Two of the access stairs have been identified through excavations; the left and right limits of these stairs, revealed by soundings, were also noted in the 1963 excavation reports.⁵⁹ Evidence for the superstructure of the altar of this phase, however, comes only from molded fragments that are attributed to a later 6th century reconstruction of this altar in the same tufa as the altar's foundation (Cifani 2008:167; Colonna 1991:53). Colonna states that in this second phase of the archaic temple, the altar and its platform were incorporated into a central forecourt in the stairs of the temple (Colonna 1991:52, 51-59, Fig 2a-b) (**Figure 7**).⁶⁰

The question then must be raised as to how one can make claims about the orientation of the first archaic altar if all that remains are its tufa foundations. The two phases of the archaic temples have been reconstructed based on a segment of the excavated podium wall from sector VII (**Figure 7, 8a and b**) from the first phase of the archaic temple: two blocks of tufa with rounded profile. This precious remaining segment of the podium serves in the scholarly literature as the basis for the proposed reconstruction of the

⁵⁸ Colonna (1991:53) states that the disturbance of these blocks was done when the altar was relocated in the second phase of the archaic temple.

⁵⁹ left limit: AFSRCM, S. Omobono, b. 31, 1, c. 4051.31; Right limit: AFSRCM, S. Omobono, b. 31, 1, c. 4051.32, 34.

⁶⁰ Colonna (1991) proposes two phases of construction of the archaic temple and one phase of intervention following the destruction: 1) a square temple of 10.3m on each side, a podium of 1.7m high with stairs in front and an altar at 2.3m distance; 2) a rectangular temple of 11.2m x 13.2m on a podium 1.2m high with a wide staircase in front and a central forecourt; 3) a leveling of the area contained to the east by a wall oriented with respect to the temple.

temple, and most importantly for the purposes of this project, for a secure understanding of its orientation. We may now combine this reconstruction of the alignment of the archaic temple with the quite reasonable assumption that the placement of the temple's altar would have conformed to the *fairly* standard architectural practice for the vast majority of such temple altars in the sanctuaries of the region and period.⁶¹ We may infer, therefore, that the builders of the archaic altar would have intended to align that monument as closely as possible at a right angle to the orientation of the archaic temple.⁶² Employing such principles and hypotheses, we are able to make, from in situ remains, a usefully exact, and, I believe, convincingly sound measurement of the orientation of the archaic altar.

Another issue concerns the plan of the archaic altar. All reconstructions of the sanctuary that include the archaic altar portray it as U-shaped in plan. While this makes perfect sense for the time period, geographic location, and cultural typology, and is consistent, as well, with a presumably conservative reuse and echoing of the form in the 4th century, Republican rebuilding of the altars of the sanctuary, the assignment of a U-

⁶¹ I emphasize here the word “fairly” since, as I will argue below, altar orientations are anything but regular during the archaic and early Republican period. By the late Republic and into the Imperial period, orientations seem at least to be more regular.

⁶² This may sound like a generalization but if we survey the placement of altars in relationship to their temples, it appears a fairly consistent trend that altars are at right angles to the temples' orientation. This position of altars would, as Vitruvius comments (4.5.1), allow the priest standing at the altar to have a direct sight line to the cult statue within the temple. See Prayon (1997:357-91). This argument gains support from the later constructions on the site of S.Omobono itself. The U-shaped Republican altars in front of the Temples A and B, placed at exact right angles to the southern orientation of the temples, serve to lend support to the theory that the earlier archaic altar too would have been at a right angle to its temple, the later structures preserving the symmetry of its predecessors. A further example of altars placed at right angles to their temples comes from another sanctuary examined in this project – Largo Argentina. The short sides of the rectangular altars of Temples A and C are parallel with the façade of the temples. The rectangular altar in front of the 2nd century Temple to Juno at Gabii also has its short side paralleling the façade of the temple, at a right angle to the building. The rectangular altar of the late Republic Temple of Jupiter Meilichios in Pompeii (VIII.vii.25) was set longitudinally on its axis.

shaped form to the structure, however likely, must be recognized as hypothetical.⁶³ And if the archaic altar(s) were in fact U-shaped, as seems most plausible, then the form of the altar would have remained invariant over the course of successive building campaigns (unlike the situation at Ostia, see above). Castagnoli (1962:148) in particular, noting this principle of conservation in the reconstruction of altars, comments on the likelihood that the form and structure of the 4th century, U-shaped altars would have been modeled on those more ancient. Such conservation of form serves to preserve, through various materials and articulations, a (perhaps forgotten) original intention behind the altar's orientation, size, or style.

So why the shift in orientation in the early 5th century B.C.E. with the construction of the new temples? I hesitate to assign too much weight here to the *symbolic* implications behind the shift in orientation of both the temple and the altar. The raising of the ground level by the addition of 30,000m³ of fill (containing materials dating from the 16th -6th century B.C.E) during the construction phase of the early 5th century twin temples may have obliterated any possible material memory of the orientation and placement of the archaic altars (Pisani Sartorio 1990: 113). In this phase of construction, there was a decisive change and alteration in the sanctuary's overall architectural plan and the appearance of its structures. With any traces of the earlier altars buried under large

⁶³ Other contemporary examples of U-shaped altars can be found at the Portonaccio sanctuary at Veii or the thirteen altars at Lavinium, the 6th century altar at Fiesole, and the Lapis Niger. The later 4th-3rd century altar in front of Temple B at Fosso dell'Incastro at Ardea or the U-shaped altar in front of the Capitulum at Cosa (mid 2nd century B.C.E.) are "archaizing" examples of the form. The most ancient example of the U-shaped form can be found at the sanctuary of Hera on Samos (see above); other examples from the Greek world come from Sardis (6th century B.C.E.), the 6th century B.C.E. altars of Apollo and Artemis at Cyrene, from Delos at the Sanctuary of Anios (end of the 6th century B.C.E.), at Agrigento at the Sanctuary of Demeter and Kore (6th century B.C.E.), and on the acropolis of Selinunte near the small temple of the small metopes (5th century B.C.E.).

amounts of fill, the memory of the older altars may have been swept away in the thoroughness of the campaign; the new builders then would have just constructed the new, Republican altar to face an architecturally conventional due east, the common direction of the time period for Roman (though not necessarily for Etruscan) altars, following the Greek practice.⁶⁴ It is quite possible that the archaic altar was oriented to a celestial phenomenon that would have marked a particular seasonal festival. Or, as well, it may be (and I note this coincidence with some caution and hesitation) that the altar, under the influence of Etruscan directional predilections,⁶⁵ was oriented to a particular region in what some scholars believe to be a division of the Etruscan sky into sixteen different regions. In this case, the archaic altar would have been oriented to face region V, the region assigned to the Etruscan counterpart of Minerva.⁶⁶ We can only speculate

⁶⁴ Castagnoli (1993:230-33) connects the eastward orientation of Roman altars to urban topography, specifically the orientation of the *Saepta*. Prayon (1997:367) comments that orientation to the east is both a Greek and Roman custom in ritual and is connected to the rising sun (as Vitruvius states). The best comparanda for the S.Omobono altars are the east-ward facing altar at the Portonaccio sanctuary at Veii, the thirteen altars at Lavinium, and the altar at Vignanello, all oriented just slightly north of east. The altar in front of the Temple at Campo della Fiera at Orvieto is also roughly oriented to the east, like the temple itself (Stopponi 2011:26, note 30). Also in Italy (but under Greek influence) the so-called Temple of Neptune and Temple of Hera at Paestum and their altars face east (only 2 degrees south of east) (Mertens 2000:36). Menichelli (2009: 118, figure 13) makes the claim that out of the 40 altars examined in her project, the majority were oriented toward the east (these designations, however, are not due, cardinal directions, but more generally fall in that part of the compass). And as cited above, see Vitruvius (4.5.1) and the discussion earlier in this chapter about the importance in ritual of facing east towards the rising sun.

⁶⁵ For Etruscan orientation, see Gottarelli (2003); Menichelli (2009); Stevens (2009); Pallottino (1956); Prayon (1991, 1997).

⁶⁶ The Piacenza Liver (a bronze model of a sheep's liver dated to around 100 B.C.E.) has been used to reconstruct the cosmological system of the Etruscans. The liver is divided into 40 regions, each with the name of one or more gods (27 gods in total). There has been somewhat of a scholarly debate over the designation of north on the Piacenza liver (see Stevens 2009 for a discussion of previous hypotheses and for a possible reconciliation of these previous theories), but if we follow Pallottino's designation of north, the orientation of the archaic altar of S.Omobono (109°) would be facing Region V, or the region in which the Etruscan goddess Tecum resides. This Etruscan deity corresponds to Minerva (Pallottino 1956). If we can follow Pallottino (see Stevens 2009 for critiques and support of his method) and his assignation of north, it is particularly tempting and fitting that the altar at S.Omobono is oriented to a region attributed in Etruscan religion to Minerva – the famous, monumental, architectonic statues of Minerva and Hercules are

on the significance of the emphatic shift of the orientation of the altar entailed by the massive 5th century B.C.E. reconstruction of the sanctuary. Perhaps the new orientation to a due easterly direction signaled a reconfiguration of seasonal sacrificial practices, or a change in methods of timekeeping, or a change in the dedication of the altar's temple. Lacking faunal data from the 5th century B.C.E. phase of the altar (which could be compared with the archaic faunal assemblage and potential changes in species or ages of animals noticed), and in the absence of epigraphic or literary testimony, or, in fact, any contemporary comparanda, we are hindered in our ability to account, in any grounded way, for what this important 5th century shift in orientation may have meant to the ritual community of Republican Rome. The greater availability of evidence for the archaic altar, however, with its faunal assemblage and very particular non-cardinal alignment, allows us to ask if, in this case, we might indeed be able to determine what might have been signified by this altar's orientation. Is some conspicuous celestial event indicated? Can that event be linked to seasonal sacrifice through concrete, archaeological evidence?

Archaic Altar at S. Omobono

If we follow the reconstruction suggested above for determining the orientation of the archaic altar, as seems perfectly reasonable, an officiant standing in the U of the altar, with the temple at his left, would be facing an azimuthal direction of 109.3° (that is 109.3° east of north).⁶⁷ For an officiant facing this direction at S.Omobono, the horizon is

attributed to the second phase of the archaic temple.
http://en.museicapitolini.org/percorsi/percorsi_per_sale/museo_del_palazzo_dei_conservatori/area_del_tempio_di_giove_capitolino/gruppo_acroteriale_di_eracle_e_atena

located not directly ahead but upward at an angle of elevation of about 3.6 degrees toward the southeast crest of the Palatine hill⁶⁸ near the site of the later Temple of Magna Mater (**Figure 9**).⁶⁹ Astronomical considerations aside, it should be noted in passing here that this location on the Palatine, near the so-called hut of Romulus and the cluster of later Republican temples, may have been an important cult site in the archaic period as well. For example, based on architectural terracottas, it is assumed that an earlier 6th century B.C.E. temple existed on the site of the later 2nd century B.C.E. temple of Magna Mater (Bouma 1996 Vol. 3: 86). And finds of pottery suggest an even earlier cult place in this area, dating to the late Iron Age or early Archaic period (see Pensabene et al. 1993 for recent excavations of the area).

I will now pursue the hypothesis that an altar's orientation and the organization and determination of some special, seasonally significant, annual sunrise ritual occurring at that altar were linked by a particular annual celestial phenomenon: the observation of the morning rising or setting of some specific star. To establish this connection, a search must be conducted for the astronomically significant celestial event (or events) that might make a "best fit" with the altar's orientation and explore in what ways this event(s) may

⁶⁷ Angle measurements of monuments reported in this chapter have been obtained by computation from the coordinate difference outputs of line measurements made with an AutoCAD image of a plan of the site prepared by the excavation team. The angles have been rounded to the nearest tenth of a degree. For S. Omobono, I have used an AutoCAD image of the site from the excavations that began in 2010, the CAD file authored first by Stefania Picciola and most recently updated by Dan Diffendale.

⁶⁸ During this period, the Velabrum was not built up and therefore an officiant in the arms of the U-shaped altar would be directly facing the western slope of the Palatine. At least from the time of Plautus (*Capt.* 489, *Curc.* 483), the Velabrum was a busy market, but the only monument mentioned by Latin authors as located in the Velabrum is the tomb of Acca Larentia (Richardson 1992:406).

⁶⁹ Here, and in the similar reports below of angular measurements of the altitude of the horizon in the direction of an altar's orientation, the angles of elevation have been computed from differences in horizontal and elevation distances obtained from the Google Earth virtual satellite image of the sanctuary by means of the ruler and elevation measurement features of the Google Earth software.

have had significance in the context of Latial sacrificial ritual.⁷⁰ The intimate connection between an altar's orientation and such a particular, agriculturally significant stellar rising or setting emphatically determined the character of the enacted sacrifice.

For 600 B.C.E. at the latitude and longitude of the sanctuary of S. Omobono, 41° 53'N/ 12°29'E, and at an angle of elevation of 3.6°, Planetary, Lunar, and Stellar Visibility software gives an extraordinarily close match (at 109.35° as compared to the measurement of the orientation of the archaic altar at 109.28°) with the morning rising (the first seasonal appearance) over the Palatine of the star known to the Graeco-Roman world as the "forehead" of Scorpius. Identified by this name in Ptolemy's *Almagest* and in a *parapegma* attributed to Callippus in Geminus' list, the "forehead" is now called Delta Scorpii, or, more commonly, Dschubba, from its medieval Arabic name (Evans and Berggren 2006:235). This is the central and brightest star of the three-star complex (the "head") forming the leading (most westerly) edge of the constellation Scorpius; it is the

⁷⁰ For my archaeo-astronomical numerical estimates, I have used the computer program commonly known as PLSV, the Alcoyne Software product called "Planetary, Lunar and Stellar Visibility v3.1.0," developed by Noel Swerdlow, professor emeritus of history, astronomy, and astrophysics at the University of Chicago, and, his collaborator, Rainer Lange of Alcoyne. For a discussion of the accuracy of this software and its underlying assumptions see the PLSV documentation at <http://www.alcoyne.de/plsv/documentation/index.html>. I have used the standard PLSV visibility settings, adjusted when necessary for critical altitude obtained from measurements that I have made using Google Earth. PLSV documentation indicates its estimates should be considered to have an uncertainty of at least one day. My sampling of PLSV estimates of star rise data for archaic Latium suggests that these predictions generally vary by no more than a day in time and a degree in azimuth over periods of about one hundred years. Solstice and equinox days are obtained from PLSV's companion program, the Alcoyne Software product, "Alcoyne Astronomical Tables." I compute equivalent modern dates using the conventional Gregorian cardinal days: March 21, June 22, Sept. 23 and Dec 22. For a review of PLSV in the context of Ovid studies see Robinson 2009. The use of PLSV as an authoritative technical tool by historically-minded astronomers is epitomized in the 2008 study by astronomers Baikouzis and Magnasco, "Is an Eclipse Described in the *Odyssey*?" published in the *Proceedings of the National Academy of Sciences of the United States of America*. The study's findings were embraced by the professional astronomy community, even appearing in a NASA database of historical eclipses and were reported internationally by the Associated Press, Agence Press-France and the New York Times. Although the astronomer authors' arguments that the text of the *Odyssey* preserves exact knowledge of a 12th century eclipse have deservedly elicited substantial challenges from Homer scholars on philological grounds, the soundness of PLSV's technical assumptions and its computational reliability have remained unquestioned throughout the controversy. See Gainsford 2012 for a full discussion.

star whose rising or setting signals the beginning of the period when the constellation itself may be said to be rising or setting.⁷¹ A constellation is a cluster of stars generally composed of a few, easily identifiable, conspicuously bright individuals together with a greater number of somewhat dimmer ‘neighbors,’ imagined as forming a pattern spread out over a well-defined region on the celestial sphere. A constellation was thought of as a coherent entity that could itself be said to be rising over the period of the several weeks it would take for all of its stars, beginning with the most westerly and ending with the most easterly, to make their individual annual morning risings on the horizon (Hannah 2005:8-10). Hence, PLSV estimates the measured orientation of the archaic altar at S. Omobono to coincide closely with the beginning of the annual rising, in 600 B.C.E., of the constellation Scorpius inaugurated by the first visibility of the “forehead of the Scorpion,” occurring about an hour and a quarter before sunrise on a day equivalent to about November 9th in the modern calendar. This is 45 days after the autumn equinox, a figure equal to exactly half the ninety day interval traditionally believed to separate the equinox from the Winter solstice (Varro *RR* 1.1.28, discussed below). Moreover, about an hour later, and thus a quarter hour before sunrise, the sun, having traveled up and west, had arrived at this same 109.3° orientation and lay about 7° below the Palatine horizon (as estimated by PLSV), presenting the ritual officiant – standing in the *antae* of the altar and gazing upward at the pre-dawn glow on the hill – with the second spectacular celestial event of the new day (**Figure 10**).

⁷¹ For example Geminus reports that on the 18th day of the zodiacal “month” of Scorpius, according to Eudoxos, the constellation Scorpius begins to rise (Evans and Berggren 2006: 235). The distinction made here between the conventional zodiacal month called “Scorpius” and the actual constellation, Scorpius, should also be noted.

Although Scorpius, due to its closeness to the path of the rising and setting sun, was to become one of the twelve constellations of the zodiac in the post-archaic period, it is the only non-Hesiodic constellation listed in the earliest *parapegmata* (those believed to date from as early as the 5th century B.C.E.).⁷² Perhaps serving more often as a seasonal weather predictor than as an agricultural marker, Scorpius would have played a simple astrometeorological timekeeping role (like the stars and constellations in Hesiod) in the late archaic period, prior to the constellation's entry into the Greek zodiac, probably sometime after the 5th century B.C.E. (Evans and Berggren 2006:277 note its similar function in Aratus's *Phenomena*).⁷³ The movements of Scorpius through the seasons, though unattested in the Mediterranean before the 5th century B.C.E., could easily have been within the range of late 6th century Italian astrometeorological knowledge. The morning rising of Scorpius would have been available to organized ritual as a convenient way to meet the religious and aesthetic need for a sunrise alternative to the farmer's traditional November evening weather watch for the setting of Arcturus (see below for a discussion of Arcturus and the agronomic significance of its evening setting).

⁷² Scorpius had had a long and independent history in Babylonian astronomy as a rather bright and calendrically significant constellation before it was later included (because of its location near the path of the sun) into the company of other usefully located but less distinguished and dimmer constellations to form the Babylonian prototype of the zodiac (Hartner 1965). Among the constellations of the Babylonian zodiac, Scorpius shares this distinction with Leo and Taurus (Hartner 1965). In the 4th century B.C.E., Greek names for the zodiac and elements of astronomical practice were being derived from Babylonian prototypes (Hannah 2002:120, 125; 2005:60).

⁷³ Scorpius is recorded in Euctemon's *parapegma*, transcribed in the Codex Vindobonensis. See Cod. Vind. Gr. Philos. 108 fos 282^v, 283^r (published by Rehm 1913: (n.7) 14-26). The Vienna manuscript does not use zodiacal months but instead uses day-counts. Hannah (2002:121) comments that while Euctemon's list of stars for the most part ignores the zodiacal constellations except that the Scorpion is mentioned as well as possibly the star Vindemiatrix in Virgo. See Lehoux (2007:181-187) for a discussion of the Codex Vindobonensis.

The timing of the 6th century B.C.E. rising of Scorpius at S. Omobono, 45 days after the autumn equinox, midway between what, as reported by Varro (RR 1.1.28), was believed be a 90 day period between the equinox and the winter solstice, corresponded to an important moment in the traditional agricultural calendar: the start of the winter season.⁷⁴ According to Varro in a passage in the *De Re Rustica* (RR 1.1.28),⁷⁵ this conventional seasonal midpoint coincides with the calendar date of November 10 (presumably the actual Julian date in Varro's time).⁷⁶ Other Roman agronomist writers also attest to the presence of the sun in Scorpius during mid-November: Columella writes (11.ii.84) that on the 9th of November, the bright star (Antares) of Scorpius rises, and it is on November 10th that winter begins: *V Id. Nov. Stella clara Scorpionis exoritur, tempestatem significat, vel Vultur, interdum rorat* (on the 5th day before the Ides of November the bright start of the Scorpion rises, a storm is predicted, or the wind is South-east). Pliny too notes that winter starts at the mid-point between the autumnal equinox and the winter solstice (18.lix.222): *rursus hi cardines singulis etiamnum articulis temporum dividuntur, per media omnes dierum spatia, quoniam inter solstitium*

⁷⁴ The actual inequality of the lengths of seasons was known to Greek astronomy as early as Callippus in about 330 B.C.E.. See Evans (1998: 210; 458, note 10).

⁷⁵ *Dies primus est veris in aquario, aestatis in tauro, autumnus in leone, hiemis in scorpiione... quae redacta ad dies civiles nostros, qui nunc sunt, primi verni temporis ex a. d. VII id. Febr., aestivi ex a. d. VII id. Mai., autumnalis ex a. d. III id. Sextil., hiberni ex a. d. IV id. Nov., subtilius descriptis temporibus observanda quaedam sunt, eaque in partes VIII dividuntur* (The first day of spring occurs [when the sun is] in Aquarius, that of summer when [the sun] is in Taurus, of autumn when [the sun] is in Leo, of winter when it is in Scorpio... which numbers, reduced to the official calendar which we use now, fix the beginning of spring on February 7, of summer on May 9, of autumn on August 11, of winter on November 10).

⁷⁶ Feeney (2007:200) states that this work was written in 37 B.C.E., eight years after the institution of the Julian Calendar on January 1st 45 B.C.E.. However, an exact Gregorian equivalent of Varro's November 10th, 37 B.C.E. or any other Julian civil date before an Augustan reform of the calendar that went into effect on January 1st, 8 C.E. is problematic. For many years after the Dictator's death, the pontiffs, who had retained some measure of control over the calendar during this period, applied the Julian leap year rules irregularly. See Hannah (2005); Feeney (2007); Michels (1967).

et aequinoctium autumni fidiculae occasus autumnum inchoat die XLVI, ab aequinoctio eo ad brumam vergiliarum matutinus occasus hiemem die XLIII, inter brumam et aequinoctium die XLV flatus favoni verum tempus, ab aequinoctio verno initium aestatis die XLVIII vergiliarum exortus matutinus. But, most importantly for this study, Columella (XI.ii.78) not only comments on the start of the winter season and the concomitant rising of Scorpius, but also observes the day on which the “forehead” of Scorpius rises: *VII Kal. Nov. Nepae frons exoritur, tempestatem significant* (on the 7th day before the Kalends of November the forehead of the Scorpion rises, a storm is portended).⁷⁷ This passage clearly underscores the fact that, at least in the time of Columella, the morning rising of the “forehead” of Scorpio, was recognizable, talked about, and an important criterion for determining and defining agricultural seasons.

The question remains: why Scorpius? Why should the Roman builders of the archaic altar at S. Omobono have preferred to orient their monument to a seemingly non-standard constellation whose earliest textual attestations beyond the borders of the Mesopotamian world are *parapegmata* attributed to Euctemon and dating presumably to the late 5th century B.C.E.?⁷⁸ Why Scorpius when there was a bright star that was much more widely attested and the seemingly obvious candidate for use as a marker of the early

⁷⁷ As noted above, Geminus, writing in the 1st century B.C.E., reports a *parapegma* of Callippus (4th century B.C.E.) recording the rising of the “forehead of Scorpio” occurring on the 4th day that the sun passes through Scorpius. See Evans and Berggren (2006) and Aujac (1975:100-101).

⁷⁸ From the Codex Vindobonensis, attributed by Hannah (2002) to Euctemon, we have two mentions of the middle of Scorpius rising, one noting a connection with the simultaneous setting of Sirius (see Ardea below). From two *parapegmata* recorded by Geminus we learn of the morning rising of the scorpion’s stinger (lambda scorpii), presumably signaling the end of the constellation’s rise on the 10th day of the zodiacal “month” of Sagittarius and the beginning of the morning setting of the constellation on 29th day of the zodiacal “month” of Pisces (Evans and Berggren 2006: 236, 238, 280). For dating and arguments that the embedding of Euctemon’s *parapegma* into a zodiacal framework is the product of later editing see Hannah (2002) and Lehoux (2007:77-79).

November season – the star Arcturus, whose evening setting in the year in question, 600 B.C.E., PLSV estimates to have occurred on the evening immediately before the morning rising of the forehead of Scorpius.

The importance of Arcturus in the astrometeorological texts of the archaic Graeco-Italic world is unquestionable. For example, the constellation of which Arcturus is the principal star, Boötes, was known to Homer (*Odyssey* V.272); the star's rising is mentioned by Hesiod (*Works & Days* 566); and, as I will explain below, in a Republican Latial context, the morning rising of Arcturus was the astral event corresponding to the orientation of the oldest altars at the Sanctuary of the Thirteen Altars at Lavinium. What needs to be emphasized here is the coincidence of Arcturus setting and the forehead of Scorpio rising. This pairing appears in adjoining *parapegmata* in the appendix to Geminus' *Introduction to the Phenomena* (*Isagoge*). Euctemon's late 5th century B.C.E. recording of the evening setting of Arcturus, "when great winds blow," is listed for the day following the day on which the forehead of Scorpius rises in the morning (as reported by Callippus in late 4th century B.C.E.) (Evans and Berggren 2006: 235; Hannah 2002:118-119).

The Roman agronomists, though dependent on late Greek astrometeorology, would presumably have had to correlate their borrowings with some knowledge of actual Italian rustic lore. Columella's (XI.2.78) entry for October 29th, an almost word-for-word repetition of Euctemon's *parapegma* about the gusty winds at the setting of Arcturus, is only one of the many correspondences between Columella and the Euctemon

parapegmata (as recorded by Geminus).⁷⁹ Pliny (NH 18.74.24) has Arcturus setting both on the day before the Kalends of November and on the 4th day before the Nonnes (the former event, presumably, the setting of the star's parent constellation, Boötes). Two lines later in this passage, Virgo (the zodiacal constellation whose setting precedes the rising of Scorpius) is said to set on the third day before the Ides of November. A few lines later (35), Pliny notes the importance of this event as a marker for the half-season following the equinox: *iustum vindemiae tempus ab aequinoctio ad vergiliarum occasum dies XLIII... occurrit* (the proper time for the vintage occurs between the equinox and the setting of the Vergiliae, a period of forty-four days), concluding the passage with the recommendation that *item vindemia facta olivam esse rapiendam et quae ad oleum pertinent quaeque a vergiliarum occasu agi debent* (as soon as the vintage has been collected, the olives should be gathered, with other particulars relative to the olive after the setting of the Vergiliae). A number of Roman references to the setting of Boötes as an agricultural time marker focus on the sowing of *uiciamque...uilemque* (vetches and kidney beans). Vergil (*Georgics* I, 227-230), after first advising the farmer to wait until the setting of Virgo before sowing grain, then urges still more patience, stating *si uero uiciamque seres uilemque phaselum/ nec Pelusiaca curam aspernabere lentis, /haud obscura cadens mittet tibi signa Boötes :/ incipe et ad medias sementem extende pruinas* (but if you sow the vetch or homely kidney bean, not to scorn the care of Egyptian lentil, setting Boötes will send you no doubtful signs. Begin, and extend your sowing to

⁷⁹ Lehoux (2007:184 note 90) records the following correspondences between Columella and Geminus: Columella's IV Kalends Nov and Geminus' 5 Scorpio; Columella's III non. Nov and Geminus' 10 Scorpio; Columella's IV Kal. Jan and Geminus' 7 Capricorn; Columella's XI Kal. Feb. and Geminus' 3 Aquarius; Columella's Xi and X Kal. Jun and Geminus' 32 Taurus.

midwinter's frosts).⁸⁰ Columella, presumably thinking about the end of the month, includes bean sowing in the preface of general recommendations for the month of October that precedes his *parapegma*-like day-to-day list that concludes with his noting of the setting of Arcturus on the 29th of October.

Parapegmata, agronomist literature, the coordination of the architectural elements of the site, the orientation of the altars, and the astronomical estimates all converge on one particular complex of November morning solar-stellar events occurring annually at S. Omobono during a period of a century or so before and after 600 B.C.E.. Moreover, the abundant faunal data from this sanctuary and dating to this same period substantially reinforce arguments for a special annual sacrifice held at a time of year near the midpoint between the autumnal equinox and winter solstice. As I have argued in Chapter 4, the age of the slaughtered animals at S. Omobono (particularly with reference to the breeding patterns and gestation periods of the two prominent animal-types, pigs and caprines, sacrificed at the site) clearly suggests a winter sacrifice, a festival that presumably marked and celebrated the start of the winter agricultural season.

Sacrifice associated with seasonally-sensitive, agricultural events was common in Republican Rome.⁸¹ Seasonal agricultural practices, animal breeding, ritual sacrifice, and the observation of stellar movements clearly entail a network of complex interactions.

⁸⁰ Pliny (*NH* 18.56) uses these same lines from the *Georgics* as an example of how Greek calendrics might not fit into the realities of Italian agricultural practices as neatly as the Roman poets might have believed. The passage reads: *Vergilius triticum et far a vergiliarum occasu seri iubet, hordeum inter aequinoctium autumni et brumam, viciam vero et passiolos et lentem boote occidente. quo fit, ut horum siderum aliorumque exortus et occasus digerendi sint in suos dies* (Virgil says that wheat and spelt should be sown at the setting of the Vergiliæ, barley between the autumnal equinox and the winter solstice, and vetches, kidney-beans, and lentils at the setting of Boötes: it is of great importance, therefore, to ascertain the exact days of the rising and setting of these constellations, as well as of the others).

⁸¹ See passages from Cato's *de Agricultura* quoted in Chapter 4.

The case study of S. Omobono, where the model of a special, annual, seasonal sunrise animal sacrifice brings together into close correlation a great variety of different kinds of evidence – architecture, faunal data, the orientation of the archaic altar, and the timing of stellar phases – establishes a sound framework which we can employ below to examine evidence for similar connections between morning risings and settings and the orientations of particular altars at other Republican sanctuaries in Latium, especially in those cases for which we might lack the abundance of confirmatory faunal remains that we have the luxury of possessing for the S. Omobono sanctuary.

Fosso dell’Incastro, Ardea

At the sanctuary of Fosso dell’Incastro at Ardea, the three altars, constructed between the 4th-2nd centuries B.C.E., are all of different styles and stand at markedly distinct orientations (**Figure 11**). I would like to suggest that such irregularity and inconsistency in the architectural layout of the sanctuary were not accidental but rather reflect extra-architectural considerations in the overall coordination of symmetries in the layout of the space – the altars systematically and purposefully oriented to some specific morning celestial event or complex of events, stellar or solar rising, or a stellar setting and this specific interaction between natural phenomena and monumental construction in turn helping to craft a sacrifice particular to the location of the sanctuary. In the 4th-3rd century B.C.E., the piazza in front of Temple B was paved and on it were constructed the two peperino altars (**Figure 12**). To date these altars, Di Mario has relied on the fact that in the 4th century, peperino was mostly used for inscriptions, decorative elements, altars, and sarcophagi, and that the nearby quarry of peperino in Marino, situated in the Alban

hills, was in use by the start of the 3rd century B.C.E. and could have been the likely source for the material of these altars (Di Mario 2007:84-85). The oblique placements of the altars, aligned neither with each other nor with the temple nor with any other monuments in the sanctuary, requires some larger explanation. If their placement did not hold some greater significance, then presumably, in the 4th century B.C.E. refashioning of the sanctuary and reconstruction of Temple B, the builders would have simply placed the altars on axis with Temple B. I would argue that their eccentric locations and placements can be accounted for in two possible ways. The first explanation is that the 4th century altars are successors to earlier altars which lay directly below them on the same site (in a similar relationship to the sequence of superimposed altars at, for example, Largo Argentina, Lapis Niger, Lavinium [discussed below] or the altar beneath the archaic altar at S. Omobono discussed earlier in this chapter and in Chapter 1). If this were the case, the later altars would have respected and preserved the position of an original, sacred structure. Another possible explanation (explored below), and by no means incompatible with that preceding, is that the altars are oriented in coordination with some specific stellar or solar event, a correlation that might provide a different way to approach an understanding of the sanctuary itself.

The U-shaped altar is *in antis*, measuring a total length of 4.2m, a width of 2.28m on the left anta, 1.23m on the right anta, with the space between the two antae measuring 1.78m. The altar rests on its own, individual tufa platform and its upper part (no longer present in full due to its use in antiquity) can be reconstructed as having a continuous profile, measuring from top to bottom, reaching 85cm, characterized by two types of

contraposto curves (DiMario 2007:82). The altar is oriented to an azimuth of 122.7°. ⁸² For 300 B.C.E., at the latitude and longitude of the sanctuary (41°35'N, 12°31' E), PLSV estimates that the sunrise occurred at an azimuth of 121.6° on the day of the winter solstice. Days of solstices are more easily determinable than equinoctial days. A. Jones, in a private communication to Lehoux (2007:80, note 41), notes “observing shadow lengths or sunrise/sunset points over several days around the solstice will give a few days where there is little or no apparent change. Taking the halfway point of this will give a solstice date accurate to half a day. Looking at both the sunrise *and* the sunset points, will give a date accurate to a quarter day.” In ancient Greece, the winter solstice was so easy to observe that two known calendars actually started their year at the winter solstice (the Boitian calendar and the Elean calendar). ⁸³ This use of the solstice as a marker of time can also be seen in a passage in Thucydides (2.78.2; 7.16.2) in which the author uses the winter solstice to coordinate the occurrences of different events. The winter solstice is also noted three times by Hesiod (479-80, 564-67, 663-65), once as a deadline for plowing.

Unlike the Greek authors who emphasize the solstice as a particularly important cue for agricultural seasons, the Latin agricultural writers provide a tangled “amalgamation of Greek material with traditional Roman farming methods” (Lehoux 2007:138). Solstices and equinoxes did not necessarily signal the start or end of the agricultural seasons, but rather changes of season were marked by the mid-points between these events (for

⁸² The measurement was made from an AutoCAD file of the site provided by Francesco di Mario. See notes 67, 69, and 70 for methods.

⁸³ Plutarch *Pelopidas* 24.1-2.

example, the start of the winter season that the evidence suggests was celebrated at S. Omobono 45 days before the winter solstice).⁸⁴ But while the solstices may not have been necessarily determining days for agricultural seasons, their occurrences nonetheless served as markers for harvesting, plowing, or other agricultural (and, perhaps, festival) activities. Throughout Varro's *de Re Rustica*, most agricultural prescriptions are given in terms of the solstices; passages begin with phrases such as *septimo intervallo inter vergiliarum occasum et brumam haec fieri oportere dicunt* (in the seventh period, between the setting of the Pleiades and the winter solstice, they say that these operations should be carried out). Pliny (*NH* 18.56) marks the winter solstice as a pivotal reference point for sowing: *inter omnes autem convenit circa brumam serendum non esse, magno argumento, quoniam hiberna semina, cum ante brumam sata sint, septimo die erumpant; si post brumam, vix quadragesimo* (It is agreed among all, however, that the sowing should not be done around the winter solstice; with good reason, since the winter seeds, if they are sowed before the winter solstice, will make their appearance above ground on the seventh day, whereas, if they are sown after the solstice, they will hardly appear by the fortieth). Pliny (*NH* 18.63) and Columella (XI.ii.95-96) both warn against disturbing the vine during the winter solstice and advise that cherry trees should be planted during the days around the winter solstice.

The positioning of the U-shaped altar to directly face sunrise on the winter solstice is complemented architecturally about a century and a half later by another altar in this

⁸⁴ Varro and Pliny make such claims. Pliny (18.59.22): *et tum aequata diei procedit nox ex eo ad brumam diebus LXXXVIII horis tribus* (at this period the days are of equal length with the nights...until the winter solstice, a period of eighty-eight days and three hours) and *ab aequinoctio eo ad brumam vergiliarum matutinus occasus hiemem die XLIIII*, (between the autumnal equinox and the winter solstice, the morning setting of the Vergiliæ [Virgo], on the forty-fourth day, denotes the beginning of winter).

sanctuary. This is not the contemporary, rectangular altar that serves as an obliquely-positioned, monumental companion to the U-shaped altar in an off-center corner of the paved area in front of Temple B. Rather, it is the altar that is furthest removed in time, space, and architectural concept – the altar directly in front of and on axis with Temple A (dating to the mid 2nd century B.C.E.). As discussed in Chapter 1, the lower part of the altar in front of Temple A is still *in situ* while its upper part sits upended between the base of the altar and the sacred well (**Figure 13**). This type of altar finds parallels with the altar of Verminius found in Rome and also with the altar found on the Palatine, dated to 124 B.C.E. Both of these parallel types are hourglass shaped and date to the second century B.C.E..

With his back to the temple, standing at the altar of Temple A, an officiant would be facing in an azimuthal direction of 46.1°. ⁸⁵ In 150 B.C.E. at Ardea, around the time of the summer solstice, there are two stellar events that can be connected with the orientation of the altar – one event on the actual day of the summer solstice, the other eight days after (as estimated by PLSV). ⁸⁶ The combination of stellar and solar events characterizing the sunrise on either of these two mornings would make excellent markers for the start of an important late June or early July ritual. One of these stars, now called after its Arabic name, Betelgeuse, is the eighth brightest star in the night sky. Representing the right shoulder of the hunter Orion, this star's conspicuous rising would signal the rising of the astronomerorologically-significant constellation Orion (See Hannah 2005:2,3 figure 5)

⁸⁵ The measurement was made from an AutoCAD file of the site provided by Francesco di Mario. see notes 67, 69, and 70 for methods.

⁸⁶ The actual difference in sunrise azimuth for either of the alternative astral events is slight, only 0.5°.

(**Figure 14**). Latin authors repeatedly reference the appearance of Orion as a marker of the summer solstice (see below for a discussion of Latin sources and *parapegmata* relating to Orion).

The other candidate for an astral event that could have been associated with the altar's orientation is the rising of Castor, signaling the rising of the zodiacal constellation Gemini. This second possibility would suggest a rather unlikely early knowledge of the zodiac at Ardea. It may even be that the two risings marked the beginning and the ending of an eight-day solstice festival. If this were in fact the case, it would argue strongly for the joint influence of natural phenomena and physical placement of the altar over the type and procedure of sacrifice. Moreover, each of the alternative star rising events can be associated with a pre-dawn solar event at the orientation of the altar. The rising of Betelgeuse at Ardea is accompanied by the simultaneous phenomenon of the appearance of "first light" over the Alban Hills in the direction of the altar's orientation.⁸⁷ Castor would rise on the horizon at an orientation very near to that of the Ardean altar, an event that was followed about half an hour later by the appearance of first light at the altar's orientation.

In whatever way the day of the solstice might have been determined, the traditional calendric and agronomic significance assigned to that solar phenomenon both in itself and in association with the rising of Orion is well attested by Roman writers and in *parapegmata*. The rising of Gemini is little noticed in the sources but it is easily

⁸⁷ See below for a discussion of "first light," or "nautical dawn" at Lavinium. Nautical dawn is defined as that time when the sun is exactly 12° below the horizon, the time when there is just enough sunlight for things to be distinguishable, the moment of transition between the technical periods of "astronomical" twilight and "nautical" twilight (<http://www.usno.navy.mil/USNO/astronomical-applications/astronomical-information-center/rise-set-twi-defs>).

conceivable that a solstice-Orion event signaled and corresponded to a festival day.⁸⁸

Columella (IX.14.5) cites the solstice as occurring at the end of June, a time important for agricultural production (*ab exortu vergiliarum ad solstitium, quod fit ultimo mense iunio circa octavam partem cancri... tumque peracto solstitio usque ad ortum caniculae, qui fere dies triginta sunt, pariter et frumenta et favi demetuntur*)⁸⁹ and specifically states that the solstice occurs on the 8th, 7th, or 6th day before the Kalends of July: *VIII et VII et VI Kal. Iul. Solstitium, Favonius et calor* (XI.ii.49). In others passages from Columella (VII.3.11; VIII.5.9), the author marks the summer solstice as an important reference for the breeding and birthing of animals (lambs and chicken): *Nam melior est autumnalis verno, sicut ait verissime Celsus, quia magis ad rem pertinet, ut ante aestivum quam hibernum solstitium convalescat, solusque ex omnibus animalibus bruma commode nascitur* (VIII.3.11);⁹⁰ *Plerique tamen etiam ab aestivo solstitio non putant bonam pullationem, quod ab eo tempore, etiam si facile educationem habent, iustum tamen non capiunt incrementum* (VIII.5.9).⁹¹

⁸⁸ There are two listings each for Euctemon and Eudoxos in Geminus' *parapegma* compared to none for Gemini attributed to these authorities (Evans and Berggren 2006:281).

⁸⁹ "from the rising of the Pleiades to the solstice, which takes place at the end of June in about the 8th part of Cancer...with the solstice past and until the rising of the dog-star, which amounts to about 30 days, the harvests and the honeycombs are equally gathered in." The 8th day of the stellar month of Cancer. The spring equinox and the start of the zodiacal year, in the period before Ptolemy, were by astronomical convention said to occur on the 8th day of Aries. See Negebauer (1975:594-98).

⁹⁰ "For an autumn lamb is better than a spring lamb, as Celsus very truly remarks, because it is more important that it should grow strong before the summer solstice than before the winter solstice, and only it of all animals can be born without risk in mid-winter."

⁹¹ "Many people however do not think it good to hatch chickens after the summer solstice, because from that time, even if it is easy to rear them, they have reach the proper growth."

Pliny too (*NH* 18.68) states that the summer solstice occurs on the 8th day before the Kalends of July and in the 8th degree of Cancer, and similarly to Columella, comments on the importance of the summer solstice as a turning point for agricultural production and harvesting: *ex hoc deinde rapiendi convehendique fructus alios atque alios tempus...* (from this period then, it is the proper time to gather and store away the various crops in succession). According to Ptolemy (*Almagest* III, I), Meton and Euctemon observed the summer solstice in the year 432 B.C.E. on the 27th of June in the morning.⁹² A passage from Ovid's *Fasti* reveals quite clearly the network of connections linking tradition, solstice, Orion, and ritual (*Fasti* VI.784-94). The narrative begins with a seemingly precise and up-to-date scientific-like report of the summer solstice occurring six days before the Kalends of July, and then switches dramatically in theme, style, and substance; the solstice period acquires ritual significance – its arrival now more appropriately dated by the rising of Orion: *Ecce suburbana rediens male sobrius aede/ ad stellas aliquis talia verba iacit:/ 'zona latet tua nunc, et cras fortasse latebit:/ dehinc erit, Orion, aspicienda mihi.'* / *at, si non esset potus, dixisset eadem/ venturum tempus solstitiale die./ Lucifero subeunte Lares delubra tulerunt/ hic ubi fit docta multa corona manu.*⁹³

The question then remains as to why the altar of Temple A, constructed over a century after those altars in front of Temple B, seems to so neatly complement the

⁹² The making of this computation from Babylonian data instead of an actual observation is suggested by Bowen and Goldstein (1988), also see Lehoux (2007:89).

⁹³ “Behold, returning from the suburban *aedes*, a drunken worshipper hails the stars with words like these ‘Orion, your belt is now hidden, and perhaps will be hidden tomorrow, but after that it will be seen by me.’ And, if he was not drunk, he would have said that the solstice would occur on that same day. On the next day the Lares are given a *delubra* in the place where many crowns are made by learned hands.” Pliny (*NH* 18.68) too states that Orion rises on the 6th day before the Kalends of July.

placement (in geo-astronomical terms) of the U-shaped altar. The correspondence between the orientation of the U-shaped altar directed at sunrise on the actual winter solstice and the placement of the altar of Temple A facing an event signaling the summer solstice might just, possibly, be a mere coincidence. However, given the careful, exacting precision in the alignment of the U-shaped altar with the winter solstice, the complementary association of the altar of Temple A with the summer solstice seems much more likely to be the result of intentional planning. The orientation of the altar of Temple A, 46.1° (exactly northeast would be 45°) is a fairly uncustomary orientation for an altar in Latium during this time period. Altars and temples in Etruria and Latium in the mid-Republic are generally oriented due east, south-east, or south-west; the overwhelming majority of these monuments are oriented in the southern half of the compass (See Castagnoli's chart mapping the orientations of Latial and Etruscan temples and altars [1993:233] and Prayon [1991:1288-89], who notices a certain preference for orientations to the southwest). This apparent departure from the conventional orientations of contemporary and neighboring altars serves to reinforce the inference of a clear intention behind the orienting of this altar at Ardea to face the rising of Orion near the time of the summer solstice.

So then we must ask why it was not the rectangular altar, adjacent to and contemporary with the U-shaped altar, that was oriented in such a way as to complement the U-shaped monument. Torelli (public presentation 2010, Oxford), referencing the famous passage in Dionysius of Halicarnassus (1.55.1-2) in which Aeneas sacrifices on

two altars sacred to the sun,⁹⁴ has proposed that the two altars in front of Temple B were coordinated so that one faced sunrise on the winter solstice and the other sunset on the winter solstice. But as tempting as it might be to connect the orientation of the rectangular altar with that of sunset on the winter solstice, actual measurements prove this to be highly unlikely. With his back to Temple B (as was customary practice), the officiant standing at the rectangular altar would be facing an azimuth of 231.9°. The sunset on the day of the winter solstice in 300 B.C.E. would occur at an azimuth of 238.4° (Alcoyne Tables, PLSV); the sun on this day in 300 B.C.E. is estimated to have arrived at the azimuth of the altar 40 minutes before sunset and at an altitude of about 5.3° above the horizon. Given the careful precision we have seen in the alignments of the other altars at this site (and others in Latium), such a discrepancy between the orientations of the altar and the winter solstice sunset could not have been merely a mistake of the builders – some other astronomical event must have been intended.

The orientation of the rectangular altar does compare well with the morning and evening settings of Sirius, the dog-star, the brightest star in the sky, and, conforms quite closely to the position of the setting of Sirius' neighboring star in the constellation Canis Major, Adhara (**Figure 15**). To be sure, the observation of the evening setting of these stars would have been extremely important for astrometeorological purposes; but, as I

⁹⁴ "Today, however, the springs are no longer so full as to overflow, but there is just a little water collected in a hollow place, and the inhabitants say it is sacred to the Sun; and near it two altars are pointed out, one facing to the east, the other to the west, both of them Trojan structures, upon which, the story goes, Aeneas offered up his first sacrifice to the god as a thank-offering for the water" (translation taken from *Lacus Curtius*).

have argued above, it is the morning setting that would be by far the more significant events for correlating celestial events with ritual events.⁹⁵

If we are to focus then on the morning setting of Sirius, we find that many authors associated this event with the beginning of winter or winter season agricultural deadlines. According to Columella (XI.ii.89), the morning setting of Sirius occurs on the 7th day before the Kalends of December; for Pliny (*NH* 18.64), Sirius sets in the morning on the 3rd day before the Kalends of January; Quintilian places the morning setting on the Kalends of December; a *parapegma* of Eudoxos reported by Geminus predicts stormy weather occurring on the 12th day after the sun has entered Sagittarius (Evans and Berggren 2006: 236). A passage from Columella (XI.ii.89) notes that at the morning setting of the Dogstar the weather is wintry but agricultural works continue (since it is best to have them completed before the 1st of December).⁹⁶ If the morning setting of Sirius did occur in late November it is interesting then to note that both of the altars in front of Temple B were oriented to celestial events that occurred in the winter months, possibly suggesting that a winter festival and sacrifice may have taken place separately at each of these adjoining monuments on different days but still within the same season. Such a hypothesis serves to connect the rituals of these two contemporary but distinctly shaped and oriented altars in the forecourt of Temple B through a coordination of winter

⁹⁵ PLSV estimates that Adhara, the star in the hind leg of the dog, the first star to set in the constellation Canis Major, has its first visible morning setting in 300 B.C.E. at azimuth 231.3°, 0.6° south of the westward orientation of the rectangular altar at about an hour before sunrise, 53 days after the day of the autumn equinox, a day equivalent to about November 15th (in the modern, Gregorian calendar).

⁹⁶ Hesiod notes not the November morning setting of Sirius but rather the star's September culmination as marking the coming of rain and as a time for wood-cutting and harvesting (*Works and Days* 420-22); this culmination coincides with that of Orion and (significantly, for our study of Lavinium below) the morning rising of Arcturus, marking the time of the grape harvest (610-12). The passage in Hesiod continues with Orion's setting joined by the Hyades and the Pleiades, signaling the beginning of the time for plowing and for the end of the sailing season (613-621).

festivals, an integration of sanctuary space that fits well with the symmetry of function suggested by the alignments of both the U-shaped altar and the altar in front of Temple A in the direction of a significant rising event on a solstice (**Figure 16**). At this sanctuary, it was not the shape or style of the altars but rather their precise positioning that determined the type and character of a sacrifice.

If, however, the priest did not have his back to the temple but instead, uncanonically, faced the temple, he would be facing an orientation of azimuth 51.9°. In this direction, the altar would be oriented to the first light occurring simultaneously with the morning *rising* of Sirius, 50 minutes before sunrise in 300 B.C.E. (PSLV), 31 days after the day of the summer solstice (Alcylone Tables), a day equivalent in the modern calendar to about July 23rd.⁹⁷ According to Pliny (*NH* 18.68), this event occurs on the 23rd day after the summer solstice, 15 days before the Kalends of August. Pliny emphasizes the importance of this celestial event for agriculture, stating that it affects the ocean, earth, and animals; he particularly links the cultivation of grapes to the time period in which the Dogstar rules (*XVI kal. Aug. Assyriae procyon exoritur, dein post triduum fere ubique confessum inter omnes sidus ingens, quod canis ortum vocamus, sole partem primam leonis ingresso. hoc fit post sox XXIII die. sentiunt id maria et terrae, multae vero et ferae, ut suis locis diximus....in hoc temporis intervallo res summa vitium agitur decretorio uvis sidere illo, quod caniculam appellavimus, unde carbunculare dicuntur ut quodam uredinis carbone exustae*). Varro (*de Re Rustica* 1.1.32) also emphasizes the importance

⁹⁷ The heliacal rising of Sirius held great importance in Egypt. It marked the feast of the beginning of the Egyptian year and the rising of the Nile (Lehoux 2007:122). Also, in the Babylonian *Diaries*, Sirius was the only fixed star whose heliacal rising was recorded, and was one of the dated events in the Babylonian “Uruk scheme” (Lehoux 2007:142). In Greece and Rome, however, many stellar phases, not just one, were used for the timing of agricultural seasons and events.

of the Dogstar to agriculture, stating *Quarto intervallo inter solstitium et caniculam plerique messem faciunt, quod frumentum dicunt quindecim diebus esse in vaginis, quindecim florere, quindecim exarescere, cum sit maturum. Arationes absolvi, quae eo fructuosiores fiunt, quo caldiore terra aratur.*⁹⁸ Varro also links the rising of the Dogstar to essential times for transplanting seeds (1.1.40) and for cutting straw (1.1.33).

Columella (XI.ii.53) places the appearance of the dog-star on the 7th day before the Kalends of August: *VII Kal. Aug. Canicula apparet, caligo aestuosa*, and places its exact rising around the Ides of July (XI.ii.62): *Hoc idem tempus est aridis uvis ficisque conficiendis...Felix quoque aut carex, ubicumque nascitur, Augusto mense recte extirpatur, melius tamen circa Idus Iulias ante Caniculae exortum.*⁹⁹ Another confirmation of this mid-summer date appears in another passage in Columella (9.14.5), where the Dogstar is thought to rise 30 days after the summer solstice, a period of time that signals the harvesting of the cornfields and the honey-combs: *tumque peracto solstitio usque ad ortum caniculae, qui fere dies triginta sunt, pariter et frumenta et favi demetuntur*. Euctemon and Eudoxus (relayed through Geminus) state that Sirius rises on the 27th day after the sun passes through Cancer (July 23rd) (Evans and Berggren 2006:232). Other authors place this heliacal rising on the 7th day before the kalends of May (Ovid, *Fasti* V) or, on the 9th day before the Kalends of September (Quintilian).

Whichever direction it may have been facing, the altar seems to have been undoubtedly

⁹⁸ “In the fourth period, between the solstice and the Dog Star, most farmers harvest, because they say that the grain is in the sheath for fifteen days, blooms for fifteen days, dries for fifteen days, and is then ripe. Plowing should be completed, which will be more valuable in proportion as it is done in warm ground.”

⁹⁹ “This is also the time for making dried grapes and figs... it is also right to uproot ferns and sedge, wherever they grow, in the month of August, it is better, however, to be done around the Ides of July, before the rising of the Dogstar.”

connected to the morning rising or setting of Sirius, an important seasonal marker in the accounts of the Latin agronomists.¹⁰⁰

It is also possible, however, that the rectangular altar in fact was not designed to be oriented to any specific stellar phenomenon. Rather, the placement of the rectangular altar seems to correspond in some respects to one side (rather than the axis) of Temple B. The southern-most corner of the short side of the rectangular monument lines up exactly with the southern-most wall of the podium of the temple. Such a placement for an altar, a linear, non-central relationship with a boundary limit of the temple, is unique in Latium (at least as far as my survey has discovered). Temple B is thought to have been preceded by an earlier religious structure, dating from at least as early as the last quarter of the 6th century B.C.E. (Ceccarelli 2011: 46). This early temple had a cella measuring 6 x 6m. To this phase at Ardea is ascribed a pavement of reddish tufa which is also found under the front piazza (a place identified, according to Varro, as a *delubrum*). Therefore, with this documented stratigraphic connection between the pavement of the earliest temple or cult building and the space in front, we should ask if it is possible that this rectangular altar of the 4th-3rd centuries B.C.E. might have been superimposed on an earlier altar or a designated area of ritual focus that was in some spatial relationship with the sacred monument beneath the later Temple B other than that suggested by the successor monuments on the site? The problem with this hypothesis is that the rectangular altar is in line not with the original cella walls, but with the walls of the enlarged podium from the reconstruction of the temple in the end of the 5th century B.C.E.. Another question

¹⁰⁰ Varro repeatedly refers to the Dogstar, placing its rising and settings in the same category of importance as solstices and equinoxes (*RR* 1.28, 32, 33, 40).

concerning this altar that must be raised (if we are to pursue the hypothesis that the altar was not, in fact, oriented to a morning rising or setting of Sirius) is why the monument was not placed on the central axis of the temple. If the 4th century B.C.E. rectangular altar was not preserving the alignment of an earlier altar, then possible reasons for which the altar was placed off axis can only be tentatively suggested. It is entirely possible that the rectangular altar was not meant to be in a specific spatial relationship with the temple but rather was built to complement and interact with the adjacent, U-shaped altar. Or perhaps on the original, 6th century B.C.E. temple's central axis, there was some other structure (not an altar) and so to locate an altar at that site in a later construction phase would be somehow impious. Of course, these hypotheses remain just that. Without further investigations into the structures and stratigraphy under the paved area in front of Temple B, all these explanations of the altar's placement are mere speculation. What is clear, however, is that in the last phase of the sanctuary of Fosso dell'Incastro at Ardea the relation of the three altars to each other and to the other monuments within the *temenos* is neither haphazard nor unsystematic but rather seems certainly to have been the result of a coordinated planning and effort, an arrangement that served to dictate and create the enacted sacrifice. The altars, in some combination of innovation and respect for topographical tradition, were either newly oriented towards specific and complementary astronomical events or were situated so as to preserve the sacred character of earlier monuments on the site.

Lavinium: Sanctuary of the Thirteen Altars

About midway in the three-century period of reiterative construction at the Sanctuary of the Thirteen Altars at Lavinium, the altars shifted to a new and different orientation; this departure from custom was followed some time later by what appears to be a renunciation of the shift and a return to the original orientation (**Figure 17**). As discussed in Chapter 1, in the first phase of construction, in the early 6th century B.C.E., altars XIII, VIII, and IX, and the rectangular edifice shared the same orientation (modeled on that of the earlier, “archaic” altar beneath altar IX). In the next phase of construction, in the mid-5th century B.C.E., altars I, II, III, IV, and V shared an orientation altered by 4.3° further southward from that of the original altars. Most tellingly, the two further building phases (altars VI and VII in the late 5th - mid 4th century, and then later X, XI, XII in the late 4th century) dropped the orientation changes of the second phase and returned to the original orientation of paradigmatic altar IX. In the scholarship on the Sanctuary of the Thirteen Altars, the shift in orientation of altars I-V has either been passed over or explained away as an accident on the part of the builders. However, in the following section I will show that the shift in orientation was both highly calculated and precise, in close correspondence with the contemporary calendar in use at Lavinium and its structure of the year.

Altars XIII, VIII, and IX, and the earlier “archaic” altar under altar IX are all oriented to an azimuth of 72°. ¹⁰¹ At Lavinium in 550 B.C.E., at an altitude of 0.3°, this

¹⁰¹ Measurements made on image of altar IX and altar IV derive from AutoCAD file from the survey made by Sophie Hay and the Geophysics team at the British School at Rome and the present author. See note 63 for methods.

azimuth corresponds to the position of the sun at the time of the first visible, morning rising of the star Arcturus in the constellation Boötes 17 days before the day of the autumn equinox (a day equivalent to September 6th in the modern calendar).¹⁰² In the 6th century B.C.E., when these altars were first constructed, the position of the rising sun at Lavinium on the day and time of the first seasonal appearance of Arcturus is estimated to have been 11.6° below the horizon-line at the point on the Alban mountains (24km away) facing the orientation direction of altar IX and its companion altars.¹⁰³ With the sun at this time giving the first indication of its imminent rising, the horizontally spreading phenomenon known technically as “nautical dawn” (or “first light”) would have been centered at this point on the horizon (**Figure 18**).¹⁰⁴ The large and perhaps communally representative sacrificial audience assembled at the Lavinium altars on this special festival occasion would have certainly been affected by the spectacle of this first sliver of light emanating toward them from the darkness on the horizon. If, as argued above, sacrifice began at the start of the day, then, at Lavinium, the effect of the seasonal reappearance of Arcturus rising together with the background glow of nautical dawn must have dramatically impacted the experience of the sacrifice of both ritual officiant and the surrounding congregation. Perhaps it was this singular, unique moment that helped to inscribe the ritual in both the minds of the participants and in the material of the altars

¹⁰² PLSV estimation.

¹⁰³ This mountain, now called Monte Artemesio, overlooked the south-east side of the valley that empties into Lake Nemi. I am most emphatically not suggesting that the Lavinian cult was connected in any direct or explicit way with the well-known, later Republican Latin cults at Nemi, 15 miles away. However, as in the case of S. Omobono and the cults on the Palatine discussed above, some kind of loosely conceived conflation of these Latin cults at a later time period would not be entirely out of the question.

¹⁰⁴ As noted above in footnote 87, nautical dawn is defined as that time when the sun is exactly 12° below the horizon, the time when there is just enough sunlight for things to be distinguishable, the moment of transition between the technical periods of “astronomical” twilight and “nautical” twilight.

(see Chapter 6 on memory for a discussion of such a process). It is the setting, specific date, and singular complex of stellar and solar events associated with the orientation of the altars at Lavinium that distinguish this sacrifice from the everyday domestic animal sacrifice that was, arguably, such a familiar and routine occurrence in the Roman world. This combination stellar-solar Lavinian event would occur about 17 days before the fall equinox, or, in the Julian calendar used by the Roman agronomists discussed below, on about September 10th.

Homer notes only the evening setting of Boötes (*Od.* V.270-75) while Hesiod is well aware of the morning rising of Arcturus and its connection to the grape harvest (*Works and Days* 610-612). Columella (IX.14.11) states that the rising of Arcturus occurs around the time of the equinox, when the sun is in Libra (*post arcturi exortum circa aequinoctium librae*), and more precisely (XI.ii.63) on the Nonnes of September (*Non. Sept. Arcturus exoritur, Favonius vel Corus*); he also places the rising on the 15th day before the Kalends of the October (XI.ii.65) (*XV Kal. Oct. Arcturus exoritur, Favonius aut Africus, interdum Eurus, quem quidam Vulturum appellant*). Pliny (XVIII.74) also concurs that Arcturus had its morning rising on the Nonnes of September (*vindemitor Aegypto nonis exoritur, Atticae arcturus matutino, et sagitta occidit mane*) and Quintilian asserts that Arcturus' rising occurred on the 14th of September. Euctemon (in a Geminus *paraepema*) states that morning rising of Arcturus, the harbinger of vintage, occurs on the 10th day after the sun passes through Virgo (Evans and Berggren 2006:236). A number of authors emphasize the importance and visibility of Arcturus as a predictor of

weather.¹⁰⁵ Columella asserts that farmers must observe carefully Arcturus' star, like sailors on turbulent seas in order for their agricultural tasks to be carried out in the right time of seasons (XI.i.30-31). Pliny (18.74) links Arcturus' appearance to weather as well: *arcturus vero medius prid. id. vehementissimo significatu terra marique per dies quinque. ratio eius haec traditur: si delphino occidente imbres fuerint, non futuros per arcturum. signum orientis eius sideris servetur hirundinum abitus; namque deprehensae intereunt.* For Columella, it is this period, marked by the rising of Arcturus, that is connected to the time when bees make their honey from flowers of thyme, marjoram, and savory; the honey is thus at its finest quality at the autumn equinox: *cum inroratis floribus thymi et cunelae thymbraeque apes mella conficiunt, idque optimae notae emitescit autumnus aequinoctio* (IX.14.10).

In the next phase of construction, around 450 B.C.E., the line of altars I-V was added at an orientation different from that of the first three altars and at a distance of 8.22m separating the new altars from the earlier structures (altar VIII to altar V). This set of altars is oriented at an azimuth of 76.3°, a 4.3° shift further south from the position of the nautical dawn opposite altars IX, VIII, and XIII. As discussed in Chapter 1, these later altars, related to each other in basic design, incorporate new developments in style while recalling the form of the earlier structures. Given the close similarity in style and construction of these later, 5th century altars to their 6th century predecessors, the shift in orientation is all the more striking. As has already been emphasized throughout this chapter, Roman builders were exactly precise in matters of architectural alignment and

¹⁰⁵ This tradition makes an appearance in Thucydides (2.78.2), where the historian connects the observation of Arcturus with the weather prediction, dictating the time for war.

a difference as substantial as 4.3° cannot be accounted for as a mere error in calculation or construction. Furthermore, if this later set of altars were intended to be oriented to a different stellar phenomenon or event, then it would have made better architectural sense for the altars to assert a corresponding difference in form, style, or material in order to distinguish themselves from the earlier group (as can be seen, for example, with the two altars of significantly different form in the forecourt of Temple B at Ardea).

Therefore, perhaps altars I-V were meant in some way to echo and complement their earlier altars in both style and orientation. The annually recurring phenomenon of first light (nautical dawn) that could be observed to occur on a certain day at the orientation altars XIII, VIII, and IX would occur at the orientation of the group of 5th-century altars (I-V) (that is at 76°) 10-11 days later in the same solar year (PLSV) (**Figure 19**). What can we make of this correlation, this 11 day shift? The mid-5th century construction dates of these new altars coincide with the introduction at Rome, usually dated to the political events of decemviral period (see below), of a new kind of civil calendar that dispenses with the obligation to coordinate months with lunar phases.¹⁰⁶ I

¹⁰⁶ Called variously the Republican, Decemviral, or pre-Julian calendar, this was the only scheme in the ancient world that “completely abandoned the use of lunar months” (Michels 1967:121). The calendar was believed by the Romans (Cicero *Att.* 6.1.8, Macrobius *Sat.* 1.13.21, 1.15.9; Livy 9.46.5) to have been instituted by the *decemviri* in the reform of 450 B.C.E., possibly connected to the drafting of the Twelve Tables, and was first published by Gnaeus Flavius, a scribe and *curule adilis*, in 304 B.C.E. (Michels 1967:108-109, 119-44; Rüpke 2011:chapter 5). This calendar may have featured regular bi-annual, non-lunar length, 22 or 23 day intercalation (Rüpke 2011:44). This unique predecessor of the Julian calendar corresponded well with an average solar year while, at the same time, clung to the concept of an intercalary month, and whenever possible held to the earlier lunisolar system. Flavius’ publication of the calendar should be understood as a “codification of existing practice... casting authority of the traditional rules onto written form” (Rüpke 2011:58). The second century B.C.E. annalists C. Sempronius Tuditanus (Fr 7 P: *Tuditanus refert libro tertio Magistratum, decem viros, qui decem tabulis duas addiderunt, de intercalando populum rogasse*) and L.Cassius Hemina (Fr 18 P, Macrobius *Sat.* I.12.31) ascribe an intercalation law to the second decemvirate. This is also supported by Cicero’s statement that the *fasti* were published alongside the Twelve Tables (*Att.* 6.1.8); and Ovid speaks generally of the reform being connected with the *decemviri* (*Fasti* 2.47-54). While a few modern scholars, notably Rüpke (2011, 2012), reject the 5th century dating, many others follow Michels in accepting the early Republican date. See

would like to argue that annual sacrifices may not have been regulated and determined by the new calendar alone but also, the persisting authority of the the orientations of the altars and their intrinsic, careful alignment with particular stellar events might have motivated an attempt (with altars I-V) at reconciling the old calendar to the new.

If we follow the scholarly consensus that the early Republican-era civil calendar would have – closely enough for our purposes here – resembled its well-attested Republican successors, such a calendar would have consisted of an ordinary 12 month year of 355 days. This year would also include a scheme for an intercalated, bi-annual month-like leap period having a non-lunar length of 22 (or possibly 23) days inserted at the end of February, resulting in a biannual “leap year” of 377 (sometimes 378) days.¹⁰⁷ And if this were the type of calendar in place or contemplated at the time of the construction of the new, 5th-century altars with their 11 day shift in orientation, then altar IV (standing here for the orientation of altars I-V) is oriented to the occurrence of "nautical dawn" on the *same* calendar day in a Republican *leap year* as the calendar day in an ordinary year on which "nautical dawn" occurs at the orientation of altars IX, VIII,

Hannah (2005), Humm (2005:455-469), and Feeney (2007) for a summary of the arguments. Humm states that it is not possible to define exactly what changes or reforms may have taken place in the calendar during the 5th century B.C.E. and we cannot necessarily attribute these reforms to the *decemviri*. The existence of a fully developed decemviral calendar is not essential to my discussion of the possible correlation of this type of calendar with the orientation of the mid-5th century altars at Lavinium. The architectural shift at the sanctuary was clearly a failed experiment – the literary tradition would, at the very least, reflect the likelihood that regional experiments with prototypes of the Republican civil calendar were contemporary with political events of the decemviral period.

¹⁰⁷ See Michels (1967:16-18, 145-172) for the pre-Julian intercalation scheme. It is thought that the Romans ideally added 90 days to a basic 355-day year through four intercalations, alternately 22 and 23 days, every two years resulting in an average calendar year of 366.25 days compared to the Julian calendar's quite close 365.25 day approximation of the solar year (Hannah 2005:106). The seasons governed by this ideal Republican calendar would drift about one day every four years or a 45-day half season in as little as 180 years. Michels (1967:16-18, 145-172) argues that the pontiffs would have noticed the drift and would have occasionally omitted an intercalation.

and XIII. Such a correlation defers to the persistent material authority of the orientation of the original altars, enabling the calendar day, celestial event, and type of sacrifice to be preserved regardless of civil calendar constraints.

How would this scheme work? On each morning in the periodically recurring solar year consisting of 365-366 days, at any given latitude, the daily phenomenon of nautical dawn will be observed to occur at a distinct and different place on the horizon. So suppose, for example, on one particular morning in the course of the solar year, 17 days before the autumn equinox, nautical dawn at Lavinium occurs at the azimuth of the 6th century altars VIII, IX, and XIII. Now, if the day of this specific nautical dawn happens to occur in an ordinary Republican civil calendar year of 355 days (on, for example, Republican calendar day September 1), then in the succeeding 377-day, intercalated, “leap year,” Republican civil calendar day September 1 would fall 377 days later (366+11). On that leap year day, nautical dawn will occur not at the azimuth of the 6th century altars, but a few degrees further to the south, close to the azimuth of the new, 5th century, 11-day shifted altars – altars I-V. Similarly, reversing the cycle in the subsequent ordinary 355-day civil year that will follow the 377-day leap year, civil calendar day September 1 will occur 355 days later (366-11), and nautical dawn will be shifted back 11 days and occur again, as it had two years previously, at the orientation of altars VIII, IX, and XIII.

The 5th century architectural attempt at architectural innovation in ritual scheduling would have had its downside. In a leap year festival held at the new alternative altars I-V, the nautical dawn occurring at the orientation of these altars would have had to forego its customary close connection with the rising of Arcturus and with a

particular fixed point on the Alban Hills. It is likely, however, that the compensating gain in the convenience of festival scheduling would have seemed at the time quite in accord with the spirit of the new calendar with its privileging of the coordination of the civil and solar years at the expense of other, more traditional astronomical and religious calendar considerations. For whatever reasons (a renewal of respect for the traditions evoked by the material memory of the 6th century altars no doubt playing an important role) later construction campaigns saw altars VI and VII in the late 5th- mid 4th century and altars X, XI, XII in the late 4th century return piously to the orientation of altar IX and of the archaic altar that lay beneath it.

But how would these matters stand if the Lavinian calendar were different from the Roman calendar? From later literary sources, we know that a different, Lavinian calendar did exist with features distinct from its Roman counterpart. For example, Solinus (I.34) comments that the Lavinians had a 13 month calendar, made up of 374 days (*terminabatur...apud Lavinios tredecim, quorum annus trecentis septuaginta quattuor diebus ferebatur*); the thirteen months of the Lavinian calendar is also commented on by Augustine (*de civ. Dei* XV.12): *...apud plerosque scriptores reperitur...habuisse annum...Lavinios tredecim mensum*; Censorius (*de die nat.* 20.1) claims that the Lavinian calendar differs from those of the Ferentini, the Albani, and the Romans (*...alium Ferentini alium Lavinii itemque Albani vel Romani habuerunt annum*); and Festus alludes to the specific laws of the Laurentines, stating (4L): *armita dicebatur virgo sacrificans, cui lacinia togae in humerum erat reiecta. Legibus etiam Laurentum*

*sanctum est, ne pomum ex alieno legatur in armum, id est, quod humeri onus sit.*¹⁰⁸ From these scattered, albeit late, sources we can perhaps conjecture that a Lavinian calendar may have resembled the Roman calendar in form and may have been composed of a standard 354-day ordinary year with a 20-day bi-annual, intercalated leap “month;” a scheme of this kind could account for the 374-day year reported by Solinus, perhaps mistakenly interpreted by the 3rd century C.E. author not as a 374-day leap year but as a 374-day, 13-month, ordinary year.¹⁰⁹

Structured around either the Roman or Lavinian calendar, the striking coincidence that the same celestial event occurs at the azimuth of altars I-V either 10 or 11 days after the occurrence at altars XIII, VIII, and IX cannot be mere accident or chance. It seems as though the second set of altars were designed in a later, more calendrically sophisticated period to serve a leap year function, attempting to reproduce, in such years, the desired astronomical events on the proper calendar days. Perhaps the builders at Lavinium constructed an alternate set of altars for a leap year sacrifice at which the participants could offer sacrifices at an annual festival whose scheduling was now determined by a fixed day in the new calendar. The leap year altars would attempt, in their shifted orientation, to reproduce some of the more important sunrise phenomena associated with the ordinary year altars. As noted above, in the next phases of construction, with altars VI and VII, and then altars X, XI, and XII, the shift back to the original orientation suggests

¹⁰⁸ “Asacrificing virgin whose toga-flap has fallen down to her shoulder is called an armita. It is still sanctioned by laws at Laurentum that the fruit of another not be gathered on the shoulder, that is, because it would be a burden to the shoulder.”

¹⁰⁹ If this 374 day year was a Lavinian leap year, then the average between 354 and 374 would be 364, resulting in the Lavinian calendar falling short by about one day per solar year. Being one day short a year would result in the seasons quickly drifting – in 90 years there would have been a 90-day drift, which is equivalent to a complete season.

that this perhaps overly ambitious and irreverent experiment with a series of altars for a sacrifice on civil calendar days in leap years was abandoned in favor of a return to more traditional methods of ritual scheduling. During the 5th century construction of altars I-V, the contemporary changes to and concern over the Roman calendar would have had to have affected both the practice of religious festivals as well as the construction of new sacred monuments.¹¹⁰ Such intricate ritual scheduling, dictated by the precision in altar placement, would have resulted in the consistency and preservation of form and character of sacrifice over the centuries of the ritual use of the space.

Italic Calendars: Regional Similarities and Differences

If the 5th century B.C.E. reform affected the Roman calendar, the Lavinian calendar must have also been altered and influenced by these changes. Calendars necessarily were specific to certain cities or locations, but grounded as they were in lunar phases, they ultimately did not differ that drastically. With astronomical lunar phases pretty much constant throughout Italy, the Roman calendar in the 5th century was integrated with the other calendars on the peninsula;¹¹¹ names of months may have differed from place to place,¹¹² and length and frequency of monthly or yearly intercalations may have also differed. While it cannot be precisely determined which communities' calendars may

¹¹⁰ The mid-Republican calendar, and presumably its early Republican ancestor, unlike the Etruscan *Tabula Capuana* with its ritual focus, have very little to say in detail about cults or sacral law. Although Flavius' published calendar includes specific religious dates, they only can be read in a "heavily refracted form, through a prism that absorbs as much as it distorts;" this calendar cannot be used as source for religious-historical interpretation (Rüpke 2011:65-66).

¹¹¹ No Italic calendar exists which provides the same documentation of day-to-day activities as do the Roman *fasti* (which would have also been displayed throughout the entirety of Italy).

¹¹² According to Rüpke (2012:91) "different names for months every fifteen kilometers were more the rule than the exception."

have influenced others and in what ways, the Etruscan presence in Latium and extant Etruscan ritual calendars must necessarily be taken into account in this study, as they provide concrete evidence of the formation of calendars and their interconnection with ritual from as early as the 5th century B.C.E..

The *Tabula Capuana*, dating to 470 B.C.E., also called the *Feriale*, is a ritual calendar regulating the cult at the sanctuary of Haema, near Capua. While, as Lehoux (2007:47) points out there is no actual evidence for the presumed use of a purely lunar predecessor of luni-solar calendars at Rome, this contemporary Etruscan tablet gives some indication of the importance placed on the phases of the moon in determining events, festivals, and markets in a neighboring Italic context. The year begins with the month of March (as is supposed also for the start of the Roman civil year from as early as the time of the hypothetically reconstructed pre-Republican, lunar calendar, the so-called calendar of Numa) and the dates for March to October are preserved (Cristofani 1995: 60). The calendar is divided into ten sections, with each perhaps corresponding to a month, much like the 10-month structure¹¹³ that antiquarians report of the Romulean calendar (Ovid *Fasti* 2.47-54). On these tablets, the days were not counted out in totality but instead only a few days were recorded and recurred per month, serving to structure each month.¹¹⁴ Another Etruscan calendar, the so-called Liber Linteus from the Agram

¹¹³ If indeed the calendar was actually intended to represent a 10-month structure and was not just incomplete as it exists now. See Turfa (2012:107).

¹¹⁴ For example, the first day mentioned, marking the beginning of each month, is the Ides, named in Etruscan *isveita*. The Romans believed that the Ides was originally Etruscan (Macrobius *Sat.* 1.15.14). The next day mentioned, occurring one week later, is the *celuta*, the waning moon; followed by *tiniana*, linked to the sky deity, Tinia (this day is thought to be the Roman Kalends); the last day listed is *aperta*, the waxing moon (the Roman Nonnes). The day named *macvitule*, which has a comparative basis in a number (including in its name the number five), would have most likely fallen in the middle of the cluster of days,

mummy wrappings, itself dates to no earlier than the 1st century B.C.E., but may reflect much older traditions.¹¹⁵ The calendar lists a series of festival dates (over twelve months), with detailed accounts of cult activities including dates from March and June-September for animal sacrifices, other alimentary offerings, and different ceremonies for the gods (Turfa 2012:24). Its presumed starting date for the year was January (Turfa 2012:24).

The literary and inscriptional testimony of archaic and Republican lunar ritual calendars from Greece and from as close as Etruscan Capua supports the hypothesis of the existence of cognate lunar ritual calendars in the sanctuaries of Rome and Latium. This world of lunar ritual and its authorities must somehow have accommodated – more or less peacefully – the kind of seasonal ritual scheduling driven by traditions of stellar observation that, as we have seen, derive more from agricultural than religious practices and are evidenced in the orientations of the altars at S. Omobono, Ardea, and Lavinium. The 5th century B.C.E. introduced calendar innovations in Rome that took greater account of the solar year at the expense of the lunar and the (pre-zodiacal) stellar year. The sanctuaries examined in this chapter can be seen to respond to such socially driven changes in practice manifested at Lavinium in the 5th century shift from the 6th century orientations and in the 4th century return to these earlier orientations, at S. Omobono in the markedly east-ward shift of the archaic altar, and, a century later, at Ardea in the prominent role played by the solstices and the orientations of the 4th-2nd century altars. As we turn to the next chapter, we will see the part played by the material agency of the

perhaps structured like a 4-day “week” (if we follow Macrobius and his Late Republican sources which state that the Etruscan calendar was periodical, formed around a *Nonnes* which occurred every eight days) (Rüpke 2011:30; Macrobius *Sat.* 1.15.14).

¹¹⁵ The cloth may have been worked as early as the 4th century B.C.E. but the book’s script is dated to 200-150 B.C.E. and is associated with Perugia (Turfa 201:223-24).

altars, over time, in the maintenance, transmission, or even filtering of these changes in practice.

CHAPTER 6

Material Memory

At each sanctuary examined so far throughout this dissertation, with each category of material evidence investigated (whether architecture, votive deposits, selection of animals, or the precise placement and orientations of altars), we have seen that the materials themselves, those objects, and resources along with their associated spaces, defined and determined the permanent character of the actively practiced sacrifice. To be sure, there would be ongoing material change. Material innovations would sometimes be introduced and these changes would no doubt have meant something to the innovators; but such meanings necessarily shift or diminish over time. Ritual, however, is repeated action and the non-representational material actions of the past would effectively determine the embodied ritual actions of later times while leaving questions of ritual meaning for each generation to negotiate for itself on its own terms. Furthermore, underlying each example given in previous chapters, behind the detailing of the operation of each specific variant of material agent, is the notion of the material action of the past on later times, the idea that these objects and spaces themselves *actively* preserve the original character or form of sacrifice over multiple centuries. We cannot assume that a ritual participant at S. Omobono, for example, sacrificing on the mid-winter festival centuries after the construction of the archaic altar in the 6th century B.C.E., would have

known that the sacrifice was held on that particular day in his contemporary annual religious calendar because of the correlation of the orientation of his present altar with that of an earlier, archetypal, buried altar with the annual morning rising of the forehead of Scorpius. Nevertheless, the memory of the ritual at the now buried altar can be conceived by us as stored, maintained, and transmitted through the materiality of the sanctuary. Its monuments and spaces function in this way as the entities determining the experience of the mid-winter sacrifice, dictating the character and even the time and date of the ritual for centuries after the original significance of such physically determined actions may in fact have been forgotten.

Through the study of the material remains of sacrifice, in other words, through the examination of the archaeological record of the ritual participants' interaction with the setting of the sacrifice, we can most easily come to a greater understanding of the convergence of the heightened experience of the moment of sacrifice with the recollection of the repetitive ritual past. We can access the means by which the memory of ritual – mental, material and social – is preserved, transmitted, and transformed.

In this chapter, to explore material memory, to analyze this phenomena within the specific archaeological context of the Sanctuary of the Thirteen Altars at Lavinium, to view the ritual experience enacted in sites of venerable history and sacredness as one of monumental pageantry, as an action characterized by repetition, high arousal, and important contact with superhuman agency,¹ I will borrow from studies in the cognitive

¹ I would like to emphasize here the distinction I make between material and superhuman agency. When I use the term "superhuman" I denote only *animate*, extra-biological agency. The term has become customary in recent years, displacing "supernatural" which was common in some of the older literature in the cognitive science of religion. The modern term side-steps issues that might arise from the problematic

science study of religion and memory. Such an application of theory from a discipline at such a distance from archaeology will allow for investigations into how we might use our knowledge of the ways in which religious actions leave their marks on the minds of ritual participants in order to arrive at a view of the ways that material memory affects ritual action. If we are careful not to apply obsolete print and computer-inspired static storage imagery in too literal a way to the dynamic neurological processes of human memory,² we may speak in a kind of convenient, rhetorical short-hand, of the “imprinting” of memory on matter – material memory.

Ethnography’s use of cognitive science to study the relationship between memory and ritual is necessarily focused on the recollection, repetition, and transmission of religious rituals enacted within a few generations. One is left to conjecture how these theories might apply themselves to archaeological time, to the inclusion of material, physical artifacts as transmitters of human memory in the longer term.³ Cognitive scientists have often looked to memory studies to discuss and explain the temporal aspects of rituals within a culture, cognitive schema contributing to an understanding of the persistence and dissemination of a ritual action. Just as culture changes over time, so too it would seem must its embedded rituals, adjusting themselves accordingly. Ritual, however, has an

character of the concept of “natural.” In this chapter, I shall be addressing questions of both material and animate kinds of extra-biological agency.

² For a discussion of the issues and relevant bibliography, see Sutton’s article on “Memory” in *The Stanford Encyclopedia of Philosophy* (<http://plato.stanford.edu/archives/sum2010/entries/memory/>).

³ The application of cognitive science studies of memory and ritual, especially the use of Whitehouse’s Modes Theory, to archaeology has been demonstrated separately by Mithen (2004) and Johnson (2004). Both essays focus on pre-literate societies. But when examining a literate society in the classical period the oppositional character of Whitehouse’s modes (one which relies on doctrine and literacy, the other relying on images and the absence of a centralized liturgy) can appear irreconcilable. However, the material record of Republican Roman ritual, when approached from the perspective of the cognitive science study of memory and ritual, will reveal a dynamic interplay between these two modes.

important invariant character for most traditions. Despite the overall long-term transformations of a culture, its rituals tend to be preserved in a fairly stable arrangement in a manner that tends to minimize changes.⁴ Anthropological and cognitive studies, approaching the subject of memory and ritual from different directions, seem to arrive at the same place. When viewed through the lens of the social sciences, in most traditions, religious rituals typically cannot support substantial variation because the specific action of the ritual itself is understood by the community as having been prescribed by the gods to conform to a specific pattern. Alternatively, and perhaps more usefully, such limits can be conceived as imposed by the space and setting of the ritual functioning as extensions of episodic memory.

The patterns of material memory that will be explored in this chapter at the Sanctuary of the Thirteen Altars at Lavinium occurred within the larger context of Republican religious practices, a religious system primarily characterized by orthopraxy⁵ where rituals privileged action over meaning.⁶ Since correct performance took precedence over

⁴ Perhaps this is the reason why scholars justify retrojecting depictions of sacrifice from the Imperial period onto the Republican practice. However, particular changes and adjustments to a practice over time were almost certainly introduced in order to preserve and transmit the overall memory of the ritual most effectively.

⁵ Ando (2008:13ff.).

⁶ Ritual actions also required proper language to work alongside the acts. Pliny NH 28.11: “sacrificing or consulting the gods without also making a prayer apparently does no good” (trans. by Warrior 2002). In this same passage, Pliny relates that a script (“*scripto*”) was read out loud to ensure the correct procedure was followed. A script would allow for the successful transmission of a ritual that was too complicated to remember and did not rely solely on the transmission of the ritual by a varying group of elected priests or priestly colleges (Griffith 2009:158). Such written instructions would maintain consistency among priests as well as procedural accuracy. Although Griffith (2009) argues for the reliance in Roman religion on such written records, texts of this kind did not exist during the Republic.

concerns for meaning or interpretation,⁷ these same rituals might require some sort of mnemonic support for communication and transmission (Griffith 2009:154).⁸ Perhaps in the absence of explicit doctrine or liturgy, Roman rituals in the Republican period gained mnemonic support not from the mutable oral transmissions of authoritative individuals nor from written texts but rather from external cues, from the natural and architectural setting of the sanctuaries, from the materials in continuous use over centuries, the enduring physical component of ephemeral human memory. This “mnemonic support” for ritual performance was in fact supplied by the very materials involved in the ritual. Perhaps an understanding of the role played by of materials in the remembering of ritual action can help shed some light on the characteristically Roman notion of communal “binding” that underlies the term *religio* (See Introduction). Harriet Flower notes how, in comparison to the relative disinterest of its citizens in textual history, “the city of Rome itself became the most important repository and monument of its own past” (2009:74).⁹

As I will show in this chapter, many of the ideas and methods of the cognitive science study of religion and memory can usefully be applied to the idea of the archaeology of memory, the material remains of past ritual serving preserve and shape later religious actions. In what follows, I will argue that permanent materials communicate – preserve,

⁷ Multiple explanations are at times given for the same ritual (Cicero *de domo* 1.1). Whitehouse states that within the imagistic mode, there is a lack of verbally transmitted exegesis about the ritual’s meaning, an exegesis that would take away the personalized character of the ritual experience (2000). Boyer (2001:33) adds support to this argument, stating that ritual participants have “free interpretation” of the ritual’s meaning.

⁸ Whitehouse (2004: 46, 192) claims that religions and rituals that carry a “heavier conceptual load” – the meaning and interpretations of liturgy, imagery, rituals, and bodies of knowledge – do require mnemonic support in order to be transmitted and call for “mnemonic infrastructure ... to build maximally counterintuitive concepts.”

⁹ See also Walter (2004).

transmit, and transform sensory information. This chapter will show that the concept of an encoding of patterns of ritual experience in the materials of a sanctuary is as much an “action-representation” as one imagined, in the traditional way, as having a permanent – and ontologically problematic – existence as an imprint in the mind. Materials are not conscious entities. Things do not speak to us semantically but they do most certainly “re-mind” us of past experience. How we interpret this reminding is – so to speak – another matter. Sanctuaries may not be sermons in stone but they do chant the old hymns.

Memory in a Cognitive and Sacred Context

The typical Roman sacrifice itself, incorporating, at least in some representative fashion, the whole community (whether through direct participation or more passive observation), can usefully be thought of as preserved principally through neither verbal memory nor collective performance memory of its ritual participants but rather, over a great span of time, through the memory evoked by the physical experience of the sanctuary, the monuments, the settings.¹⁰ However much the semantic representation of experience may be mediated by social circumstances, memory and matter remain inextricably bound; cognitive mechanisms select certain material objects and physical settings as particularly worthy both of conscious memory and for stimulating practices relating to beliefs.

If human memory, unable to accommodate and “stock” every format and range of representation, prioritizes what kinds of experiences might get transmitted and preserved

¹⁰ We can think here of historian Pierre Nora’s observation in “Between Memory and History: *Lieux de memoires*” that memory “takes root in the concrete, in spaces, gestures, images, and objects; history binds itself strictly to temporal continuities, to progressions and to relations between things” (1989:9).

and what gets forgotten, then there must be some constraints on what can be processed by human memory. Although the cognitive aspects of ritual are most straightforwardly understood as shaped by the physical setting, the limiting process can be given a social interpretation. The sites of ritual are not consciously and voluntarily (to use Pascal Boyer's terminology) remembered, but rather, as Boyer sees it, the social aspects of ritual impact memory unconsciously ("implicitly" in the terminology of the cognitive science of memory) and set up constraints which ensure that certain "built-in" specifications are repeated and become traditional (Boyer 1990:18). The sanctuary itself can then be seen as composed of particular arrangements of settings and structures selected according to postulated principles of innate memorability that are subject to social mediation. Such sacred spaces are said to have been "imprinted" with particular "surface features," both regional and site specific, remnants of social interaction that provide guidelines for future such engagements with the space (Boyer 1990:18-19). I would argue, reversing viewpoints, that what Boyer discusses as "surface features" can be seen, on the contrary, as active agents, not mere artifacts of previous practice, but rather the continuing creators and shapers of the ritual enacted in the space. The view supplies the eternal anthropological present with a dynamic historical continuity. The extended mind is far from a new idea; the ancient Romans themselves were no strangers to the phenomenon of memory embedded in a material setting incorporating corresponding memories of actions and events occurring in that particular space: as Quintilian states, *nam cum in loca aliqua post tempus reversi sumus, non ipsa*

*agnoscimus tantum sed etiam quae in iis fecerimus reminiscimur, personaeque subeunt, nonnumquam tacitae quoque cogitationes in mentem revertuntur.*¹¹

It is ritual's enactment in a particular, permanent physical setting, and its interaction with these specific, authoritative, enduring natural topography and material structures, that conserve the form of the sacrifice and valorize the importance of the preservation of the act, both for the present community and for future encounters. Boyer's concept of tradition (1990), something established and historical, needs to be augmented with its complement, a more active formulation of memory.¹² Memory is not something that is passive or static but rather is an active process of renewing. The successive constructions of the various altars examined in this project continually recall and mimic an earlier structure within the same sanctuary as well as evoke the very rituals associated with these earlier physical structures.¹³ Such a material interplay of memory and action within ritual

¹¹ For when we return to a place after considerable absence, we not merely recognize the place itself, but remember things that we did there, and recall the persons whom we met and even the unuttered thoughts which passed through our minds when we were there before (*Institutio Oratoria* 11.2.17); translation by Butler, Loeb Classical Library.

¹² Using Boyer's terminology and ideas, the repetition of altars at Lavinium and the transmission of artifactual representations (with occasional symbolic aspects) would be an example of "tradition."

¹³ The vexed nature of the concept of memory, the dichotomy between a more static tradition and a dynamic process, is highlighted by the subtle distinctions between the two German words for "memory" – *das Gedächtnis* and *die Erinnerung*.¹³ With the prefix "ge," *Gedächtnis* has the connotation of something more established, an action in the past that is already finished, a tradition. *Gedächtnis*, in its most literal sense, is a kind of semantic memory that revolves around thought, with the etymology of the word coming from *der Gedanke* (thought). Furthermore, the prefix "ge" denotes repetition or continuation and is commonly used to designate an abstract amount – memory as a rethinking. On the other hand, *die Erinnerung* has the connotation of something that is more incorporative and participatory. The word itself literally comes from *er innert*, meaning "he interiorizes," a definition that emphasizes the experiential, emotional relation of the self to an external object – memory as an abiding experience. Perhaps then, the altars examined within this project, monuments that were continually interacted with, adapted, manipulated, and multiplied over centuries, are examples of a material memory in the sense of the German *die Erinnerung*.

can be seen to be closely in line with Sperber's admonition to understand *how* rituals mean and not *what* they mean (as discussed in depth in Chapter 1).

The act of ritual slaughter would not only impact the mind but would also leave material traces in the physical setting of the ritual occurrence: at the altar and its sacred, material surroundings. The "material memory" preserved in the interaction of materials, forms, and placements of the altars examined in this dissertation necessarily call to mind ritual practices or other associations of the monuments with religious actions, lending an agency and authority to the structures and settings to guide future ritual practice.¹⁴ In what follows, I will argue for such a concept of a materially-based cultural memory appropriate to archaeology¹⁵ in which the material manifestation of cult gives form to both ritual thought and the performance of ritual actions, storing permanent knowledge of ritual over the centuries in the stone of the altars for the changing communities of the region of Rome and Latium. The blood of the animal would have stained the altars,¹⁶ its burnt bones carbonizing the surface of the upper altar where the fire would have presumably been placed (seen for example at Macchiagrande [Stefani 1922]), the discarded sacrificial remains interred in the foundations of neighboring altars, the provision for a special place in the construction of the platforms of the altars for the

¹⁴ The cognitive science of language has been aggressively employing computational models to pursue similar issues in the study of the relation of association to context. Since the early 1990's, successfully functioning extra-physiological artificial neural networking devices have been capable of extracting and applying complex grammatical behavior after exposure to a single simple sentence (Elman 1991).

¹⁵ I take here into consideration Assman's (2006:153) reification of "cultural memory" in which he states, "ritual as a form of thought is an *officium memoriae*, a cultic memory service that daily sets a vast store of knowledge of the world in motion. Its purpose is not just to interpret the world, but to take the meaning it has elicited and to feed it back into the world to strengthen, foster, and rejuvenate it."

¹⁶ For a discussion of blood stains on altars see Ekroth 2005. Her study examines depictions of blood spatter on altars on Greek vases.

implements of ritual (for example, the emplacement for a patera delineated and carved into the foundation of altar VI at Lavinium). The cumulative imprint of past ritual is physically manifest on the stone matrix of these altars: their front steps worn down with the indentation of use by ritual officiants over the years, their flat upper surfaces somewhat concave from the weight of the sacrificial animal.¹⁷

Memory at Lavinium

My approach to the study of material memory can best be exemplified by the particular trajectory of ritual patterning evident at the Sanctuary of the Thirteen Altars at Lavinium. The altars at Lavinium need to be considered as active participants in the formation and preservation of the memory of the ritual actions occurring at the sanctuary. Their form, structure, style, material, and orientation must all be seen as part of how communal religion recorded, recalled, and reenacted previous rituals; the altars are, in a sense, site-based frameworks and prompts for specific social activities. In the example of Lavinium, it is the materiality of the altars and the relative stability of their natural setting more so than verbal transmission or mental representation of action that provide the permanent framework for the “scripted” (to use a term borrowed from cognitive science studies, see below) recollection and repetition of ephemeral ritual actions. The sustained attention over three centuries to this one fixed site and the repetition of form, style, and

¹⁷ For example, on the upper surfaces of the altars at Macchiagrande, large hollow squares were filled with the organic remains of sacrifice (Stefani 1922). At Ardea, the front foundation of the U-shaped altar in the foreground of Temple B is visibly worn down at the center of the U, a testimony to the habitual path an officiant would have paraded with a sacrificial animal to the central space of the altar.

orientation of the altars, that is to say, the materiality itself of the altar, necessarily promote memories of past ritual practice.

In my investigation of the long-term material invariances at the Lavinian sanctuary, I neither intend to argue that the altars had a single, uniform religious significance or associated ritual practice over three centuries, nor do I dismiss the need to recognize that objects and spaces are interpreted and perceived in a multiplicity of ways over time. I do, however, claim that memory resides in the context of change and that close examination will reveal a careful replication of underlying forms, a continued attention to the orientation of the original “archaic” altar, and a concern for preservation and rebuilding. The altars at Lavinium would have necessarily evoked a cultural and, in particular, an archaeological memory – a thematically coherent complex of material and topographical memory associated with the survival of the earliest altar as a paradigmatic form.

Over the course of the three centuries of ongoing building and rebuilding, slight variations in form and style occurred as the sanctuary at Lavinium evolved and the number of altars increased (see Chapter 1 for an in-depth discussion of the construction phases). Variations of this kind are unsurprising and can be accounted for by normal changes in architectural fashion during the centuries of construction. But the altars are also, to some extent, monuments that are independent of historical change, “immune to the ups and downs of social taste” (Assmann 2008: 100). The experience of the archetypal persistence of the basic design and orientation of the non-Italic, U-shaped, “archaic” altar, the echoing and mimicking of earlier altars in details down to the molding and curvature of later monuments, the expansion and enlargement of platforms to include

older altars, and the reconstruction of earlier altars would have resonated with, amplified, and channeled the conscious and deliberate operations of cultural and architectural memory.¹⁸ Lambert, Scherer, Rodgers, and Jacoby view collective memory of both the rituals and the monuments themselves as present in each individual mind; this presence somehow extended beyond the individual to be shared by the group, to be embedded in a particular and specific social and historical context (Lambert et al. 2009.) The occult seeming character of the concept of collective memory is easily finessed by supplementing social and historical context with its cultural counterpart – by viewing the embedding of collective memory as fundamentally material.¹⁹ It was not only the lavish, communal spectacle of sacrificial performance enacted at these altars that bound individual and social memory of events to the physical circumstances of the structures, but, perhaps even more importantly, the striking architectonic experience of the arrangement and multiplicity of the Lavinian altars.

Following Richard Bradley's (2000) model of place as proactive and determinative, which argues that certain sites are maintained as sacred over time for a reason, that "particular places were especially important in allowing communication" between humans and the divine, sacrality and the character of ritual can be seen as inherent to and

¹⁸ Much recent work has emphasized the important role that socialization plays in the process of creating extra-generational, collective, so-called "cultural" memory (Van Dyke and Alcock 2003). Cultural memory might easily be said to be preserved over time not only by verbalized communications about the past but also by repetitive sub-communicative cultural activities like ritual. Cultural memory consists of transmission to and between individual minds. As Jan Assmann (2006:11) notes in *Religion and Cultural Memory: Ten Studies*, "whenever people join together in larger groups they generate a connective semantics, thereby producing forms of memory that are designed to stabilize a common identity and point of view that span several generations." See Halbwachs 1992, Roediger et al. 2009.

¹⁹ Even if participants in a religious ritual have distinct emotional experiences, even if the collective rites create a personal memory, the individual participants are embedded in their community (Whitehouse 2009:6; Pachis 2009:25).

demonstrative of the specific location of altar IX. This sacral quality persists from the primal “archaic” altar, to the construction of an altar directly above it, to later altars and related constructions mimicking, accommodating, and incorporating altar IX, and to the reconstruction of the altar itself (Bradley 2000:11). Within the Sanctuary of the Thirteen Altars at Lavinium, altar IX is repeatedly singled out as the most sacred of the sacred structures, not only by the uniqueness and abundance of the finds associated with the altar (discussed in detail below) but also by the respect the later monuments pay to the traditional style and orientation of this archetypal monument.

As discussed in depth in the previous chapter, the concentration of attention on the form and alignment of altar IX can perhaps best be seen in the slight shifts in orientation over the three centuries. In the first phase of construction, altars XIII, VIII, and IX, and the rectangular edifice shared the same orientation (following that of the earlier, “archaic” altar). In the next phase of construction, altars I, II, III, IV, and V shared an orientation altered by 4.2° from that of altar IX. Most tellingly, the two further building phases (altars VI and VII, and then later X, XI, XII) dropped the orientation changes of the second phase and returned to the original orientation of altar IX.

This sequence clearly reveals the significance of the religious and cultural memory attached to the original altar. If fifth or fourth-century B.C.E. builders of the sanctuary’s third phase were just indifferently adapting their constructions to the practical economies and constraints of the site, imitating form without recalling the inherent meaning and religious significance of the structures, or if they were merely fine-tuning adjustments of the sanctuary to the landscape in an effort to enhance the importance and sacrality of the

general setting, then presumably the orientation of these later altars would have followed that of the altars of the second phase of construction rather than returning to the first.

Not only the altars but also their settings would have played a role in material memory. Apart from archeology's concern with the material aspects of ritual over time, there is a substantial body of scholarship that addresses questions of place in ritual (Alcock and Osborne 1994; Basso 1996; Bell 1992; Casey 1996; Cole 2004; Smith 1987). As we have seen throughout the previous chapters, landscape serves not only as background context for material constructions; natural topography itself plays a major, authoritative role in the selection of sites for the placement of sacred monuments and, in effect, interacts with these man-made structures. An example of such an intricate interplay between nature and sacred monument can be seen in the previous chapter's detailed investigations into the elaborate coordination of altar orientation and the point in the natural landscape associated with annual celestial phenomena.

Landscape and the centuries-long accumulation of monuments at Lavinium work together to localize and maintain the sacred character of the site. Indeed the sanctuary's sacrality may even be said to reside principally in the material memory of the inauguration of the sacred space in the early 6th century. As the foci for worship and sacrifice, the altars interact with their physical surroundings, claiming the site for the sacred, creating a stage for ritual action where "a ritual object or action becomes sacred by having attention focused on it in a highly marked way" (Smith 1987:104). The altar cannot be interpreted as the means by which a physical site becomes sacred, nor can the site be said to confer sanctity on the altar; rather, object and place are mutually constitutive of and dependent on each other in an interwoven set of relationships (Smith

1987:103-104). It is just this very dialogue between materials and their placements in time and space, here at Lavinium as at the other sanctuaries examined in this dissertation that serves to determine and define the character of the sacrifice.

These modes of memory transmission between ritual action and place, between monument and landscape interact – the sanctification of the recurrence of ritual procedure at the thirteen altars may have been reinforced and reified over time both by the repetitions of the material forms of the altars and by the iteration of the altars' positioning with respect to visual features of the landscape. But though intimately linked, structure and setting must also elicit different memories. That which has been brought into existence and that which is believed to have always been play different roles in the collective, cultural remembrance of past religious practices. The memory evident in the conservative architecture of the altars must be distinct from that called to mind by the seemingly fixed, unchanging physical setting. The first type of memory can be seen only through evidence of development and evolution, the change in fact highlighting not what is different in form, but what remains the same; the memory evoked by the landscape, in contrast, can occur only as a result of a postulated invariance of the natural topography, its presumed immutability over time. Both these modes of memory-maintenance are compatible and non-exclusive – memory can be located in both materials and the places they inhabit and define. The material memory entailed by the iterative consensus of monuments echoing each other in their eternal setting ensures that a defining authority over the character of sacrifice will be preserved and maintained over time.

Sacred Setting of Ritual and Memory

It is the setting (material and natural) of the sacrifice that acts as a guide to recalling a religious experience. In his *De Magia* (56.8), Apuleius, following in the line of earlier Latin rhetoricians' professional interests in memory, calls these spaces *memoracula*, external symbols or objects that aid in memory transmission and recall, objects linked to religion and religious practices – they are *memoria religionis* (56.1). Cicero, in one of the earliest employments of the “imprinting” metaphor, compares places to wax tablets and proposes that places are physically inscribed with memory over time to help us recall and transmit associations linked to these particular *loci* (Cicero *De Oratore* 2.8.357-258; Penny Small 1997:85). In a statement that highlights the importance of precise location in connection to memory, Cicero comments that:

Hac tum re admonitus invenisse fertur ordinem esse maxume, qui memoriae lumen adferret Itaque iis, qui hanc partem ingenii exercerent, locos esse capiendos et ea, quae memoria tenere vellent, effingenda animo atque in iis locis collocanda; sic fore ut ordinem rerum locorum ordo conservaret, res autem ipsas rerum effigies notaret atque ut locis pro cera simulacris pro litteris uteremur.

And that this circumstance suggested to him the discovery of the truth that the best aid to clearness of memory consists in orderly arrangement. He [Simonides] inferred that persons desiring to train this faculty must select localities and form mental images of the facts they wish to remember and store those images in the localities, with the result that the arrangement of the localities will preserve the order of the facts, and the images of the facts will designate the facts themselves, and we shall employ the localities and images respectively as a wax writing tablet and the letters written on it.

(*De Oratore* 2.86.353-354; Translated by Sutton, Loeb 1967)

This place-specific characteristic of memory, employed in mnemotechnics attributed to the Greek poet Simonides, and later developed by Cicero and Quintilian, connects places

and images to a kind of system of “mental writing” with which data is encoded and preserved in memory (Assmann 2011: 17). Such a linking of memory and specific setting was repeatedly emphasized in Chapter 2’s discussion of the interaction among monuments over centuries at the Sacred Area of the Republican Temples at Ostia, and albeit to a lesser degree, throughout all the previous chapters and sites examined. The Roman mnemotechnic method focused on space and settings and not on aspects of time. These sites of memory required community-authorized specialists to preserve them over time, becoming places where political as well as religious events occurred, where commemorative acts happened.

Special Agent, Patient/Instrument Rituals, Culturally Postulated Superhuman Agents

Over three centuries, the ritual memory embedded in the altars at the Sanctuary of the Thirteen Altars at Lavinium cannot be entirely associated with short-lived, anthropocentric cognitive patterns of memory.²⁰ On the other hand, the temporal and material continuities in the Sanctuary of the Thirteen Altars at Lavinium bear strong correspondences to certain underlying themes and features of the cognitive science discussion of the memory of ritual.

When the cause of a phenomenon cannot be perceived, the mind tends to attribute the cause to the intentionality of an agent – an animal, human or, if necessary, supernatural being (Whitehouse 2004:32). In cognitive science studies, religious rituals are defined as actions entailing the presence of a special type of agent, the *culturally postulated*

²⁰ Such theories will be discussed below.

superhuman agent (CPS-agents) that acts through ritually appointed intermediaries.²¹ The CPS agents are very similar to their human analogs, allowing participants to easily make inferences about their actions, goals, desires, and states of mind (McCauley and Lawson 2002:25); however, it is their crucial differences from human agents that help establish the distinction between religious rituals and ordinary actions. I would like to take this one step further, arguing instead for complementary, non-conscious, extra-biological, material and spatial analogs to these conscious, supernatural agents, physical rather than metaphysical extensions of the human mind, informing and guiding ritual practice in a specific material setting. The archaeologist, having little access to mental states would then, from this point of view, be in a position make reasonably sound inferences on the basis of anthropological analogy. Ritual participants would have understood the causes of their actions in response to the authority of such material agency as originating with the gods or with the determinations of their ancestors. Having a tool for sorting out such correlations would give the archaeologist an increased means of ensuring that the scant remains of semantic evidence find their way to their proper place in the total material assemblage (as an example, see Chapter 5's discussion [pages 400-404] concerning the faulty attempt to reconcile Dionysius of Halicarnassus' textual description of Aeneas' sacrifice at two altars with the actual material remains and orientations of the altars at Ardea).

²¹ The theologically and metaphysically loaded term "supernatural being" occurs infrequently in the literature of the cognitive science of religion. Individual events may certainly be said to exist in the usual sense and when these events are conceived of as actions, these actions will certainly sometimes entail the existence, cognitively speaking, of superhuman agents, a second order existence as members of an invisible subclass of the perpetrators of actions. Presumably CPS agents, as such, cannot be thought of as proper "supernatural beings" unless a specific, culturally supplied "intentionality" is assigned to the action of the CPS-agent.

In the cognitive science study of religion, intensity and repetition, usually compatible components of memorable experience, are seen as playing oppositional roles – the emotionally arresting character of highly particular religious events and the schematic repetition of religious procedures and interpretations tend to lend themselves to quite different social forms. These rituals fall into two distinct categories: special agent rituals, and special patient/instrument rituals. In the special agent rituals, the culturally postulated superhuman agents (CPS-agents) act ritually through the human agent of the ritual;²² in the special patient/ instrument rituals, the CPS agents are connected with the ritual elements (materials or instruments) that fulfill one of the other active roles; in special patient rituals, the most direct connection to the divine is through the patient or through the act itself. In the sanctuaries examined in this dissertation, I have argued that it is not the human actors who serve as authoritative figures or agents in determining the type, form, or character of the sacrifice, but rather what the cognitive science of religion would call the *instruments*, the ritual elements, the spaces or objects, that play a supervisory role, crafting the intricacies of the religious actions. As cognitive scientists often assign the ritual of sacrifice to the category of special patient rituals, we need to question the extent to which this concept captures the features of Roman sacrifice. Perhaps, the point of greatest contact between the characteristics of special patient rituals as presented in

²² In Roman religion, Beard (1990:19-48) argues that communication with the gods was conducted exclusively through the mediation of the priesthood, through human agency. The senatorial and priestly supervision over religion and religious activities ensured the formal, proper procedure of rituals in the *sacra publica* (Beard 1990: 24-25, 30-34). The role of a dynamic leader was not played by a single person, but rather a collective body. But as I hope to have shown throughout this and the previous chapters, control over the rituals may not have merely resided in a collective body, in a senatorial or priestly supervision, but also, and primarily, in the material spaces and objects associated with the sacrifice (for example, see Chapter 5's discussion of the specific, precise orientations of the altars Lavinium and the close attention in new construction to changes in a ritual calendar).

cognitive science theories and the details of Republican sacrifice as examined in this dissertation is that both concern a ritual in which supernatural agency is generated through the objects or animals themselves.

Special patient/ instrument rituals can occur frequently and act on patients or employ instruments that entail a special ritual connection with the gods. For example, sacrifice can function in ways that suggest that the offering itself can be viewed as a CPS agent. The human agent performing such a ritual is more ritually distant from the CPS-agent than are either the instruments being used or the patients, the recipients of their actions. This idea aligns itself with the previous discussion in Chapter 4 of the deliberate and careful selection of the species and age of sacrificial animals at S. Omobono. Such an active, authoritative role assigned to the sacrificial animals themselves in crafting the form of sacrifice nicely illustrates how an understanding of the complex interplay of materials, authority, and cognition in religious experience can be approached through a combination of material agency and cognitive science models of sacrifice and special patient/instrument rituals in which the animal itself is a CPS agent.²³ Whatever connections a priest or religious specialist performing a special agent or special patient ritual might have to the gods were secondary to the direct contact flowing to the recipient of the action (the animal) or the implement employed in the ritual.

²³ This then supports Chalupa's (albeit somewhat weak) argument (2009:128) that in the context of state cult during the Republic, there was a complete absence of special agent rituals and consequently all rituals at that time were special-patient rituals, rituals in which CPS agents played the role of beneficiaries or addressees of the performed ritual.

Special Agent, Special Patient Rituals, and Memory

Within McCauley and Lawson's "schema," the various categories of ritual (the *special agent* and *special patient/instrument* rituals) impact the memory in very different ways. We need to first understand the characteristics of each type of ritual and how these properties relate to memory transmission in order to fully investigate the ways Republican Roman sacrifice might correlate with a particular memory schema. In their 2002 book, McCauley and Lawson argue that there are two different types of socially stable arrangements for evolving rituals, both of which reinforce the probability of accurate memory transmission. Rituals of the special patient/instrument type are high-frequency recurrent actions with low level emotional arousal and stimulation engaging, through repetition, both conscious *semantic* memory and *implicit, procedural* memory. Rituals of the contrasting special agent type are low-frequency, non-repetitive rituals that incorporate higher levels of stimulation and arousal mediated by *episodic* memory.²⁴ McCauley and Lawson argue that a ritual participant's representation of how culturally postulated superhuman agents (CPS-agents) might be implicated in the enacted ritual will determine the repeatability of the ritual as well as the "mnemonic dynamics those rituals enlist" (2002:43).²⁵

²⁴ Specialists in the Philosophy of Mind term these categories of memory "propositional" and "recollective," respectively. See the article on "Memory" in the Stanford Encyclopedia of Philosophy (<http://plato.stanford.edu/entries/memory/>) for a thorough overview and bibliography of the interdisciplinary issues.

²⁵ For example, Whitehouse (2004:37) claims that "when gods act, their effects are decisive and permanent. An ordination or a wedding is effected by the god (via the priest or other officiant), and what the god has done cannot be undone except by the god (or the god's representative). Hence, any reversal of the effects of such rituals could in principle be ritualized."

In the special patient/instrument type of rituals, there is no distinct finality, as the rituals can be performed repeatedly without limit.²⁶ The religious specialists, the agents, in these rituals do not bring about permanent religious effects; the effects of a special patient or special instrument ritual are merely temporary. But the repeatability and frequent performance of special patient/ instrument rituals ensure the likelihood of subsequent recollection. The frequency of religious rituals, ensuring exposure and familiarity, produces a sort of remembered script; “a ritual is a *prototype* of a scripted action” (McCauley and Lawson 2002:49, emphasis original). This script, giving a shape to the memory of the ritual, can be considered as a form of knowledge structure that helps inform recollection.²⁷ The ritual, repeated and “scripted,” tends to become habitual and the memory for participating in such rituals becomes more automated and implicit: “participants may have a much richer sense of *how* to proceed than they have for *what* they are doing” (McCauley and Lawson 2002:49). The frequency of the performance of ritual is what enables “elaborate practices” or “complex strings of ideas” to be embedded in memory, free from forgetting (Whitehouse 2009:5). It is within these rituals that McCauley and Lawson differentiate between the practitioners of the ritual and the observers. The spectators of a religious ritual only have to recognize the ritual, whereas the practitioners, those who must actually perform the ritual again, must be able to recognize and recall from memory the particulars of the act.

²⁶For example, a priest baptizing an infant would be a special agent ritual, whereas a sacrifice or a ritual of penance would be a special patient ritual.

²⁷ Humphrey and Laidlaw (1994:111) comment that “the idea of a script...does not identify the peculiar prescription of ritual as such.” These authors argue that the fact that something is scripted not does make it a ritual *per se*.

With special agent rituals, it is not high frequency that ensures remembrance but rather the high emotional stimulation and arousal associated with a relatively unique experience in a manner suggesting that “manipulation of emotions in ritual is tied to mnemonic issues” (McCauley and Lawson 2002:112). Cognitive scientists have connected such rituals to “flashbulb memories,” vivid and generally accurate episodic memories, memories that bring up associations with yourself or your previous experience (a phenomenon which will be discussed below in depth) that occur from a significant, usually unexpected event (Laidlaw 2004:4); flashbulb memories are “vivid recollections of inspirational, calamitous, or otherwise emotionally arousing events” (Whitehouse 1996:710).²⁸

As would any typical observer at any communally-sponsored ritual anywhere in the ancient urban world, the participant at any of the sanctuaries examined within this dissertation would have had to be able to identify the sacrifice at these particular altars as a recognizable action. But at the same time, the atypicality of the extraordinary monumental public settings and, to judge by the sacrificial remains excavated at each sanctuary (especially those of the larger species of animals), of the appropriately enhanced spectacle of the sacrifice at these altars, would draw attention to itself and consequently heighten the participant’s emotional engagement with ritual in a manner quite different from the familiar experience of the everyday version of ritual sacrifice. The dissimilarities of everyday domestic sacrifice and public, communal sacrifice at a

²⁸ Whitehouse uses flashbulb memories in the context of significantly violent and frightening rites of passage. Such a usage would not apply to a Republican Roman sacrifice. Whitehouse’s “flashbulb” memories are not very common events.

monumental altar would correlate with different modes in the processing and transmission of memory.²⁹

At the altars examined throughout this dissertation, the impact of sacrifice on individual, cultural, and material memory would have been quite likely magnified by the communal setting and the bloody spectacle of the ritual slaughter performance.³⁰ Unlike the familiar, everyday domestic sacrifice, a communal sacrifice in a monumental setting would be distinct and memorable; and the greater the contrast with the familiar, the greater would be the potential for a memorably effective emotional arousal.³¹ While the core procedure of the ritual of sacrifice would most likely have been well known to the spectators, the other various aspects of setting, collectivity, monumentality, and sensory performance would have all contributed to mapping this familiar and common procedure

²⁹ For example, the common bloodless offerings (pine cones, figs, nuts) (see Robinson 2002) at a sacrifice within a house in Pompeii would stand in stark contrast to a monumental, communal, public sacrifice of a sheep, goat, pig, or cow. In Roccaglorioso, for example, we can see a convergence of the public and the private aspects of sacrifice. On the Central Plateau, a large, aristocratic household incorporates a large, paved courtyard with a stone shrine (with a pitch tile roof and a possibly painted terracotta plaque in the pediment) facing west in the northeast of the courtyard (terracotta models of this shrine type have been found in Southern Italy and Sicily) (Fracchia 1989:225). Terracotta votives, statuettes of seated divinities and ceramics offerings were found at the shrine. However, while ostensibly a household shrine, the animals offered here are more of the types to be sacrificed at public, monumental altars.

³⁰ I wish to note here that in searching Latin texts before 200C.E. I found that the Latin *violentus* never appears in conjunction with the Latin words for sacrifice (*immolare* and *sacrificare*).

³¹ In the Roman social and material context, “public” and “private” sacrifice necessarily differ. Unfortunately, very few private altars from the Republican period in Rome exist today. The *lararia* throughout Pompeii are beyond both the geographic and temporal scope of this project; they present the best cohesive collection of private, household shrines and call for a very brief discussion (Bodel 2008). In Pompeii, over a third of the residential buildings have built-in ritual components, *lararia* or independent altars (over 300 *lararia* have been recorded in Pompeii; around 5 altars independent of a shrine have been recorded in the houses in Pompeii) (Boyce 1937; Fröhlich 1991). The relationship between public and private altars can best be seen in the *lararium* in Pompeii at the house of L. Caecilius Iucundus (V.i.26). Here, a low relief is sculpted into a marble slab of the aedicule, depicting a tetrastyle temple with a blazing altar in front of it. See Small (2007:187) for possible identifications and ways in which the iconography of the altar might serve to mediate between the Pompeian political community and the private, sacred space within the family home.

onto the material and mental landscape. The very public nature of religious rituals fosters collectivity and coordination of the participants, an organization and cooperation that can tend to constrain, predict, and anticipate the performance of the ritual and the various roles of the participants. Scholars often seem inclined to lump audience and practitioners into a composite entity, drawing generalizations and a single interpretation from a multiplicity of possible meanings (such as what the slitting of an animal's throat might convey) (for some examples, see Georgoudi et al. 2005; de Heusch 1985; Valeri 1985). On the other hand, assignments of transgressive meaning, if they existed at all, to transitional acts of sacrifice cannot have been uniform, and perhaps the careful conservation over long periods of time of the architectural forms of the altars – the objective material stage upon which the slaughter of animal subjects was enacted – might suggest the existence and operation of a collective, uniform material memory of past ritual practices less dialectically concerned with violence.³²

While we cannot make blanket generalizations (tempting as it may be) that monumental, public altars witnessed the sacrifice of larger animals (such as sheep, pigs, goats, cattle), and private domestic altars were the locus for the sacrifice of smaller creatures (such as chickens, roosters, or rodents) or even more commonly bloodless,

³² I feel some obligation to mention here some key ideas of the principal figures in the study of violence in ritual. I am completely unconvinced, however, of the soundness or applicability of the theories of scholars such as Girard, who views sacrifice as a “collective murder” (1977:207), a killing that serves to place and connect human beings to other human beings, since, as it is postulated, the psychology of violence varies little from one individual to another. Girard's main theory is that of sacrificial “substitution,” viewing the animal victim as a substitute for all members of society, redirecting aggression and protecting the entire community from its own violence. Therefore, ironically, the very act of slaughter serves to restore harmony to the community. Despite my strong reservations in accepting Girard's theory, I do follow his view that sacrifice is about human relations, not solely about some overriding desire for communication with and reciprocity to the gods.

vegetal offerings,³³ we can nonetheless assume that the public spectacle of the sacrifice at the public altars – the procession, the libations (wet and dry), the assent of the animal, the killing, the draining and collecting of blood, the cooking and division of parts – would have made a much more elaborate display than that at a private domestic sacrifice.

The bloody dramatic spectacle of sacrifice falls into line with the cognitive science concept of “sensory pageantry,” stimulating various senses in the participants in order to arouse an emotional response (McCauley and Lawson 2002: Chapter 3). The “emotional provocation” of such sensory pageantry will prove memorable and heighten the possibility of and motivation for verbal transmission, marking the influence and effects of the divine intervention characteristic of special-agent rituals. What could be called the “monumental spectacle” of sacrifice might actually find echoes in the material preservation and continuation seen in the repetitive reconsolidation of memory in the form, style, and orientation of the altars examined at the various sanctuaries in Rome and Latium; for the “recall of disturbing or traumatic experiences actually improves with time” (Whitehouse 1996:711).³⁴ An awareness of the powerful impact on the memory of the extraordinary, singular event was noted by Republican rhetoricians: *nec hoc alia de causa potest accidere, nisi quod usitatae res facile e memoria elabuntur, insignes et novae diutius <manent in animo* (*Rhetorica ad Herennium* 3.16.22).³⁵

³³ Half of the sacrifices at *lararia* in Pompeii are vegetal; pigs and cocks were also offered at these domestic shrines. for a study of household shrines and sacrifice see Foss (1997).

³⁴ See below for a discussion on how the materiality of the altars and their specific placements and forms might serve as regular “reminders” in the sense of memory reconsolidation (Hupbach 2007:47).

³⁵ Nor could this be so for any other reason than that ordinary things easily slip from the memory while the striking and novel stay longer in mind; Loeb translation.

It would at first seem to be the case that if the average Republican Roman were accustomed to frequent, domestic sacrifice, then the animal's blood could not have been all that provocative. But we must also consider the large body of scholarship on the depiction of ancient sacrifice on Greek vases (van Straten 1987; 1995; 2005). For the most part, the actual moment of killing is absent from these illustrations.³⁶ These depictions seem to emphasize instead the calm or serene aspects of sacrifice: the animal's peaceful procession to the altar, without any restraint, and the reported consent of the victim at the end (the nod of compliance).³⁷ And if the practice represented on vases corresponds to what in fact was enacted, this strategic exposure would conceivably add to the cognitive impact of the moment of the actual slaughter, the moment of surprise creating possibly that "flashbulb memory" and the "significant novelty" that is emotionally arousing (McCauley and Lawson 2002:57). Perhaps then it is the bloody spectacle that inscribes memory and distinguishes public sacrifice from domestic sacrifice.

Implicit and Explicit Memory

To Harvey Whitehouse (2004:65), the two categories of ritual assigned by McCauley and Lawson can be identified with the two types of memory first proposed by Graff and Schachter: implicit (concerning things we know without being aware of knowing and including, as its most important sub-class, procedural memory, things we know how to do

³⁶ Van Straten (2005) states that on less than 5% of the vase does the actual slaughter appear.

³⁷ Furthermore, the knife is hidden in the basket until the moment of sacrifice, its concealment emphasizing the desire and professional skill to keep the bloody element hidden until the last moment possible (Georgoudi 2005).

without being aware of how we know) and explicit or declarative memory (concerning things we know at a conscious level and which can be further divided into long and short term memory, with long term memory divided yet again, as in the example that follows, into what are termed episodic and semantic memory).³⁸ Procedural memory is closely related to human interaction with material objects; it is an unconscious memory cued by the environment. Such a type of memory would necessarily be activated in emplaced ritual.

Adapting the well-accepted and empirically-tested theory of memory to ritual study, Whitehouse links special agent rituals, with their low frequency and highly emotive experiences, to what he terms the imagistic mode of memory – interpretations of experience that are “non-verbal,” relying more on iconic imagery, and are associated with those high arousal, low frequency ritual practices that are transmitted among small, face-to-face groups (Martin 2009:238; McCauley and Lawson 2002:106).³⁹ The imagistic mode depends on the revelatory potential to engage episodic memory, a type of explicit, long-term memory of specific events in one’s own past events and experience. Rituals that fall into the imagistic mode do not regard the participant’s memory as a vacuum that religious authorities must fill; rather, every participant is a potential exegete and authority

³⁸ Information preserved in the semantic memory is accessible to conscious recollection and introspection but is distinct from the memory of the originating event associated with the preservation. (Chalupa 2009:116).

³⁹ Whitehouse’s modes theory, explaining the ways in which different systems of memory are activated during religious rituals, can be seen as an “attempt to explain socio-cultural variability and transformation rather than universal or widespread recurrence” (Whitehouse 2009:10). His modes theory is not one of religions or religious types but rather is a generalizable explanation for the transmission of religious knowledge *over time* (Pachis 2009:18).

on these rare kinds of religious experiences.⁴⁰ Such a mode of memory allows for the material ritual objects and settings themselves to act as authorities as well – not in explicating meaning but in supervising procedure – and in such roles, these materials and spaces, inherently linked to past religious events and experiences, “trigger” re-collection of the specific character or appearance of the enacted sacrifice.⁴¹

Frequent rituals, on the other hand, characterized by repetition rather than intensity of sensory stimulation, operate through what Whitehouse terms the doctrinal mode of memory, a mode which depends on general schema associated with the semantic memory, a type of long-term memory associated with concept-based knowledge. The doctrinal mode is linked to a widespread transmission of a commonly held set of beliefs (often these beliefs are normatively expressed and affectively argued) among a large-scale community, under the guidance of a central or institutional authority (presumably human in this formulation from cognitive science), relying on depersonalized religious experiences (Martin 2009:238). Just as the potential authority associated with the imagistic mode of memory might be material as well as human, so too might the “knowledge” of ritual procedures – usually viewed as procedural memory – be seen as an aspect of a “doctrinal” material authority. While not doctrinal in the sense of a set system of beliefs, Roman religion as a system of orthopraxy arguably can be seen to conform to

⁴⁰ For in both the doctrinal and imagistic modes (through semantic memory or through episodic memory, respectively), communal practice of ritual does not single out one particular participant but instead creates a collective and shared experience (Gragg 2009:138).

⁴¹ The metaphor “trigger,” occurring frequently in the cognitive science theory of the extended mind, conveys the model’s view of the relation of the “external” material world to the “internal” dynamic processes of neuro-biological conscious recollection. These processes require the complex interaction of both external and internal components Clark (1998:7-19).

the doctrinal mode (Pachis 2009:21, 24). The rigidity in procedure and high level of routinization of religious rituals would have made explicit exegetical knowledge and explanations unnecessary (Chalupa 2009:118). It is therefore not the exegetical rationale behind the performance of sacrifice but rather its flawless outward procedure that was of primary importance; Roman religion does not require a “theologically correct” exegesis as does, for example, a monotheistic religion in which such an exegesis is considered crucial for all members (Chalupa 2009:117).

The information transmitted in the doctrinal mode can either be represented as “schemata” (cognitive templates for the organization of doctrines) or as “scripts” (cognitive templates for rituals, for sequences and procedures) (Martin 2009:242).⁴² According to the authors of a recent book, *Imagistic Traditions in the Graeco-Roman World: A Cognitive Modeling of History of Religious Research*, it is Roman religion’s emphasis on the correct, flawless sacrificial performance that is “sympathetic” with the Whitehouse’s doctrinal mode of religiosity (Griffith 2009, in Whitehouse 2009:7). But for the purposes of the arguments presented in this dissertation, as I will show Roman sacrificial ritual reveals affinities for both the imagistic and doctrinal modes of memory, to both the special agent rituals and the special patient/instrument rituals.⁴³

⁴² “Schema” is a general term for cognitive templates that can also be used to mean conceptual in contrast to action templates; “script” is a term used by cognitive scientists for cognitive templates that apply to sequences of actions (Martin 2009:242). The frequency and rigidly prescribed character of Roman rituals, it is argued, would have been processed by procedural memory, a type of implicit memory that may often function in a manner that entails a corresponding semantic memory, involving explicit mental representations of a generalized and abstracted nature (Chalupa 2009:116; Mithen 2004:19-20; Johnson 2004:45). For example, the act of reading, unlike, say, that of bicycle riding, is inextricably both procedural and semantic.

⁴³ Perhaps Roman religion does not fit neatly into the imagistic or doctrinal mode but rather is a composite of the two (Martin 2004; Whitehouse 2004b) and incorporates both “modes of operation”

Whitehouse further connects the two varieties of ritual to questions of meaning. Richert, Whitehouse, and Steward (2005:131) argue that in considering what a particular ritual might mean, one must look for “intentionality *not* in the functional properties of the action but in its place in a *wider nexus* of ritualized behaviors.” The explicit, episodic memories generated by religious rituals foster the formation of “analogical” connections, thinking that can lead to “complex exegetical or cosmological knowledge” (Whitehouse 2004:9). The rarity and unfamiliarity of special agent rituals encourage individual participants to think a great deal at an explicit level about the “meaning” of the procedure of the ritual, to undergo “ritual exegesis” (Richert et al. 2005: 129).⁴⁴ With the notion of a comprehensive communal and mental framework for associative religious thought, we can see the cognitive underpinnings in ritual studies of what Sperber (1975) has termed the question of *how* a ritual means (as discussed in Chapter 1). The particular meaning of a ritual is a topic and question I have tried emphatically to steer clear of in this archaeological-based study of the *experience* and *performance* of Republican Roman sacrifice. But in translating theories concerning the mind in cognitive science to theories accessing the experience of sacrifice as a material-based ritual, perhaps the concept of “ritual exegesis” so prevalent in cognitive science of religion discussions as to how the mind is impacted by special agent rituals can be adapted to explore how the sacred setting

(Whitehouse 2000:126). Martin (2009:242) suggests that divination by prodigies during the Republic might be an example of the imagistic mode.

⁴⁴ To Whitehouse, special agent rituals foster spontaneous exegetical reflection (SER), an attempt on the part of the participant to make sense of his ritual experience. The higher frequency special patient and special instrument rituals, on the other hand, carried out so often, become more automated and a participant is much less likely to worry about either the meaning of what is being done in the ritual or the reasons why it has to be performed in a strictly-prescribed manner. The frequency of these rituals lessens the tendency of people to devise their own personal theories of the rituals performed. Whitehouse’s SER thus fits neatly into the connectist view of concepts as “essentially pattern recognition devices” (Smith and Medin 1981:8).

is impacted by and responds to such a ritual type.⁴⁵ Both repetitive and highly sensory, Roman sacrifice does not fit neatly into McCauley and Lawson's cognitive schema. Semantically-remembered doctrines explain 'imagistic' experience. The beliefs reinforced in repetitive, low-impact rituals are thus bound up with the conceptual control of infrequent, high-impact special agent rituals (McCauley and Lawson 2002:182). Conspicuously lacking in doctrines, special agent rituals, and the social control of interpretations, the long-lived Republican Roman religious system, according to these authors' theory, should have been unstable and either splintered or found a way to generate doctrine (McCauley and Lawson 2002: 182-192). The elusive source of the stability of Roman sacrifice, the missing "doctrine" and interpretive authority required by the cognitive theory, can be accounted for by what I have termed the sanctuary's material "landscape." The transmission of the non-semantic procedural "knowledge" of a religious act can be viewed as a kind of material exegesis, a decoding by the material objects and settings of the memory of the scripted ritual actions of the past.

If, in Whitehouse's analysis of the interaction of the two modes of religious memory, we substitute material for human agency and procedural for semantic knowledge we can catch a glimpse of the mutually-reinforcing character of repetition and stimulation in sacrificial ritual. While repetitive modes of ritual serve to "ensure the stable reproduction of a substantial corpus of knowledge[,] [t]he interpretive framework becomes frozen...so that the process of revelation is no longer a matter of creative invention, but of creative

⁴⁵ Chalupa (2009:117) argues that ritual exegesis of the type emphasized in cognitive science theories of religion was "relatively unimportant" in Roman state religion since what was important in a ritual was not the rationale behind its performance, not the 'theological' explanation of the act, but rather the precise preservation of exact procedure of the ritual, a ritual derived from the exact procedural knowledge of the religious action.

application of previously stipulated principles” (Whitehouse 2004:6). The two modes work in tandem over time: repetition guarantees the preservation of the details of ritual; spontaneous exegetical reflection, the sudden insights into ritual meanings, provides the motivation to continue and transmit the ritual across generations. The material version of this joint operation can be seen at all the sanctuaries examined in the previous chapters but most particularly at the altars at Lavinium.

Lavinium: Altars as Agents?

In what follows, I would like to reconcile, in detail, the cognitive science of religion notion of agent as a postulated super-human entity with what would seem to be its ontological opposite, the concept of agent as an extra-biological, empirically-attested material object. In proposing this conceptual and terminological alignment, this movement from spirit to mind to matter, I would like to suggest that we can attribute a sort of “agency” (of the type described by, for example, McCauley and Lawson 2002) to the altars of sanctuaries themselves. Violations of ontological status are even better recalled than mere deviations from the norm.⁴⁶ Such violations help to make the experience of a setting more salient; similarly, studies of long term recall show that the memory of such violations is more distinctive and much better preserved than other memories of material experience (Boyer 2001: 80), particularly when reinforced by more frequent and ordinary reminders, such as emplaced ritual practice (Hupbach 2007:47). Perhaps then the altars in such public sanctuaries as have been examined in this dissertation, like the altars at Lavinium, can actually be thought of as functioning

⁴⁶ See the discussion of the “cognitive optimum position” in the Introduction to this dissertation.

reflexively, calling attention to themselves as agents on occasions of high arousal, low frequency monumental spectacle.

In this marriage of cognitive models of religious memory and material memory, perhaps the physical altar itself can be thought of as occupying some ontological middle-ground (when experienced, say, in full operational mode, including the altar together with the fire and smoke of sacrifice rising to a specific divinity). The altar itself *actively* functions as an interface between the other-world and the world of experience and memory.

As we have seen above, cognitive science theories of ritual (and of how the memory of ritual is preserved by the mind) rely on conceptions of “agents” and “agency” entailing two sorts of distinctions: one between human and culturally postulated superhuman (CPS) agents and another between instruments and agents. In the scenario of the special patient/instrument ritual, an instrument becomes endowed with CPS agency *by* a human agent and such an empowered instrument is intended to be used by a human agent. In ascribing agency to the altars, I prefer to distance myself from a related trend in recent archaeological and anthropological discussion of the “agency” of archaeological artifacts (see Gell 1998). I do not see the usefulness, for my purposes, of suggesting that inanimate artifacts can be endowed with consciousness, anthropomorphized. But, I do believe and hope to have argued convincingly that objects and settings, though not anthropomorphic in the sense of possessing consciousness, have a distinct sort of authority which actively defines and crafts the character of sacrifice. My concern is not with hypothesizing how contemporaries might have interpreted whatever awareness they may have had of material agency. Rather, my goal is to construct a view of the archeology of ritual that

takes as its starting point a community's local response to the authority of materials. The extended mind is not the extended soul. In my view, then, the altars at sanctuaries, conceived by the contemporary Romans as associated with a specific god and as the location where the gods could mediate their interactions with humans, could, of themselves, possess the power to act as a certain kind of especially privileged CPS agents (as objects), occupying the top position in a hierarchy of such agents capable of bridging the gap between human and divine, monumentalizing both setting and spectacle, conferring on ritual a heightened authoritative, memorable, imagistic character.⁴⁷ While the priests actually officiating at the sacrifice are also, in the cognitive sense of the term, agents, the personnel necessarily changes over the generations. The altars at each sanctuary, on the other hand, largely do not; though adapting to changes of fashion in decorative styles, the altars remain more or less invariant in their architectural form, materials, and orientation.

While the concept of material agency does not entail conscious external entities, the approach does not exclude making use of such entities if they already exist. When animate interpretations of material agency are available, as in anthropological studies in the cognitive science of religion, or when such meanings may be inferred from

⁴⁷ An observation about Indian Vedic sacrificial belief might be apt here. During an animal sacrifice, the fire on the altar itself is a god, *agni*, the fire then acting as a "special-agent" in McCauley and Lawson's schema. For references to Agni (fire), see RV (Rg Veda) I.12, II.8, IV.4. These ritual hymns directly invoke fire/Agni and ask him to consume the offerings. For example, a passage from RV I.12 is quoted here: 6. *By Agni Agni is kindled (or, by fire fire is kindled), the sage, the master of the house, the young one, the bearer of oblations, whose mouth is the sacrificial spoon.* / 7. *Praise Agni the sage, whose ordinances for the sacrifice are true, the god who drives away sickness.* / 8. *Be the protector, O Agni, of a master of sacrificial food who worships thee, O god, as his messenger.* / 9. *Be merciful, O purifier, unto the man who is rich in sacrificial food, and who invites Agni to the feast of the gods.* / 10. *Thus, O Agni, resplendent purifier, conduct the gods hither to us, to our sacrifice and to our food* (translation taken from the Sacred Books of the East series).

representations or anthropological analogies, questions of the authority of materials may be usefully approached from their metaphysical side.

The supernatural agency preserved in the material of the altars studied in this dissertation, perhaps originally instituted by an “enabling ritual” (or in this case, a foundation ritual), persisted for more than at least two centuries despite changes in the political character of the community or possibly even in religious ideology. Perhaps it can be better said, therefore, that it is not the ritual official but rather the altar itself that prescribes and triggers the procedure of sacrifice. Perhaps the altars themselves, as CPS agents acting on behalf of a specific god, function in effect as masters of ceremony at the performance of the sacrifice being scripted, repeated, encoded in materials, and memorialized. And if the altars are themselves the agents in the special agent ritual, if they are acting on behalf of immaterial CPS agents, then perhaps we can use this observation to help reconcile conflicting views in the endless debate over the role of sacrifice in the relationship between gods and humans (Rüpke 2005, 2007:143-145) (See Chapter 4). If the quest for resolution of these issues must persist, then it may be useful to regard the total materiality of sacrifice, and not simply the sacrificial animal, as the mediator of these relations – the table and its setting as well as the ephemeral question of what’s on the menu.

Altars, then, are special two-way agents and, if we have no need to invoke the full theory of active agency, we may usefully view these sacred monuments in their alternate, passive-agency mode: as materials entailed in the way memory is processed by actual human minds. Or, with supernatural agency assigned to the altars, the monuments acting

for deities, the altars switch roles, becoming more usefully viewed as counterintuitive agents than as counterintuitive artifacts (Whitehouse 2009:3).

Memorability and agency through placement: Linear Arrangements

Each altar itself does not only act individually as a separate agent influencing the ritual, but collectively, in their monumental arrangement, they also actively inform and inscribe the sacrifice. At Lavinium, the progressive (and sometimes regressive) construction of a linear array of altars over a period of three centuries reflects a careful and calculated preservation and curation of the monuments, structures having the power to convey a specific material memory of past ritual. The entirety of the layout, multiplicity, and physical experience of the Thirteen Altars would have actively imposed a consistent character on the ritual sacrifice itself at which altar the rite might be occurring. The row of altars at Lavinium, although rare in Roman world, has some parallels in Central Italy. Comparisons can be found at the more or less contemporary linear arrangements of altars at Macchiagrande (with six altars)⁴⁸ outside of Veii, Posta di

⁴⁸ Slightly to the north of the road which runs along the entire length of the plain occupied by the city of Veii at its greatest extent, on the peak of a hill, overlooking a crag, sits the site of Macchiagrande. The site, located inside the city walls, dates to no earlier than the 3rd century B.C.E. (dated by the inscriptions and the greater part of the finds), that is, the earliest Roman presence in the area; however, it was most likely located on an older site (though not of an Etruscan cult), as is attested by a architectonic fragment whose color and style dates to the 5th century B.C.E. (Stefani 1922; Torelli 1999). Five of the six altars excavated are embellished with bases and coverings, while the sixth is a simple parallelepiped. On the faces of five of the altars are traces of dedicatory inscriptions engraved directly into the tufa matrix: Dis deabus, Victorie, [M]inerva, Apoline, Ive[L]ib(e)rt(ati) (Torelli 1999; CIL I² 2628-32). Torelli 1999 mentions an additional altar at the site with the dedication to Pitumno. He cites only his personal correspondence with Dr. F. Boitani Visentini. Evidence of votive activity attests to the sacrality of the area. Finds include a miniature, square, unembellished altar, with two small round grooves at the angles of the upper face (See Chapter 3 on votives), a fragment of an offering table decorated by a band molding, and numerous ex-votos (Stefani 1922).

Mesa on the Via Appia (with six altars),⁴⁹ and the Sacred Area of the Republican Temples at Ostia (with four altars). Each of these sites has a row of altars that in various ways calls to mind the Lavinian sequence; but each abstains from the earlier sanctuary's more elaborately articulated, uncustomary, U-Shaped altars and settles instead for smaller and squatter rectangular forms more crudely constructed in a lower-grade tufa.

Unlike the altars at Lavinium, the rows of altars at Macchiagrande and at Posta di Mesa do not appear to be constructed over multiple phases but rather seems to be single construction projects. Therefore, at Macchiagrande and Posta di Mesa, it is not the iterative reconsolidation of a paradigmatic form that characterizes the preservation and transmission of memory, but rather it is the singularity and distinctiveness of the synchronous, consolidating experience of the monumental multiplicity of the row of altars that creates something strikingly memorable, a “cognitive optimum” (see Introduction chapter).

⁴⁹ An array of altars, each dedicated to a different divinity can also be found at the site of Posta di Mesa, at the 52nd mile marker of the Via Appia. Unfortunately, the exact location of the altars is unknown but they have been described as being opposite the tomb of Clesippus on the mound of earth opposite the canal which runs along the Via Appia (Solin 1999: 397-400). Dating to the 4th-3rd century B.C.E. (Coarelli [2005]), the six altars were each embellished with a *lamina* dedicated to a specific deity. There is one to Apolenei, a rare form also found on one of the cippi from the *lucus Pisaurensis*, dated probably not later than the mid 3rd century B.C.E.. There is Cererei, a form with an *ei* ending that can be compared to the inscription on the *lamella* dedicated to Ceres found at Lavinium: *Cerere auliquoquibus/ Vespernam poro*; the example from Posta di Mesa is most likely late 4th century. There are also: Dianai, Diovei, Herclei, Neptuno, and one that reads L. ALBIO L.F/ HERCOLE/ DONO DEDET (perhaps belonging to an individual *donarium* erected during a later time). Coarelli (2005:184) dates this last inscription to the heart of the 3rd century B.C.E., noting a hooked *l*, an *r* with the lower shaft short and bent, and an *o* smaller than the other letters. Furthermore, the nominative in the second declension with the *o* ending (and not the *os*) can be dated to around 220 B.C.E. And the dative of *Hercole* is different from the dative of the same god (*Herclei*) on the *lamina* which appears to be perhaps mid 4th century B.C.E. (as compared to two Praenestine cistae). Each of the six *lamella*, all of the same size, relates the name of a divinity in the dative form; the dedication by L. Albuius to Hercules also assigns the dative form to the divinity. At the edge of each *lamella* are two holes for the attachment of these plaques to the altars. Coarelli (2005) states that there were likely more than six altars belonging to this complex and that the sanctuary, housing cults of a particular plebian and urban character, was connected to the period of Roman conquest.

At each of the sanctuaries examined in this dissertation, including the Sanctuary at Lavinium, it is not so much the greater or lesser number of altars that may happen to be in each array or knowledge of their historical sequence of construction, but rather it is the altars' monumental iterative replication that compels immediate notice, the sequential architectural organization of space suggesting at once both the valorization of repeated attention to ritual as well as its diversification.⁵⁰ The altars themselves are individually recognizable monuments, close but distinct variations on a theme, but their monumental iteration is clearly a deviation from the model of the altar as a free-standing counterpart of a spatially enclosing temple edifice. In such a unique setting of resonating monuments, the singularity of a sacrifice at one of the Lavinian altars would have been emphatic. Unlike, for example, the altars at Largo Argentina, the importance of the sacrifice or sacrifices that occurred at the Lavinian altars would have been heightened by their independence from visual obstruction and envelopment. The linear iteration of altars in a temple-less sanctuary serves as a device for directing attention to a view of ritual action as a repeatable, immutable, materially-continuous practice – as an enduring end in itself rather than, as we usually tend to look at such things, a mere pragmatic means to some precisely delimited goal, a transaction with the otherworld that some authority has interpreted for us as the “meaning” of the sacrifice.

Just as the violent spectacle and communal audience may have impacted the memory of sacrifice, this architectural material departure from everyday experience can be seen, in cognitive terms, to stimulate episodic (i.e., particularized rather than normative)

⁵⁰ The seeming uniqueness of this kind of arrangement of multiple altars fits closely with the theory of a “cognitive optimum” (see Introduction chapter).

memory, the altars functioning in an imagistic (i.e., associated with distinctive experience rather than repetitive experience) mode as virtual agents in a special agent ritual, creating a high-arousal low-frequency ritual event out of the elements of frequent, familiar everyday sacrifice. In the cases of the altars examined in this study, opportunities for variation and even the possibility, perhaps, of the duplication of ritual at alternate orientations, would increase the likelihood of the production and transmission of a salient memory that might be cognitively tagged.

Memorability in objects: votive deposits

At Lavinium, the evidence for periodic conservative extension of this extraordinary altar complex and the existence of remains indicating a substantial level of votive activity throughout the life of the sanctuary (see below) are fully consistent with Whitehouse's and McCauley and Lawson's requirement (2002:107) that religions must include rituals with sensory pageantry in "carefully timed doses" if they are to be transmitted and effective over time. In the late 1960s, Castagnoli carefully excavated and documented the area around each altar, recording the finds that could be associated with each structure based on the placement of the artifacts in the strata and in the foundation layers (1975). Such a strategically planned and detailed excavation record allows us to study the finds related to each specific altar. By distinguishing patterns and consistencies within the finds, noting certain privileging of altars through select artifacts, we can perhaps begin to approach an understanding of the details of the processes by which the encoding and reactivation of the memory of ritual might incorporate the experience of a material monument.

If it were purely the untouched nature of the place, the landscape of the sanctuary or the overall monumental character of the assemblage of the thirteen altars, that determined the type of ritual enacted at the altars, then the artifacts around the altars, the materialization of ritual, would arguably be uniform, controlled, and reflective of the fixed, unchanging setting, the ritual objects themselves and their disposition dictated by the architectural setting. Some variations might be expected, especially over time, with materials related to performance styles and techniques, modifications in ritual practice, or the use of individual artifacts changing over the three centuries. But allowing for fashion, the majority of the finds would most likely fall into the same range of basic forms, the same types of representations, the same ritual implements. Instead, specific and more exceptional types of dedications seem to be linked to specific altars or groups of altars and not to the more general setting. The presence of the more unique objects, although dispersed in no clearly discernable pattern, but nevertheless evident only at certain altars throughout all phases of construction, suggests some particularly valorized category of repeated ritual practice, some method of marking specialized or highly meaningful practices, distinguishing such procedures from the more ordinary practices represented by the more typical finds (the ceramics and the ex-votos, for example).

Perhaps these hypothetically exceptional practices, suggested by the privileged distribution of artifacts, can be seen as an attempt to recall, reiterate, and memorialize previous models and modes of ritual. Perhaps one altar was seen as preeminent and its assemblage of ritual objects set a sort of precedent, a model, a standard, an authoritative example which was repeatedly emulated and re-enacted at other altars over the centuries.

Votives, fine ceramics (imported and local), bronze or terracotta statuettes, and tiles were found at many of the altars.⁵¹ The oldest concentration of votives comes from a deposit associated with the first phase of the altars.⁵² Other notable concentrations of votive material are: from the east side of altar VI; from a deposit, walled by tufa blocks and thought to be a foundation deposit near altars X and XI (Castagnoli 1975:34,70); to the north of altar V; and west of the plateau of altar IX. In what follows, I will briefly discuss and survey the ceramic finds and other votives associated with each phase to give a sense of the artifact assemblage at the site. The ceramic belonging to the oldest strata was impasto, bucchero,⁵³ levegated clay (in minimal amounts), and Etrusco-Corinthian ware (one alabastron has been documented). Of the bucchero vases, the open forms (in both miniature and full-sized vessels) were the most common – kantharoi, calyces, bowls with a simple molded border.⁵⁴ Less common were kylixes, oinochoai, and olpe (all commonly found in miniature scale). These types reproduced, in fine and more costly ceramic, models from the private sphere (Castagnoli 1975:86). The most common vessel forms made from depurated clay are basins, large jugs, and plates (imitating Corinthian

⁵¹ What follows here is not intended as a comprehensive survey of the finds but rather offered to give a sense of the range and types of material related to each altar and to the various chronological phases of the sanctuary. For a full, comprehensive report see Castagnoli (1975).

⁵² According to Montini (1959:16), this material comes from a deposit belonging to a temple that has yet to be found but was originally a short distance from the altars but was separated by a movement of the Earth's plates and stopped opposite the line of altars. Without further evidence, this theory seems highly unlikely and unfounded.

⁵³ The presence of bucchero is most abundant in stratum D.

⁵⁴ Around altar XIII and VIII, for example, many fragments of miniature bucchero vessels were found whose miniature size and form imply a votive function. A great many of the ceramics were in forms for cooking, mostly *ollae* (see Chapter 4, pp. 324-325). Olle were found in association with nearly all the altars on the site. Associated with the original construction of the archaic altar under altar IX, for example, were a large quantity of bucchero fragments, many fragments of imported ceramics (for example, Ionic and Laconian cups), fragments of a lekythos, of an Attic *deinos*, and fragments of thin impasto ware.

forms).⁵⁵ Two-handled cups, *ollae*, amphorae, and vases of large dimensions were the most common vessel forms found in impasto ware (very few examples of miniatures are made from impasto ware).⁵⁶ From the archaic period on, the full-sized jars and bowls (sometimes serving additionally as lids) make up a large percentage of the vessels made of ordinary ware.⁵⁷ In the later Republican strata, the vessels (mostly full-sized) were made of “*ceramica commune*” – impasto, depurated clays, black-glaze ware, over-painted black-glaze ware, *petites estampilles*, and *Genucilia* plates.⁵⁸

Of the rarer non-ceramic finds, ash, carbon, or bones (i.e., organic evidence of sacrifice) were only recorded at altars VIII, IX, and X (those associated with altar IX are related to the archaic level; those of altar VIII to stratum C, pertaining to the first phase of the construction of the altar’s foundations, that is, belonging to the oldest phase of the sanctuary).⁵⁹ Bronze statuettes were found at a few, apparently privileged altars: around altar I, a small bronze of Veiovis⁶⁰ type (Castagnoli 1975:10-12; 357-359) and a small

⁵⁵ The introduction of levigated clay in any significant quantity can be associated with the local employment of the potter’s wheel (Nijboer 1998:137).

⁵⁶ According to Nijboer (1998:138) it is likely that the workshops which produced impasto ware made tiles and some vessels (such as *teglic*) and eventually even made votive objects. It is possible that the terracotta tiles, cooking jars, lids, and other kitchen and table wares were produced *en masse* from the 7th-4th century B.C.E. (Nijboer 1998: 138).

⁵⁷ Around Altar IV and Altar III, for example, were fragments of large bucchero and impasto vessels (cups, vases, kylices). Later strata associated with Altar II, III, and V revealed fragments of black glaze ceramics, thin impasto ware, and coarse impasto ware.

⁵⁸ Around Altars VI and VII, for example, were numerous votives and fragments of bucchero, olle, imported ceramics and black glaze ware. Over-painted black glaze ware was found around Altar X, for example. Sporadic finds of bucchero and impasto fragments were found, for example, around Altars X, XI, and XII.

⁵⁹ Unfortunately, to my knowledge, no faunal analysis of the bone has been completed at this point.

⁶⁰ Smith (1996: 201-202) states that Vediovis (an alternate spelling for Veiovis) may have been closely connected with the Julian gens. Weinstock (1971:4-12); CIL 1:807=XIV 2387=ILS 2988.

bronze of a kore; around altar II, one small bronze statuette, around altar VI, a base of a bronze statuette, and a bronze kore; around altar VII, a bronze figure; around altar VIII, a small bronze statuette; around altar IX, a couple of small bronze kouroi; around altar XI, a small bronze kouros; and around altar XII, three small bronzes. Coins were recorded only at altars V, VI, IX, and X. Whole or fragmentary *lamellae* (bronze sheets commonly used for inscriptions)⁶¹ were documented only at altars III, IV, and between VIII and IX. Jewelry was recorded at altars IX (a silver ring and a bronze ring) and III (a part of a bronze fibula). Architectural antefixes were recorded at altars IV, IX, and X. Tanagran statuettes were found at altars IX and X.⁶² Numerous ex votos were found throughout the excavations of the altars. Just to name a few examples, they were found in the shapes of heads (for example, at altar I, in between altars IV and V, and at altar V), as animals (for example, one was found at altar V, a dove was found at altar X, and in total were found: 18 cows, 1 horse, hooves of a quadruped, 4 unidentified quadruped animals, 4 sheep, 1 ram, 1 wild boar, 2 suckling pigs, 3 birds, 3 seals, 2 swans. See Söderlind 2004), and various body parts (for example, at altars V and IX) (Castagnoli 1975).⁶³

Examples of each kind of the more distinctive artifacts or remains listed above (coins, *lamellae*, jewelry, bronze statues, weapons, antefixes, ash, bone, and carbon) were

⁶¹ See the discussion below of the altars at Posta di Mesa and for the tradition of naming deities on an altar.

⁶² According to Nijboer (1998:137-138), during the 5th century B.C.E. a local coroplast workshop was established at Lavinium that made terracotta sculpture (including life size statues) and in the 4th century B.C.E. this workshop was particularly active. Nijboer assigns the terracotta votive statues from the Sanctuary of the Thirteen Altars to belong to this workshop.

⁶³ The largest collection of anatomical votives found in the immediate area of Rome comes from the Sanctuary of the Thirteen Altars at Lavinium. At Lavinium, the collection of anatomical votives includes 36 half-heads, 7 breasts, 10 ears, 1 tongue, 3 male torsos, 2 buttocks, 102 arms/hands, fingers, 207 legs/feet, 45 phalluses (10 pre-pubescent), 2 female genitalia, 17 uteri, and 1 bladder (Thomasson 1961:123; Turfa 2004: 364-365, no. 326).

discovered at altar IX, the early sixth-century successor to the “archaic” altar lying beneath. Aside from the normal finds of terracotta votives, ordinary black-glaze ceramic wares, and tiles, the excavations around altar IX produced (as discussed in passing above), in addition to a large amount of bone and ash, a patera (a sacrificial bowl),⁶⁴ extremely fine miniature ceramics, an inscribed cup, bronze *kouroi*, an iron spear point, a silver ring, coins, and a votive model of a temple (a quite intriguing find since as of yet, there is no evidence for a complementary monumental temple structure(s) in the area of the altars). In addition to these finds, one of the only two full inscriptions⁶⁵ associated with the sanctuary of the thirteen altars was found between altars VIII and IX; this inscription, written in an archaic Hellenized Latin, was to Castor and Pollux (Castagnoli 1975:441-443). The stratum in which this *lamella* was discovered postdates the original construction of altar VIII and therefore may be associated with the construction of altar IX (or the later rebuilding of altar VIII). The continued focus of attention on altar IX over three centuries creates the leading figure in a sort of “master narrative” of ritual practice, a mythical history that “stresses the continuity of the past and present...the past is moved forward closer to the present” (Alcock 2002:16; Bernbeck et al. 1996: 140). This clear privileging of altar IX can be seen to engage the materiality of memory, a memory that is “deliberately designed” to be intimately linked to the physical structure of the altar (Alcock 2002: 28).

⁶⁴ Fragments of additional paterae were also found around Altar X.

⁶⁵ The other inscription was found in the general area of the altars, also inscribed on a *lamella*, and is thought to address Ceres (though there has been much debate over the meaning of this inscription). See Castagnoli (1975:444) for bibliography.

The memory evoked by altar IX, the memory inscribed or imprinted, so to speak, onto the physical monument of the altar itself, the memory that subsequently encompasses the form of the other structures in the sanctuary, does not originate in the overall topographical setting of the sanctuary of the thirteen altars but is rather, to some extent, linked to the specific circumstances of the placement of altar IX. Perhaps, therefore, the texture of J.Z Smith's discussion of the mutually constitutive relationship of place and ritual, or of Catherine Bell's concept of ritual creating an "arena," needs to be more layered when considering the "topography of remembrance" (Bell 1992; Alcock 2002:7). It may not be simply the general, panoramic considerations of landscape and monumental assemblage that invoke the memory of ritual practice, but rather, first and foremost, the specific placement of an individual structure, the material interaction of monument and site, its seating, in an almost literal sense of the word, that supports cultural and religious reminiscence and determines the shape and character of the enacted sacrifice. At Lavinium, the specificity of the location and orientation of altar IX, and not the general topography of the area, is what generates and channels the sacrality of the sanctuary and the type and form of the ritual itself.

Continuous Altar Building as a Process of Reconsolidation

Moving from the particular architectural and artifactual material evidence at Lavinium and the discussion of how both the setting and the objects at this site respond to sacrificial performance while at the same time actively dictate the character of the ritual, we now need to explore how the material memory embedded in such a material matrix (at Lavinium as well as at other sanctuaries already examined within this dissertation) can

persist and amplify over centuries of use. In what follows, I will argue that at Lavinium, the continuous and careful attention to the replication of altars and the persistent additions to the space can perhaps be understood as a material manifestation of neurological models of the process of memory reconsolidation (Hupbach 2007; Morris 2006; Sara 2000, for a discussion of criticisms of the model; Tronson 2007). According to neuroscientists, new memories are stabilized through a process called consolidation. Over a period of time, when these memories are re-activated, they become unstable and require an additional consolidation phase (reconsolidation). Reconsolidation is a continuous and constructive phase, allowing for the manipulation and modification of pre-existing memories as well as for the incorporation of new data in previously consolidated, more stable memory. The reconsolidation process is a reiterative process and leads to a strengthening of the memories over a long period of time (Tronson 2007: 265); the reactivation of the memory confirms that the memory is still relevant.⁶⁶

Moving from mind to matter, the successive construction phases at Lavinium can perhaps be read as a process of reconsolidation, with the iterative addition of altars recalling and relating to, yet elaborating on an earlier memory embedded in the physical experience of the site, a memory materially manifested in the stone of the first, archaic altar. Similar to the mental processes involved in the reconsolidation phase, when new altars are built at Lavinium the construction simultaneously reactivates and mimics a previous model and incorporates new data (alterations of molding, steps, even of

⁶⁶ It would seem that routine high-frequency ritual could reinforce the episodic memory of a one-time ritual and facilitate necessary adjustments to these memories over time. Hupbach (2007: 51-52) notes that modification of an episodic memory, reliant on its preceding reactivation, undergoes a time-dependent process of reconsolidation that is dependent on reminders, or subtle cues, which can trigger constructive processes incorporating new information while still building on prior experience.

orientation), allowing the material memory of the sanctuary to develop, change, and remain continuously active and never static.

These processes of reconsolidation, allowing for a better understanding of how memories are recalled, built upon, and kept dynamic even once they have already been stored, stabilized, and consolidated, help to explicate the complicated relationship between the material memory of a once manifest altar that now remains buried and hidden, and the reiteration and preservation of that experientially reconsolidated altar. Such a dynamic interplay can be seen at the series of altars at Largo Argentina. The privileging of one primal altar at Lavinium, the careful attention to preserving both the structure and the rituals associated with it over at least three centuries, finds a parallel at Largo Argentina. At Lavinium, the successive constructions of the altars create an extensive, persistently expanding horizontal assemblage, where each structure necessarily recalls some earlier monument in the complex; the more recent altars do not supplant or negate their predecessors but rather extend their range, creating a striking visual parade of monuments. At Largo Argentina, by contrast, a different manifestation of material memory can be seen in the succession of altars in front of Temples A and C. Instead of the lateral array of altars at Lavinium (and at Macchiagrande), at this sanctuary the disposition of structures is vertical – the new altars are constructed directly on top of each other, burying the previous monuments but simultaneously preserving their memory with later altars carefully attending to the preservation of design, mimicking their predecessors in form, molding, orientation, and material. With the altars of Temples A and C at Largo Argentina, built in the same location and, certainly in the case of the altar of Temple A, sharing substantially the same dimensions and plan over centuries of

iterated construction, not only are the monuments themselves receivers and transmitters of material memory, but so too is their particular setting, assigning an importance to place evocative of Cicero's insistence that the order of places preserve and privilege the order of what they represent (see above). Even if buried, these earlier altars are not forgotten – their materials are physically incorporated into the later structures (Temple A).

At Lavinium and Largo Argentina, we see two different methods of preservation and two distinct ways in which material memory can be embedded in a sacred space, two different ways in which the altars themselves continue to shape the conservative form of ritual. At Lavinium, the earlier structures are preserved and incorporated – with seeming deliberation and therefore, perhaps, with some accompanying recognition and interpretation of their significance as agents of memory – into the arrangement of the later altars, with the old persisting alongside the new, prominently marking a visual connection and path between past and present; at Largo Argentina, the newer constructions are directly superimposed on the previous monuments, seemingly renouncing a visual link to the past.⁶⁷

But the apparent differences in the types of material memory present at Lavinium and Largo Argentina are not entirely irreconcilable. The successive altars at Lavinium are not, in fact, recalling the first visible altars on the site (altars IX, VIII, and XIII), but instead are mimicking the earlier “archaic” altar buried under altar IX. In form, molding, orientation, and material, all thirteen altars recall this first, sacred, buried structure. This

⁶⁷ Perhaps the two different types of material memory at Largo and Lavinium can be thought of as paralleling the two different types of memory connoted by the words *Gedächtnis* and *Erinnerung* discussed above in footnote 13, or, in the context of Pierre Nora's temporal and spatial continuities of memory, as one distinguishing something in the past, a tradition, and the other something active, inclusive and participatory.

precedent for superimposing a newer altar directly above an earlier structure occurs again at Lavinium in the last phase of construction in the late 4th century B.C.E., with a new altar constructed over the 6th-century altar VIII. The vertical sequences evident in the successive constructions of altars VIII and IX at Lavinium therefore find close parallels in the series of successive altars in front of Temples A and C at Largo Argentina.

The examples at Largo Argentina, with the reuse of the earlier altar's material in the construction of the later monument, and at Lavinium, where the "archaic" altar under altar IX is continually recalled and recreated over the following three centuries of construction, highlight the fact that, even unseen, the material memory of a buried structure in fact is not forgotten but persists and prescribes the model for the later constructions; out of sight does not necessarily mean out of mind.

With the examples of Largo Argentina and Lavinium, where the concealment and burial of altars prescribe the form and location of later monuments, we are forced to rethink the altars at Ardea. The two altars in the forecourt of Temple B at Ardea privilege the preservation of memory over current styles or architectural constraints. The U-shaped form of one of the altars, an imported Greek architectural type popular in this area in the 6th and 5th centuries B.C.E., is rarely first introduced to a sanctuary in late 4th or 3rd century B.C.E. Latium. The presence of this form at Ardea in this later period may be evidence of an attempt at mimicking the contemporary altars at Lavinium (which are themselves modeled on the earlier, archaic style of the very first altar on the site). Or perhaps this late 4th – early 3rd century altar at Ardea is instead intended to recall an earlier structure on or, more likely, below the same site; such a placement is in tune with the practice of vertical superposition found, as we have seen, at altar IX at Lavinium and

at the altars in front of Temples A and C at Largo Argentina. As was discussed in depth in the previous chapter with its focus on orientation, the off-axis placement of these altars at Ardea might suggest the presence of similarly oriented earlier, sacred structures on or below the location of the later altars.

Perhaps then, the question is not, as might be suggested, whether the buried altars at Largo Argentina, Lavinium, and perhaps Ardea are emblematic of the process of forgetting or of remembering, but rather whether the vertical iterations of the altars are reflections of active or passive memory.⁶⁸ The relationship between the buried altars and their superimposed successors could even be a reflection of “preservative forgetting,” something reversible or a halfway mode of forgetting (Assmann 2008:98). In her article “Canon and Archive,” Aleida Assmann draws a distinction between actively circulated memory that keeps the past present (canon) and memory that is passively stored and keeps the past in the past (archive). The phenomenon of the burial and replication of altars investigates in this dissertation reflects the processes of both archive and canon. The altars at, for example, Lavinium and Largo Argentina, have undergone a “rigorous process” of selection; they have been “canonized,” authoritatively sanctified, and set apart from other monuments in a special way (Assmann 2008:100). The making of such distinctions, following from the authority inherent to the structures themselves and their specific characteristics (whether their orientation, their style, their miniature replicas) governs the form and procedure of sacrifice over centuries of ritual performance. And, the altars, canonical in form, outlive generations. But the material memory present in the

⁶⁸ Processes which Junker-Kenny (2008:208) tells us are “not in simple contradiction” but are “mutually enabling and constitutive factors.” For Nora (1989:8), memory is active, “memory is life...in permanent evolution, open to the dialectic of remembering and forgetting.”

altars also bears some similarities to the characteristics of Assmann's passive memory, the archive; while the altars have lost their original place, they have at the same time been materially preserved, almost "cataloged," included in a new context that gives them a second life and prolongs their existence (Assmann 2008: 103). The altars, like archives, create a "meta-memory, a second order memory that preserves what has been forgotten" (Assmann 2008: 106).

Additional Markers

As both representatives of active and passive memory, as structures that continue, even if buried and out of sight, to define and determine the form of both subsequent altars as well as the enacted sacrifice, to preserve what had the potential to be forgotten, the altars examined in this dissertation are the pivotal monuments in a sacred space which guide and inform future religious performances. But the individual altars do not, in themselves, act alone or even in combination; but rather through ornament and articulations of form, through more explicit material representations or texts, the architecture, dedications, inscriptions, and statues in the *temenos* heighten the sacrificial performance and are imprinted with their own, interconnected material memories. If we are to follow recent scholarship that speaks to the question of memory and sacred spaces, then sanctuaries become places where people remember other people who marked events earlier in that same space, as, for instance, altars with dedicatory inscriptions that explicitly imprint the donor's presence on the sacred space (Winter 2009). Such written signposts incorporated within the material matrix of an altar or other sacred structures verbalize explicitly the authority inherently residing in the material itself. For example, at

Largo Argentina, the inscription to Aulus Postumius on the altar of Temple C physically inscribes this consul's name onto a religious monument within the sanctuary, publically and demonstrably laying claim to a renovation of the sacred space (see Chapter 1 for more details). A similar assertion of sponsorship at the Sacred Area of the Republican Temples at Ostia marks the right *anta* of the Tetrastyle Temple : – [---] LEIUS L(UCI) F(ILIIUS) [---]ANUS, perhaps referring to C. Apuleius Decianus, the tribune of the plebs in 99 B.C.E. (according to Coarelli 1994:37; also, see Bloch 1953:299 n.65; Cébeillac 1971: 91ff.) (see Chapter 1 for more details). These inscriptions, linked to key events, recall the past and could even acts as “repositories” of the dedicator's family history in the public sphere, offering valuable cultural prestige in a way that written historiography could not – “much of this was memory, not the history found in formal texts” (Flower 2009: 68, 73). Together with the physical structures themselves, these monumental texts confer a supplementary – perhaps, extra-religious – authority, an added force to the surrounding, enacted ritual. By their very placement, these inscriptions serve not just as individual testimonies or personal dedications but rather the names themselves become monumentalized and sacralized, part of the material memory of the space itself, peripherally incorporated into all future rituals; these inscribed monuments create a message that is “emphatically one of shared continuity and tradition” (Flower 2009: 73). The experience of a ritual participant in such sanctuaries would be shaped by these dedicatory inscriptions, as “the *monumentum* controls and directs the viewer's thoughts as they move from the present to the past, then back to the present and into the future” (Jaeger 1997:18).⁶⁹ In the absence of a written liturgical doctrine of Roman religion,

⁶⁹ Varro L.L. 6.49 discusses the connection between the Latin words *monere*, to remind, and

these inscriptions, monumentally imprinted on the material constructions of cult, would have functioned as allusions to the past practices and meanings on which all later religious practices and meanings were believed to have been modeled. In many cases this would involve evoking the memory of a particularly unique ritual – a foundation ritual of the temple or altar, a one-time, non-repeatable, emotionally arousing religious event.

If dedicatory inscriptions on altars or temples' façades transmit memories of past practices and relate a shared history associated with a particular space, then so too must monumental commemorative statues, structures, or plaques function in a similar manner (the portable non-monumental dedications have already been examined in full in Chapter 3 with the miniature *arulae* from Largo Argentina). For example, at S. Omobono, a monumental expression of a sanctuary's interaction with communal politics is visible with the *donarium* of Marcus Fulvius Flaccus (see Chapters 1 and 3 for more details on the structure of the *donarium*).⁷⁰ While it is unclear what exactly may have been erected on top of this circular base, what deserves attention are not the decorative aspects of the monument itself or the particular and ephemeral political significance of its probable

monimenta, reminders: *Ab eodem monere, quod is qui monet, proinde sit ac memoria; sic monimenta quae in sepulcris, et ideo secundum viam, quo praetereuntis admoneant et se fuisse et illos esse mortalis. Ab eo cetera quae scripta ac facta memoriae causa monimenta dicta.*

⁷⁰ One might consider, as a possible comparandum, the 1st century B.C.E. statue of Gaius Cartilius Poplicola at the Sacred Area of the Republican Temples at Ostia. The placement of this half-manteled, nude honorific statue, having heroic connotations and divine attributes, prominently incorporates an important political and military figure of the city of Ostia into the sacred space, lending the area the character of an arena of inclusive public display. The place is simultaneously sacred, marked off from the other "profane" areas of the city, while at the same time actively serves as a social and political meeting space of the city, located directly on the road from the Tiber to the city center (Rieger 2004). The inscription on the base of the statue was altered several times during Poplicola's career (changing the number of times C. Cartilius Poplicola was duoviri, substituting *iterum* for *tertio*, and adding the cognomen Poplicola, inserted in the correct position determined by a normal onomastic formula). The headless statue, found near the Temple of Hercules, outlived, in some fashion, its immediate political purpose, revealing a continuing attention to and the recurring importance of the statue's inclusive civic and religious function.

statue, but the monument's calculated placement within the sanctuary and the civic implications of its preservation. The structure is placed between the two altars of the temples, on axis with the entrance of the sanctuary, its prominent location physically impacting the space, by altering the shape of the sanctuary, and influencing the way in which a ritual participant would interact with the area. Over 200 years after the construction of the twin temple sanctuary complex, the imposition of the structure readjusts and reconditions the material memory of the sanctuary, undoubtedly influencing the shape of a sacrifice enacted there. Unlike the repaving of Largo Argentina commissioned by Aulus Postumius and the erection of the altar of Temple C with his inscription (a renovation of a sanctuary that equally affected the entirety of the sacred space), this structure at S. Omobono does not change the entire sanctuary with monumental refashioning or construction, but instead superimposes itself on a pre-existing space, adding an additional layer to the memory of the area. With the construction of the *donarium*, a visitor to the sanctuary is now visually guided to this dedicated base; a priest standing between the antae of the altar of Temple A faces this structure while performing a sacrifice. Through words and through placement, dedications and commemorative monuments can help to translate, transmit, and also to alter and impact the material memory embedded in a particular sanctuary.

It is not by chance that each of the sanctuaries studied in this dissertation contains more than one altar and that in each case the multiple altars were in use for at least two centuries. Such a selection was deliberate on the part of the author. For in such contexts, in settings that are in continual use for a range of purposes, we can explore just *how* the authority residing initially in the earliest religious objects and spaces persists in the

crafting of the character of sacrifice long after *what* once was the meaning or purpose of the originating ritual would have been forgotten. In the particular case of the Thirteen Altars at Lavinium examined in this chapter, one can see an especially spectacular material example of how potentially monotonous material repetition can be finessed by means of monumental iteration into something arrestingly and memorably singular. Throughout this dissertation we have seen how an altar's constant attention to the extraordinary, its adamant refusal of the familiar, supplies the mechanism which preserves its idiosyncratic character and its power to determine human actions.

CONCLUSION

This dissertation has taken as its premise the local, site-specific character of Roman sacrifice. As we move away from the conception of a universal, unvarying ritual, we likewise need to ask who or what is determining the markedly local nature of these practices. Through exploring such larger themes as the organization and architectural phases of sacred space, the offering of terracotta votives or animals, the orientation and specific placement of altars, and the ways in which memory of ritual practice might usefully be conceived as stored and transmitted in the material of the altars, this dissertation has argued that the site-specific nature of Republican Roman sacrifice can be said, in a quite literal sense, to have been determined by the religious spaces and associated ritual objects themselves. I have argued for a more inclusive *landscape* of authority, one in which the physical context and material resources of religious activities establish patterns for the reenacting of sacrifice that, in turn, gain authority through the repetition of ritual. At each sanctuary examined, it became clear that the ritual objects and the sacred settings themselves served to craft and effectively localize the character of the experience of Republican Roman sacrifice.

At Ostia, Largo Argentina, S. Omobono, Ardea, and Lavinium, particularities of the sanctuary (setting, relations among monuments, orientation, and architecture) all substantially contributed to molding the localized character of the enacted sacrifice. The

ritual at each sanctuary was integrated with and responded to its larger material and topographical setting and to its logistical and technological infrastructure. In taking this view of the evidence and in arguing for its cogency and broad applicability, this dissertation has moved away from considering Roman religion and sacrifice from the traditional intellectualist perspective, in which these activities are a manifestation of a doctrinal, belief-based mentality. Instead, sacrifice is viewed as a highly particular and valued manifestation of the involvement of human behavior with material culture, as a structured individual and communal experience in the material and physical world. The principal religious practice of the Roman Republic, communal animal sacrifice, did not associate itself with the kinds of doctrines and beliefs that serve as the basic objects of investigation in traditional religious studies. The theories and methods prevailing in these disciplines have deep roots in the study of Religions of the Book and, until quite recently, scholars of religion have focused overwhelmingly on how a religion is understood by its practitioners. Whether the study is anthropological or historical, it is the meaning of actions rather than the actions themselves that have most concerned these investigators. The study of a religion like that of the Roman Republic, a religion of practices that demanded little in the way of an understanding of those practices, calls for a distinctly different and varied set of organizational concepts and research procedures.

New Perspectives

In conceiving of Roman sacrifice as a human behavior involved with material culture, as an experienced action, this dissertation has relied on a variety of theoretical approaches and frameworks appropriate to analyzing and explaining the ways in which

sacrifice is experienced as a remembered action repeated in the present, an action shaped and crafted by its material setting and ritual objects. Chapter 2, using theories borrowed from phenomenology, cognitive science, and landscape archaeology, argues for a greater liberality in the interpretation of the importance of boundaries both inside and outside the *temenos*, showing how the successive constructions in the Sacred Area of the Republican Temples at Ostia interacted with each other, impacting and redefining the procedure of sacrifice over centuries of use. With theoretical approaches to mimesis and miniaturization from art history, prehistoric archaeology, anthropology, and semiotics, Chapter 3 sets the miniature terracotta altars from Largo Argentina in their larger architectural context, in a dynamic interplay with their monumental archetypes. Chapter 4 approached the faunal remains from S. Omobono, and more generally the role of sacrificial meat in Republican Rome, with the propositions of reciprocity, meat distribution, and butchery borrowed from the fields of economics, religious studies, and zooarchaeology. Chapter 5 relies on the tenets of calendrics, astronomy, and agriculture to provide insight into the precise orientations of the altars at Fosso dell’Incastro at Ardea, the Sanctuary of the Thirteen Altars at Lavinium, and S. Omobono in Rome. The final chapter of this dissertation moves into the mind, employing cognitive science theories of memory transmission in ritual to help make sense of how the memory of the repeated experience of sacrifice might leave its mark not only in the minds of its participants but on the materials of the sanctuary.

While a seemingly diverse, eclectic selection of theories, drawn from different disciplines and different scholarly traditions, these approaches have effectively offered a way to begin to understand the experience of Roman sacrifice as a ritual grounded in the

material world. Through each chapter, through each case study examined, the primacy of the sacred landscape in determining religious authority has been consistently highlighted. The concept of agency was not restricted to human and superhuman action: the altars, their specific placements, orientation, surrounding sacred constructions, and ritual infrastructure have been shown to have played the most important part in determining the character of the enacted sacrifice.

New Directions, Future Research

As with the assembling of a seemingly disparate yet careful collection of theoretical tools, the selection of sanctuaries examined in this dissertation was also the result conscientious deliberation. The different sanctuaries are bound through correspondences in period, regional setting, architectural arrangement (a multiplicity of sequentially constructed, permanent altars), and remains of organic and inorganic sacrificial deposits that could be associated with specific altars. All the sanctuaries are located in a specific, limited geographic region (with the farthest site only 27km from Rome); but this very proximity in sanctuary location serves to emphasize the inherent diversity of the sacrificial practices of neighboring sanctuaries. The significant differences of detail in the types of votives offered or sacrificial species selected, in the coordination between an altar's orientation and a stellar rising or setting, in the selection of the sacred monuments that get preserved and reused and those that are neglected, affirm the markedly local, site-specific character of sacrifice.

The study's limited geographic scope was essential to revealing the inherently local character of emplaced sacrifice. However, I believe the theoretical approaches and

methodologies that demonstrated their usefulness in this study of sanctuaries in Latium could as well be successfully employed in an investigation of sanctuaries in other areas in Italy (Etruria, Campania, Sicily) as well as outside of Italy to sites in Gaul, North Africa, or Asia Minor, for example. A number of sanctuaries in each of these regions present the same characteristics (multiple altars at one site, continuous use and construction activity for centuries, associated faunal or votive deposits at the altars) which were the necessary criteria in this dissertation to the approach taken, questions asked, and conclusions reached.

This study deliberately focused on a time period and region for which there were few, if any, literary or visual depictions of the practice of sacrifice. In the absence of such a corpus of evidence, without the support of contemporary representations, the research for this dissertation has relied almost solely on the evidence provided by material remains of sacrifice. Depending on materials alone, each chapter develops a specific approach to organizing and thinking about the kinds of differences presented by the archaeological records of the various sites. But we have to ask ourselves what would happen, how might the conclusions of this dissertation be challenged, corroborated, or amplified if the sites under study were from time periods or regions for which the archaeological evidence could be compared to relevant contemporary verbal or imagistic representations that were relatively free from suspicions of anachronism or interpretive bias?

Not only would such a broadening of scope and time period allow for the incorporation and use of literary and visual testimony, but an expanded data base could also offer opportunities to probe more deeply or to discover new kinds of relations. As

noted occasionally throughout the preceding chapters, there were certain restrictions in or limitations to the data collections from each site. For example, with respect to the faunal sample from Ioppolo's 1960s excavations at S. Omobono (discussed in Chapter 4), arguments about the shifts in orientation from the archaic altar to the Republican altar could have been asserted with fewer reservations if a faunal sample had existed for the 5th century phase of the new altar (Chapter 5). If the excavator at Largo Argentina had collected or recorded animal bones and not solely terracotta votives at altars A or C, we might have been able to comment on the co-existence or co-occurrence of votive and animal sacrifice (Chapter 3). Or, if detailed excavation reports existed for the Sacred Area of the Republican Temples at Ostia, we could have perhaps seen a pattern in the types and frequencies of offerings deposited that correlated with the changes in construction phases (Chapter 2). An investigation into the ground surface beneath the U-shaped and rectangular altars in front of Temple B at Fosso dell'Incastro at Ardea could reveal whether the off-axis alignment of the altars was caused by an earlier sacred structure on the same site (Chapters 5 and 6).

Perhaps this dissertation's study of sacrifice would benefit most from a reexamination of the existing material record from the point of view of modern zooarchaeology. The sanctuaries examined here were all largely excavated from the 1930s-1970s (Ardea had some excavation campaigns in the 90s as well). Recent years have seen many advances in the techniques of sieving, floatation analysis, coring, and careful collection and recording of animal and vegetal remains. While clearly we cannot go back in time and excavate these sites anew with modern methodology, a thorough, carefully excavated, and recently analyzed faunal assemblage from another sanctuary

would be of great value in testing the soundness of inferences drawn from the presently available data and the extent of the applicability of various theoretical approaches borrowed from other disciplines. The zooarchaeological studies from Roman sanctuaries in Gaul, for example, are extensive and impressively thorough, and a study of the site-specific character of Roman sacrifice at these sites might be a particularly interesting avenue to pursue in future research.

Beyond Sacrifice: The Broader Picture

Although this dissertation is arranged thematically such that in each chapter, one of the five sanctuaries serves as the paradigmatic example and speaks most effectively to a specific theme or question or approach, the concepts engaged and questions addressed were pertinent throughout in different ways to each of the sanctuaries studied. More generally, such questions and ideas can be expected to demonstrate a similar usefulness in the study of other Roman sacred spaces. Therefore, while the case studies are limited, the conclusions are not. The results of the research in this dissertation provide the theoretical and methodological foundations for presenting a grounded model for future studies of sacrifice and other aspects of Roman religion, as well as broader contemplations of what ritual can reveal about social behavior and material culture in the Roman world.

In the short story, “On Exactitude in Science,” Jorge Borges describes the creation of an “extensive” map that was designed to fit the entire territory. This map was of such great magnitude that it proved to be “cumbersome;” a map is intended to solve problems and to get us somewhere. As we saw in the Introduction to this dissertation, J.Z. Smith

used the themes in this short story to problematize the definition(s) of religion(s). As the following six chapters have argued, the sanctuaries and their altars at each of the sites studied in this dissertation can likewise borrow from Borges' cartography metaphor. There is no map that can cover every territory, no universal guide. But whereas Borges' Empire gives up, abandoning the discipline of geography completely after the attempt to create a map of all territories fails, this dissertation has emphasized that the inherent desire to make a universal design, a fit-all category, is itself what is problematic. To be sure, sacrifice can be distinguished from what is not sacrifice; the problem resides in presuming to say what sacrifice is. The conception that we can have a single, monolithic, scripted procedure for Roman sacrifice that applies to all periods and locales, that we can study sacrifice removed from its particular setting, from its topographical or chronological context, that we can anachronistically compare Republican practice to the Imperial version by relying on a tendentious canon of crafted visual and literary depictions, has been forcefully addressed and argued against throughout this dissertation. There is no universal map; similarly, each sanctuary examined presents its own highly-particularized material mapping of sacrifice, specific to its own territory, to its own particular altar. Roman sacrifice was markedly site-specific; there was no one, universal procedure or material template.

FIGURES: Chapter 1

(notes: plans of S.Omobono have been used from the archives. Thanks are due to Nicola Terrenato, Paolo Brocato, and Carlo Regoli)

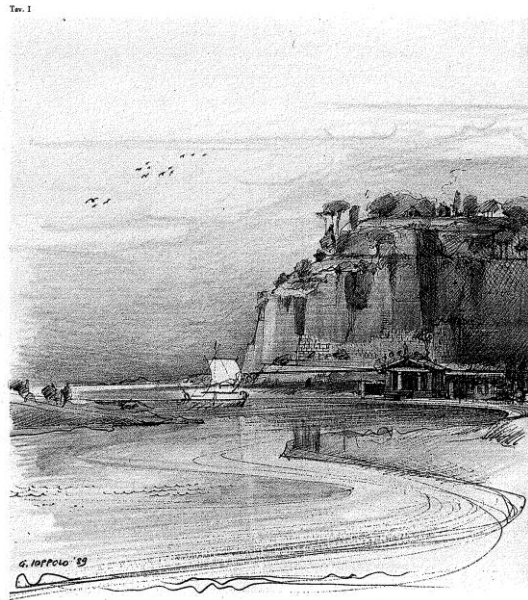
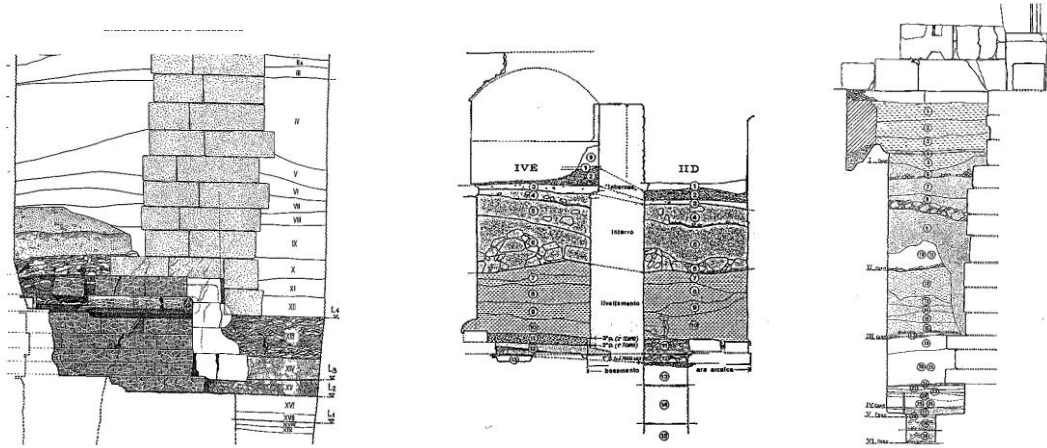


Figure 1.1: Tiber and S. Omobono Reconstruction (image from Ioppolo 1989)



2a

2b

2c

Figure 1.2 strata: 2a Gjerstad, 2b Ioppolo, 2c Virgili (image from Adornato 2003)

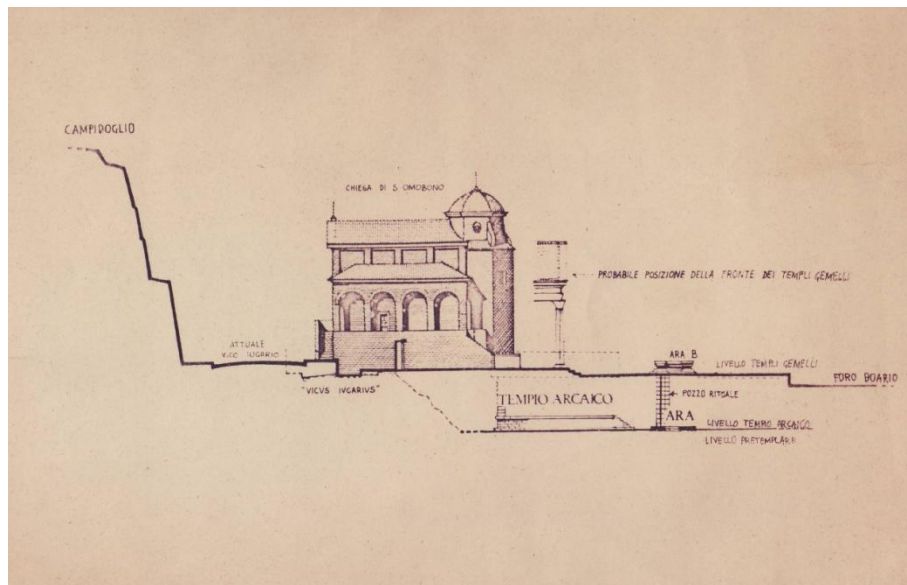


Figure 1.3: Levels of sacred architecture at S.Omobono (image from Pisani Sartorio 1989)

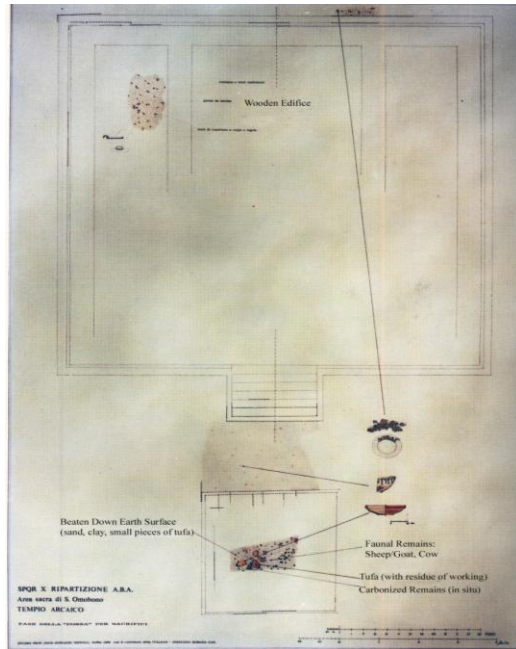


Figure 1.4: Sacrificial ditch (image from Pisani Sartorio 1989)

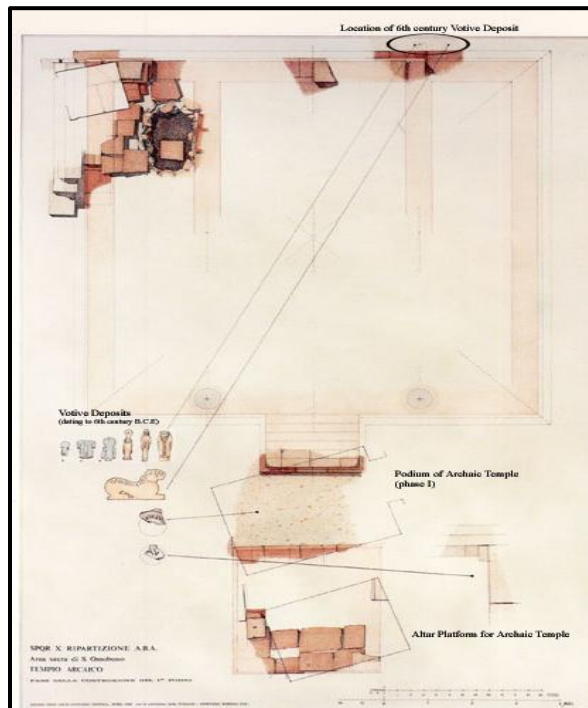


Figure 1.5: Location of Archaic altar (image from Pisani Sartorio 1989)

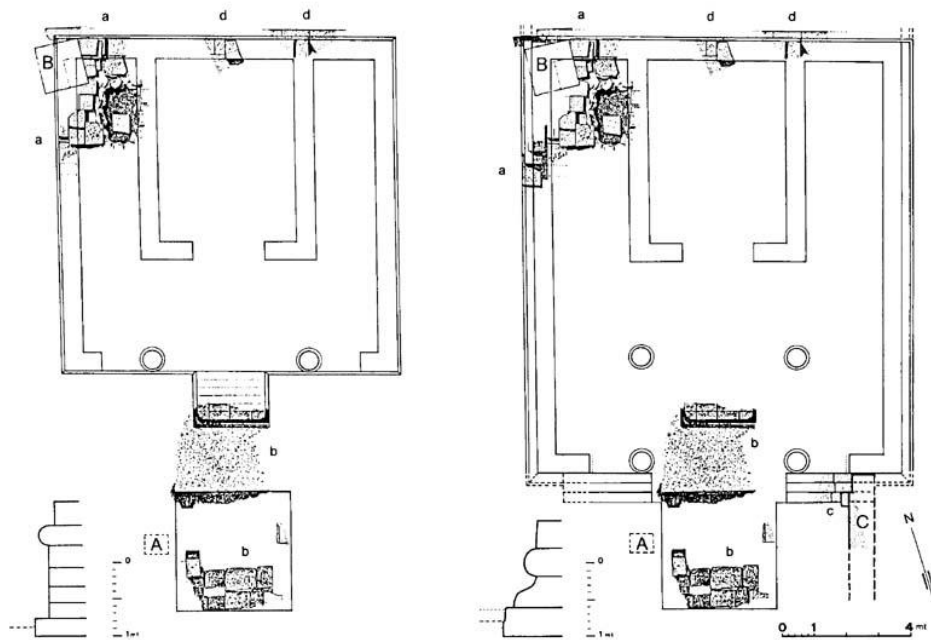


Figure 1.6: a) first phase archaic temple b) phase 2 archaic temple (image from Colonna 1991)



Figure 1.7: plan from archives



Figure 1.8: Minerva and Hercules Statues (image from Ioppolo 1989)

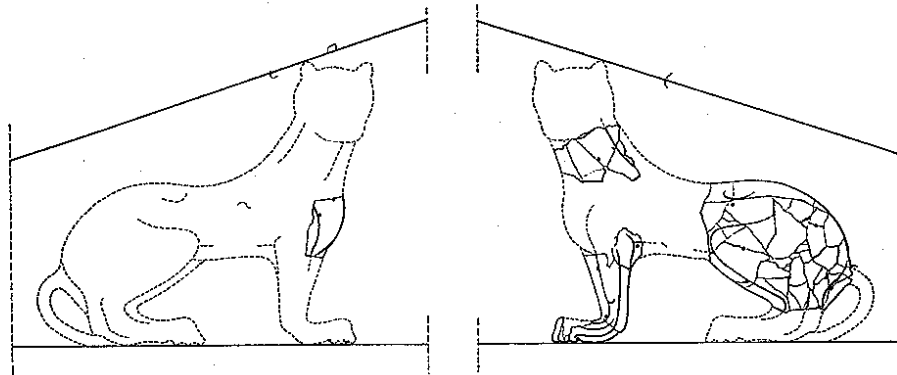


Figure 1.9: Terracotta Felines (image from Sommella Mura 1977)

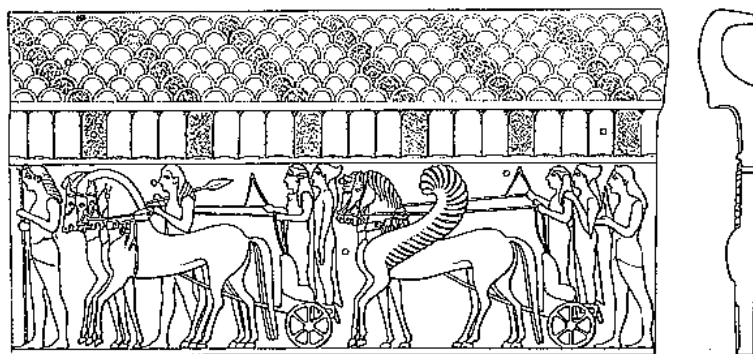


Figure 1.10: Terracotta decoration (image from Sommella Mura 1977)



Figure 1.11a: Buchhero Ritual Vessels (image from Pisani Sartorio 1989)



Figure 1.11b: Bronze Figurines (image from Pisani Sartorio 1989)

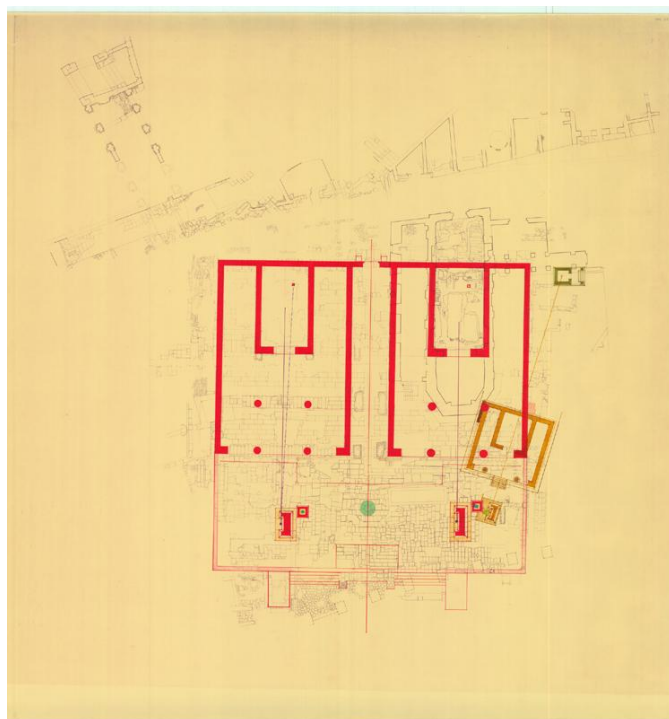


Figure 1.12: Plan of site from archives



Figure 1.13a: Altar of Fortuna (photo by author)

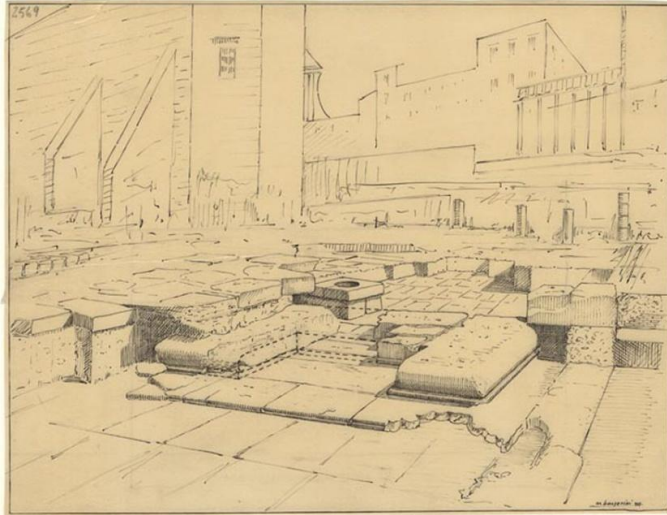


Figure 1.13b: Altar of Fortuna, drawing (archives)

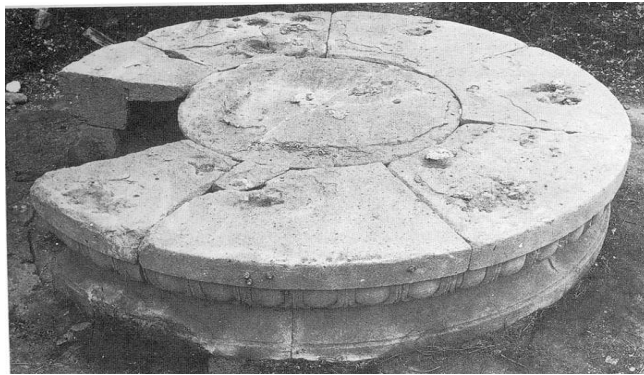
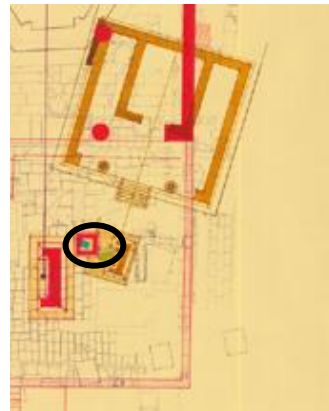


Figure 1.14: Base of Marcus Fulvius Flaccus Monument (image from Coarelli 1988)



a



b

Figure 1.15a,b: a) Well of Altar of Fortuna (photo by author) b) well of Altar of Mater Matuta (plan from archives)



Figure 1.16: Cistern (image from Virgili 1988)

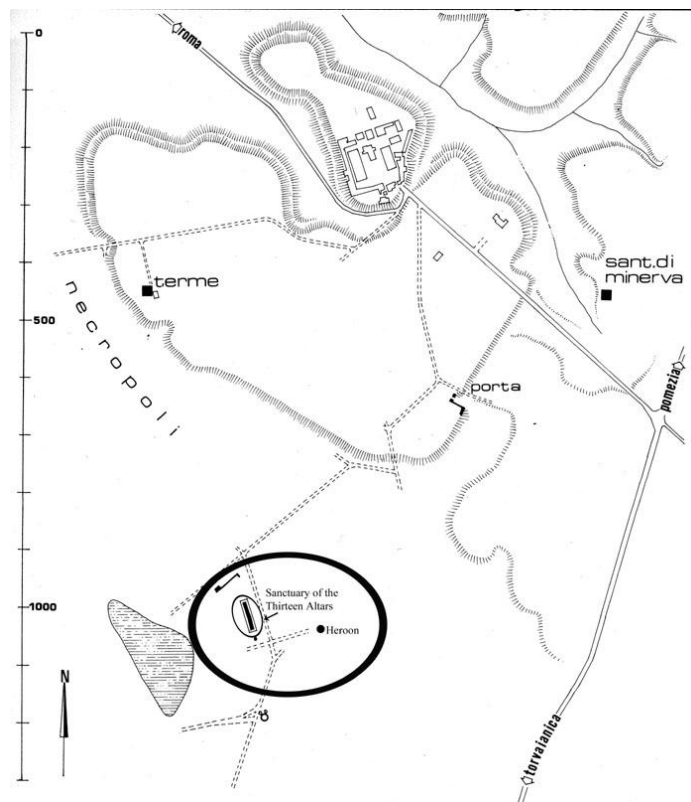


Figure 1.17: Map of Lavinium (after Castagnoli 1981, modified by author)



Figure 1.18: Heroon (image from Sommella 1971)

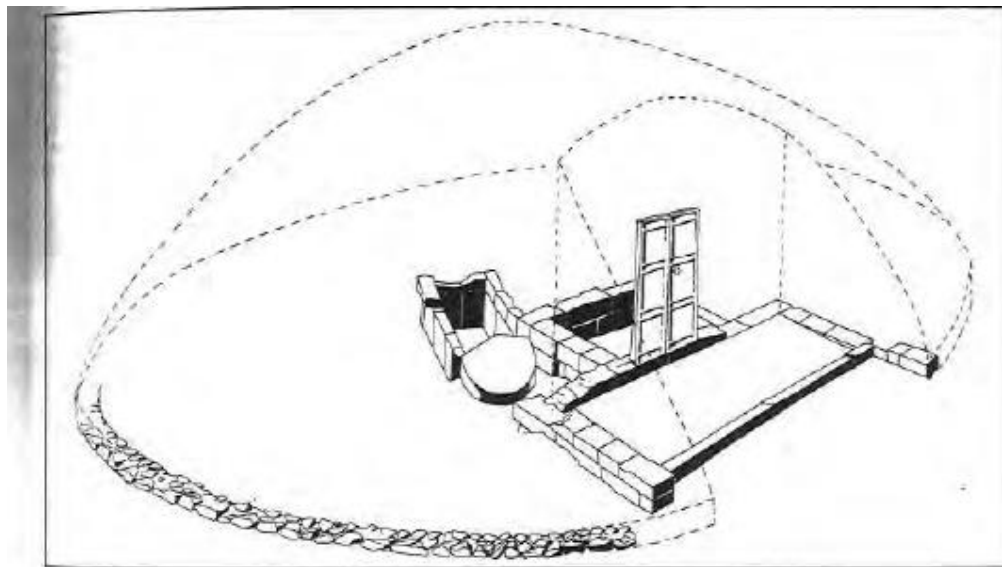


Figure 1.19: Reconstruction of Heroon (image from Castagnoli 1981)

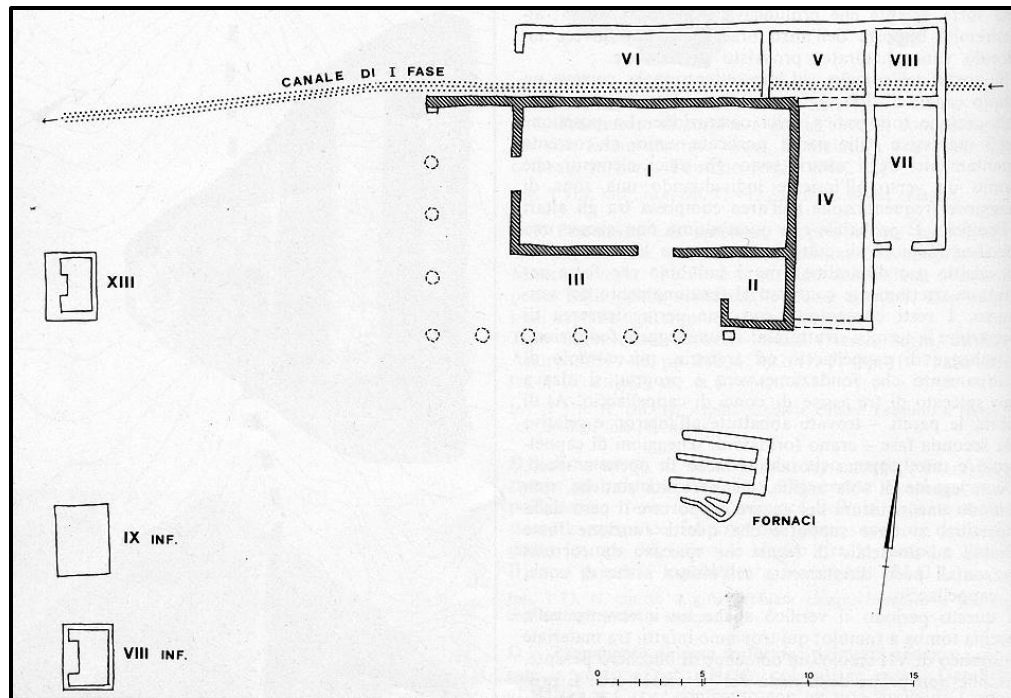
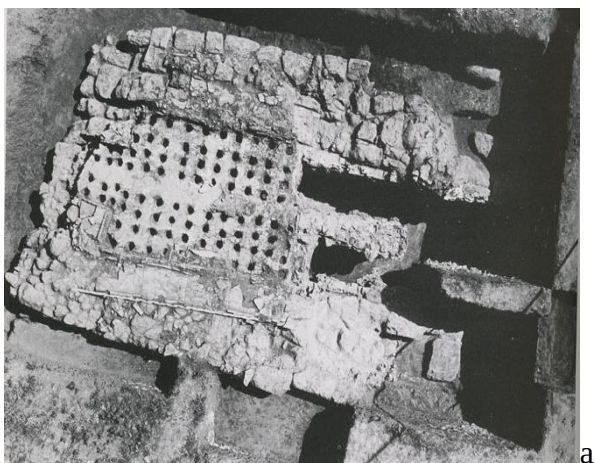


Figure 1.20: Plan of Northeast Edifice (image from Castagnoli 1981)



a



b

Figure 1.21a, b: a) Aerial view of hearth (image from Castagnoli 1981)
b) hearth, present day (photo by author)



Figure 1.22: Row of Altars, Lavinium (photo taken by author, 2011)



Figure 1.23: Altar at Veii (photo by author)

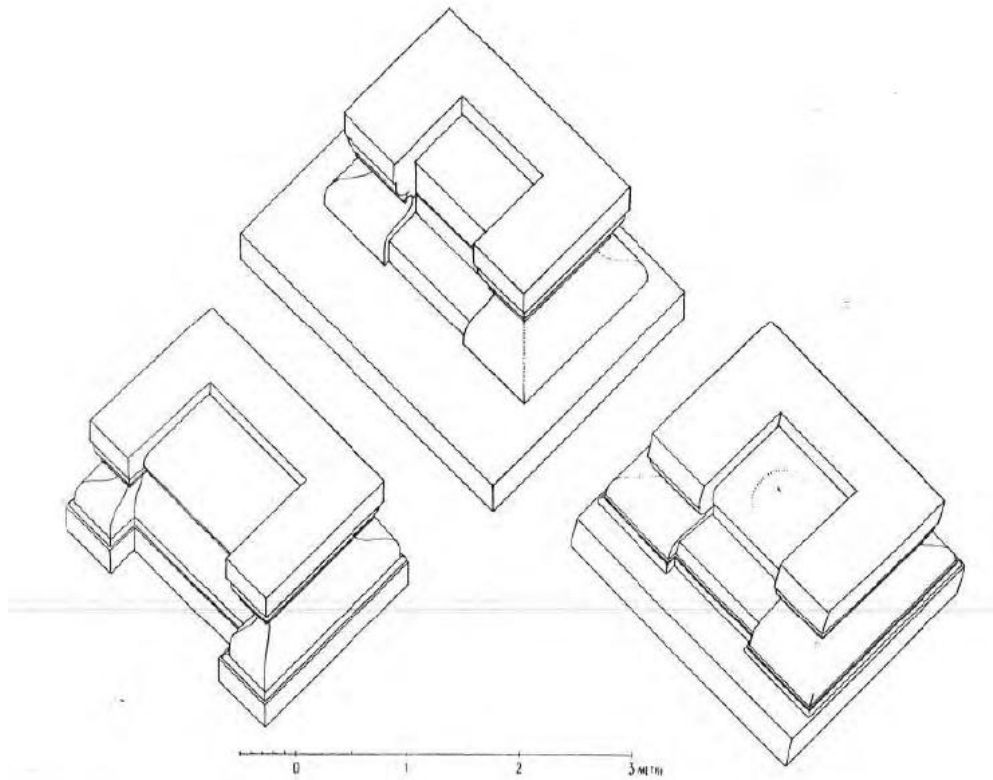


Figure 1.24: U-shaped Altars (image from Castagnoli 1962)

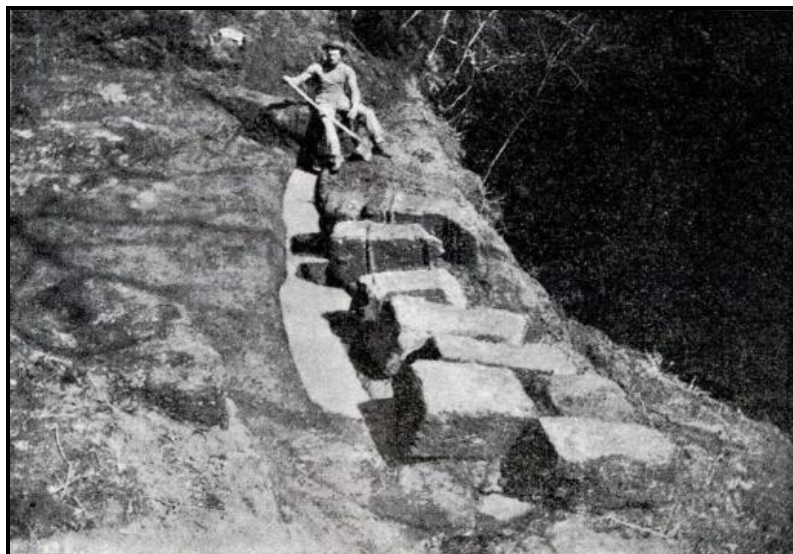


Figure 1.25: Macchiagrande Altars (image from Stefani 1922)

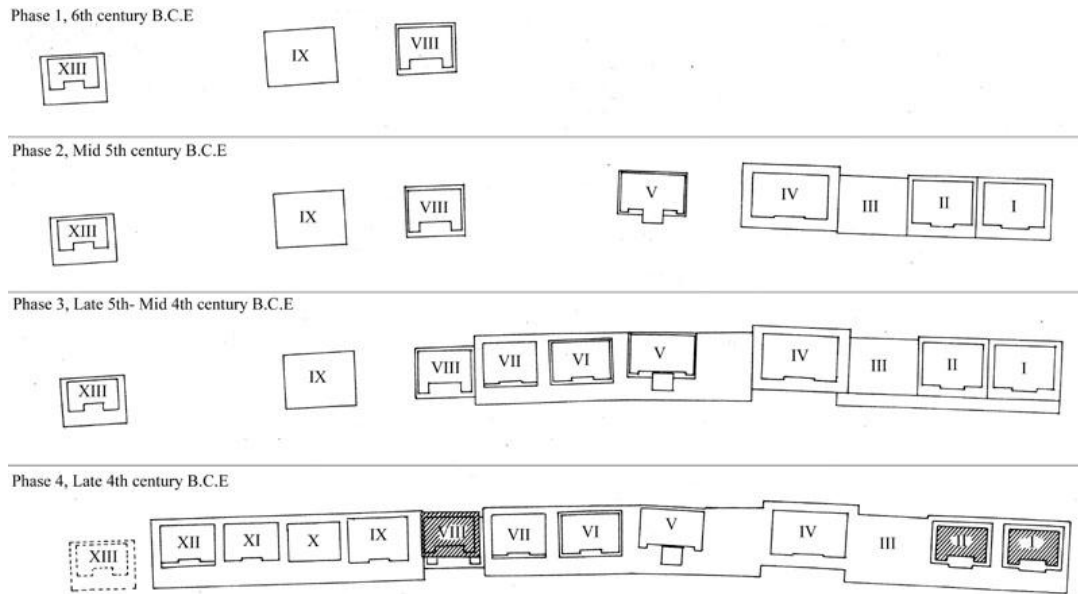


Figure 1.26: Phases of Altars, Lavinium (image from Castagnoli 1981; modified by author)

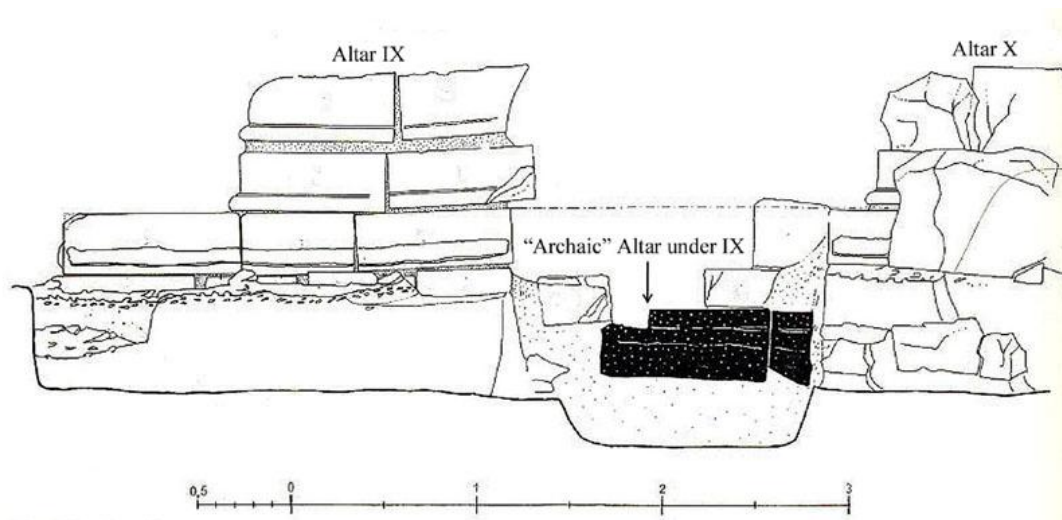


Figure 1.27: Schematic Drawing of Altar IX (image from Castagnoli 1975; modified by author)



Figure 1.28: Altars V and VI (photo by author)



Figure 1.29a, b: Altar XIV (photos by author)



Figure 1.30: Altar XV (photo by author)

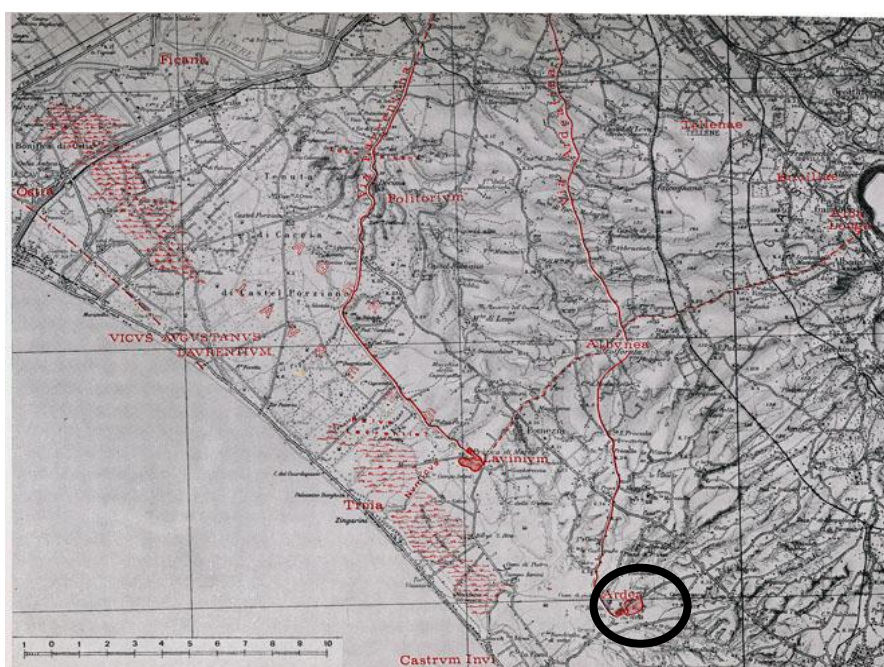


Figure 1.31: Map of Ardea (image from Castagnoli 1972; modified by author)



Figure 1.32: Map of Ardea showing: 1) acropolis of Ardea; 2) Colle della Noce; 3 and 4) Fosso dell'Incastro; 5) Casarinaccio(image from Di Mario 2007:19).



Figure 1.33a: Temple B, Ardea(photo by author)



Figure 1.33b: Altars of Temple B, Ardea (photo by author)

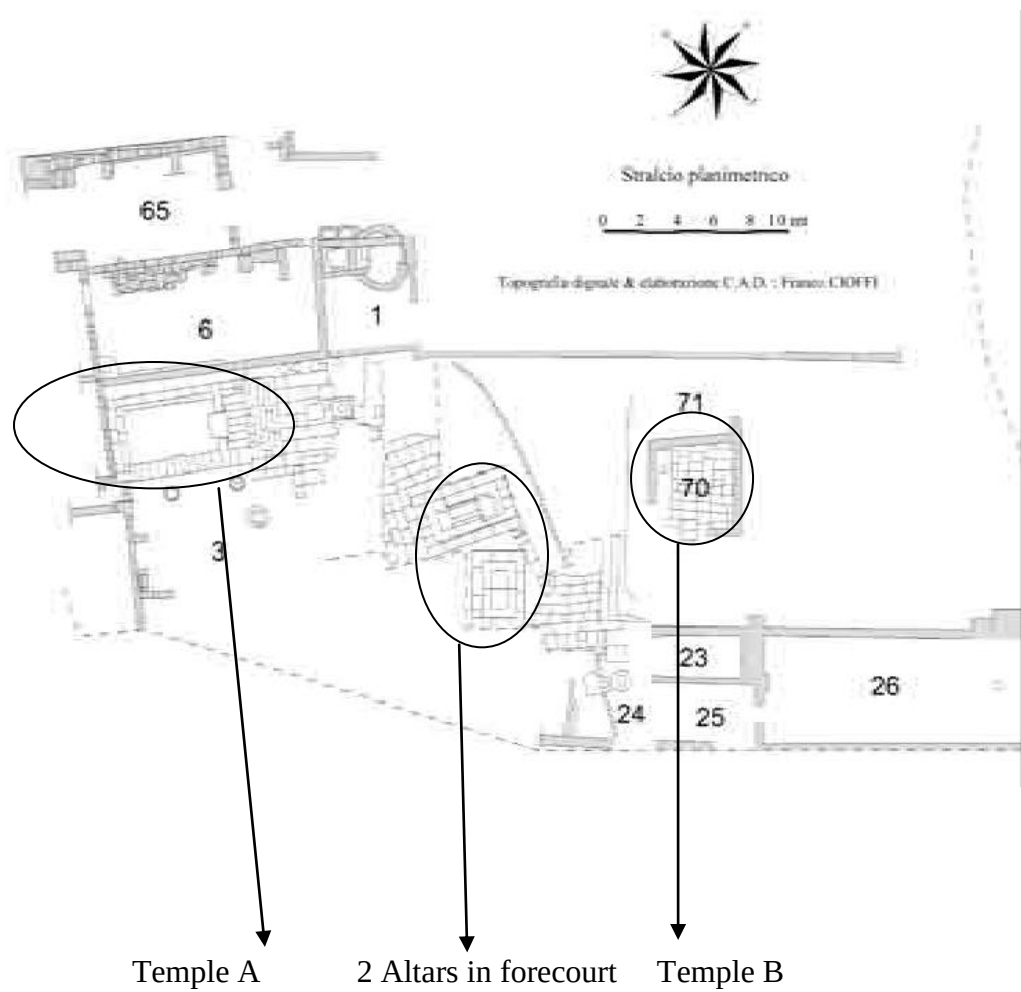


Figure 1.34: Plan of Fosso dell'Incastro (plan from Di Mario 2007)



a



b

Figure 1.35a,b: Temple A (photos by author)



Figure 1.36: Cippus in Temple A (image from Di Mario 2009:74)



Figure 1.37: Altar and Well of Temple A (photo by author)



Figure 1.38: Altar of Temple A (photo by author)



Figure 1.39: Temple B (photo by author)



Figure 1.40: Altars of Temple B (photo by author)



Figure 1.41: Altars of Temple B (photo by author)



Figure 1.42a: U-shaped Altar (photo by author)



Figure 1.42b: Rectangular Altar (photo by author)



Figure 1.43: Altars of Temple B (photo by author)



Figure 1.44: Altar of Asclepius (photo by author)



Figure 1.45: Sacred Area of the Republican Temples at Ostia: Computer generated model from mid-Imperial period phase (ostia-antica.org)

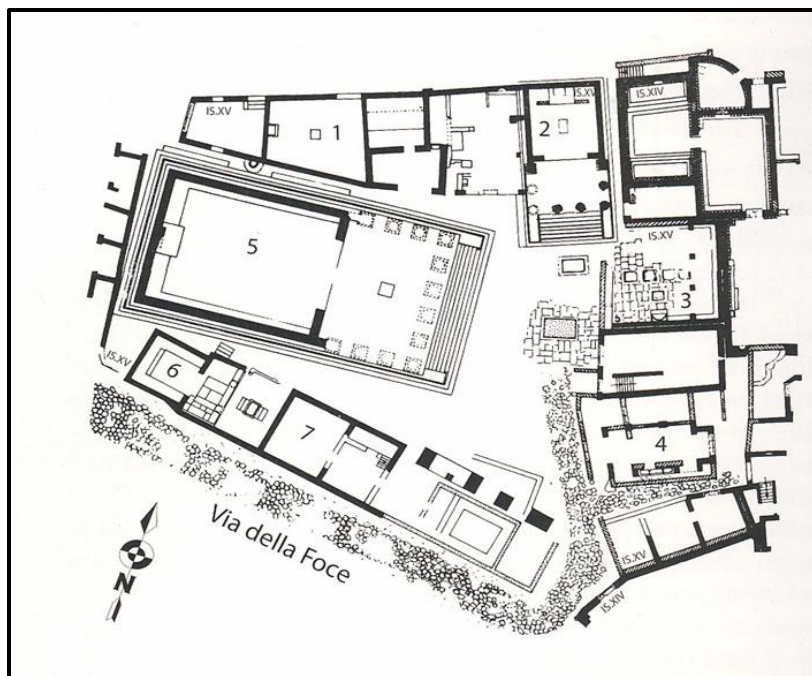


Figure 1.47: Plan of Sanctuary in Imperial Phase (image from Boin 2010)



Figure 1.48: Group of 4 Altars (photo by author)



Figure 1.49: Group of 4 Altars (photo by author)

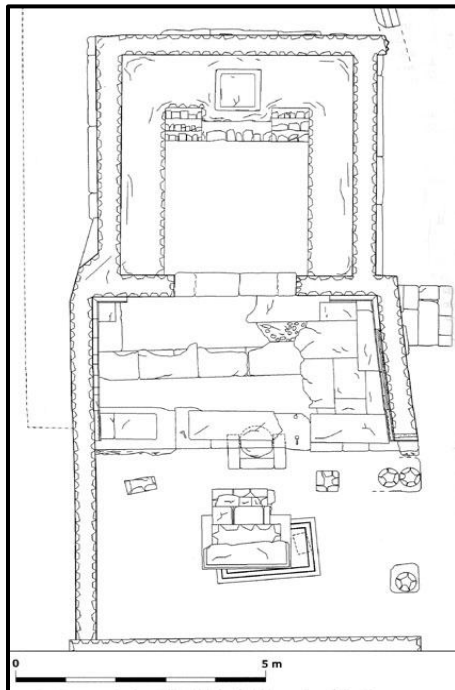


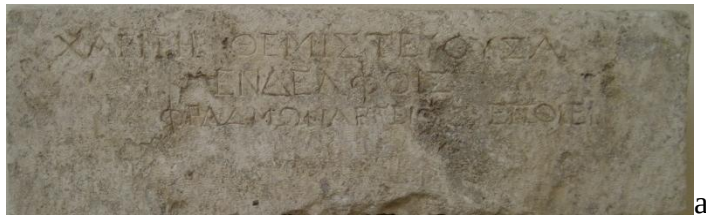
Figure 1.50: Plan of Temple of the Round Altar (image from Pensabene 2007)



Figure 1.51: Passageway between Temple of the Round Altar and Temple of Hercules (photo by author)



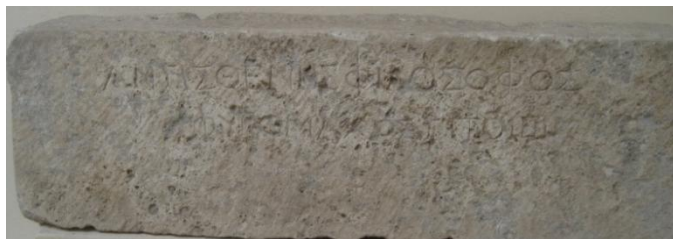
Figure 1.52a,b: Early Phase of Altar of The Temple of the Round Altar (photos by author)



a



b



c

Figure 1.53a,b,c: Greek Inscriptions from Area around Altar (photos by author from Ostia Antica Museum)

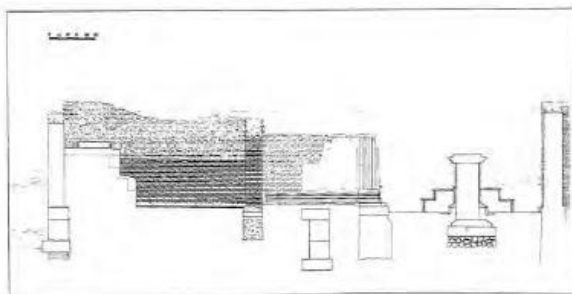


Figure 1.54: Longitudinal Section of The Temple of the Round Altar (image from Pensabene 2007)



a



b

Figure 1.55a,b: Imperial Phase of Altar (a: ostia-antica.org; b: photo by author)

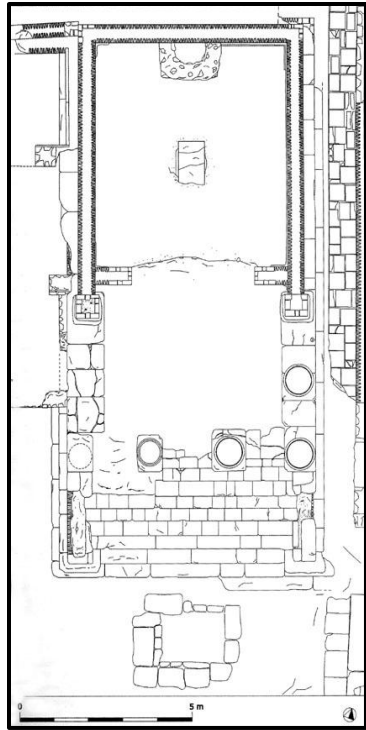


Figure 1.56: Tetrastyle Temple (image from Pensabene 2007)

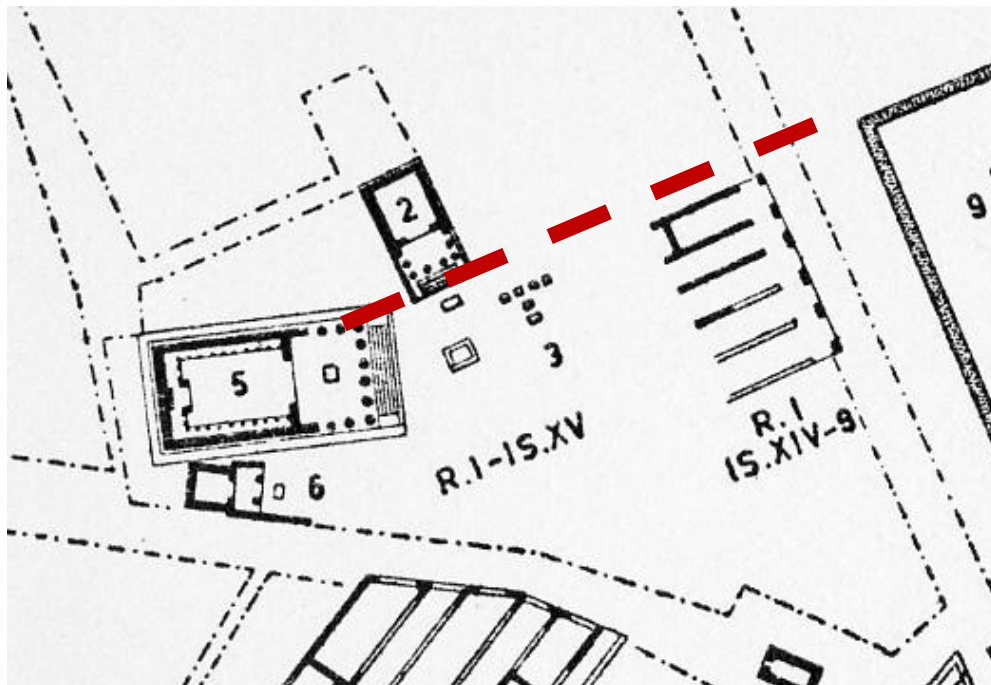


Figure 1.57: Plan of Sanctuary Showing Original Temenos (Plan of Gismondi, from Ricciardi 1996)

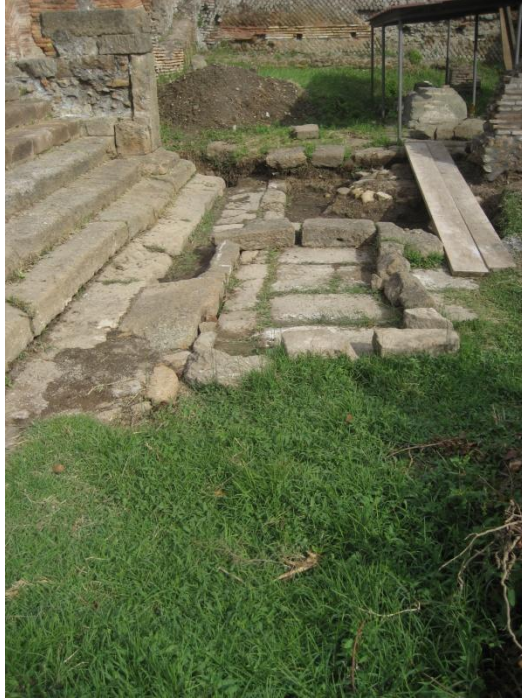


Figure 1.58: Altar of Tetrastyle Temple (photo by author)



Figure 1.59: Brick Altar in Front of the Temple of Hercules (photo by author)



Figure 1.60: Late Altar found in the Temple of Hercules (photo from ostia-antica.org)

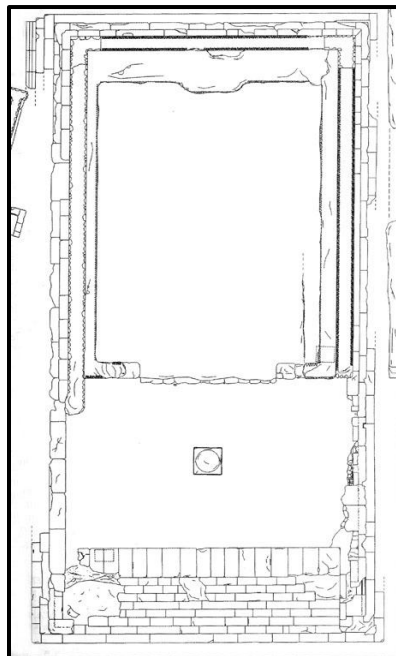


Figure 1.61: Plan of the Temple of Hercules (image from Pensabene 2007)

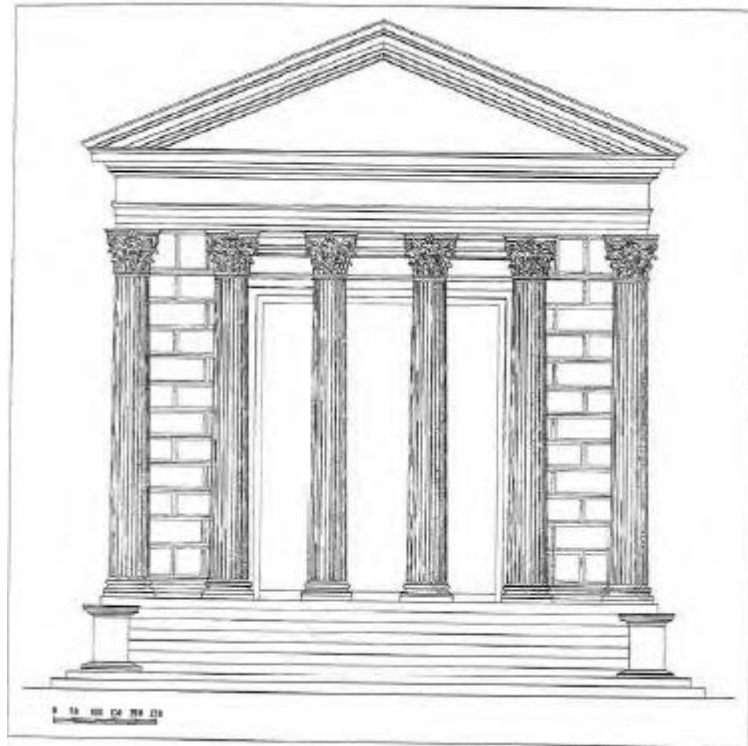


Figure 1.62: Reconstructed Façade of the Temple of Hercules (image from Pensabene 2007)

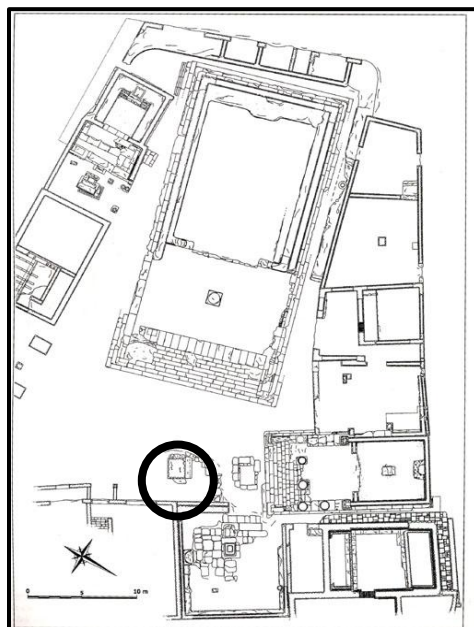


Figure 1.63: Plan of Sanctuary with the Altar of the Temple of Hercules circled (image from Pensabene 2007)



Figure 1.64: Proposed Altar for the Temple of Hercules (images taken from Becatti 1942 and ostia-antica.org)

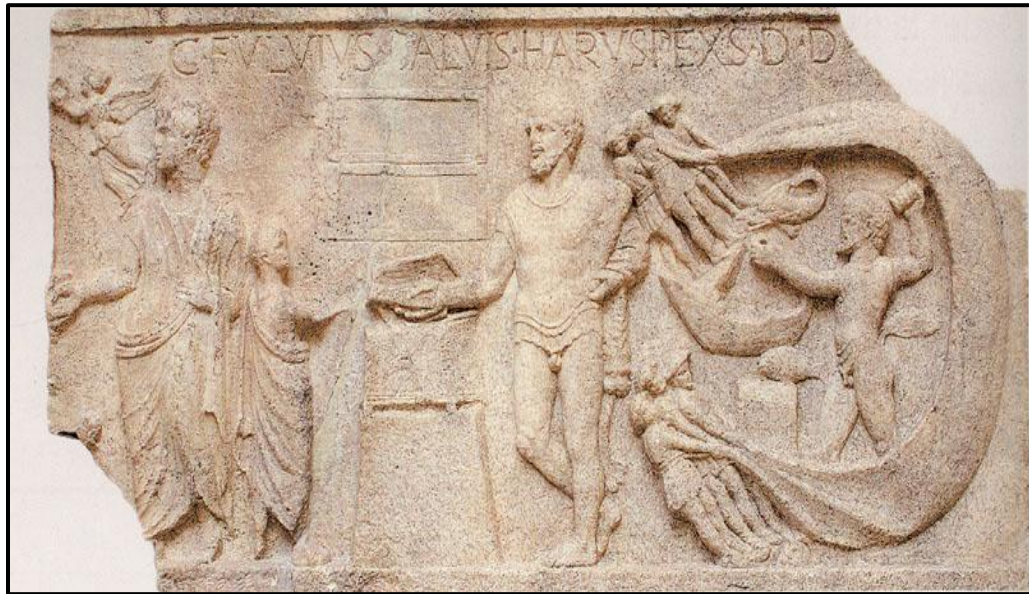


Figure 1.65: Haruspex Relief (photo from ostia-antica.org)



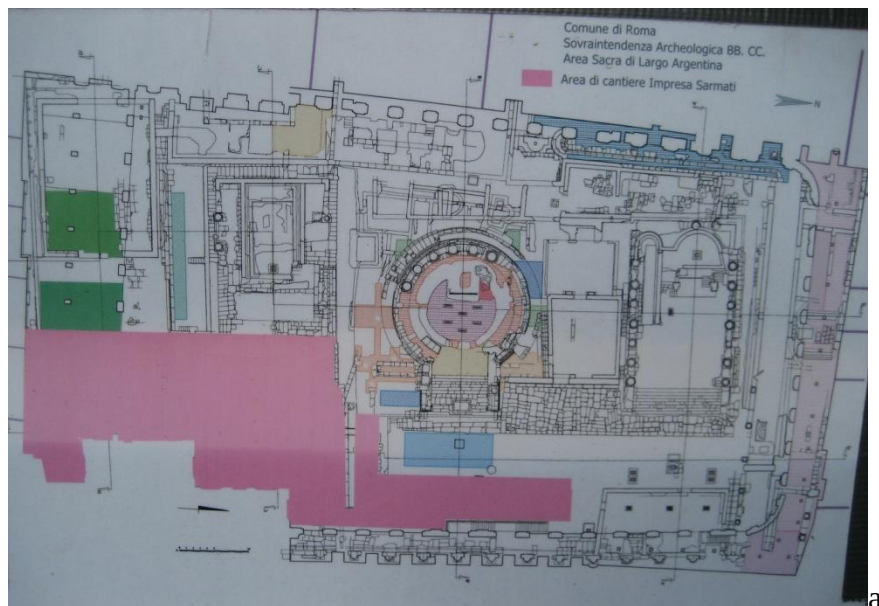
Figure 1.66a, b: Statue of C. Cartilius Poplicola (photos from Ostia-antica.org)



Figure 1.67: Well (still visible today) (photo by author)



Figure 1.68: Largo Argentina Sanctuary (photo by author)



a

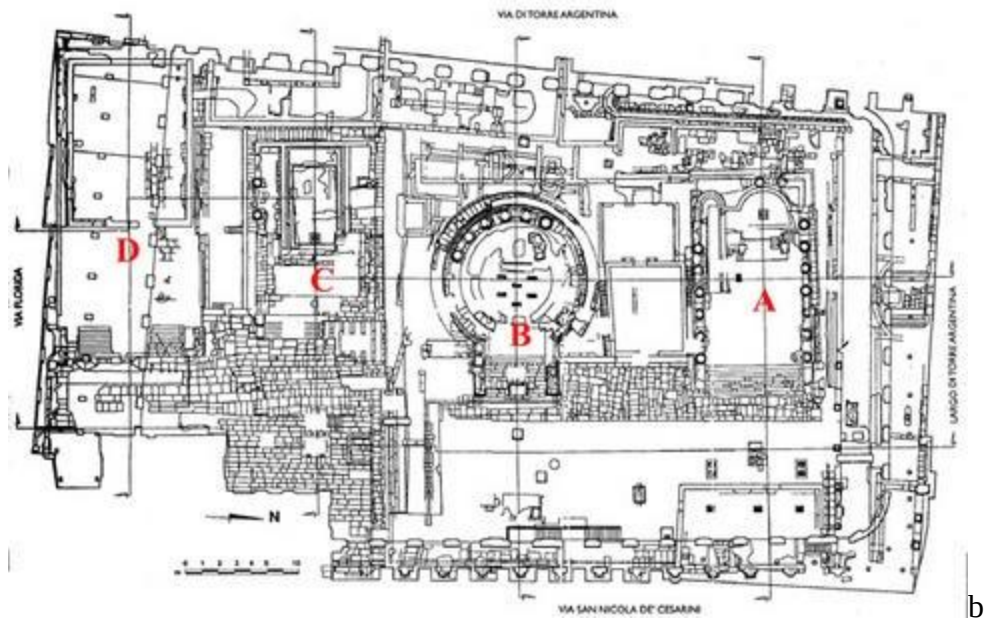


Figure 1.69a, b: Plans of Largo Argentina (a. photo by author from site; b. photo from <http://www.hdwallpapersinn.com/area-sacra-di-largo-argentina-pictures.html>)



Figure 1.70: 3rd century B.C.E. fragment of Altar of Temple C (Marchetti Longhi 1933:310)

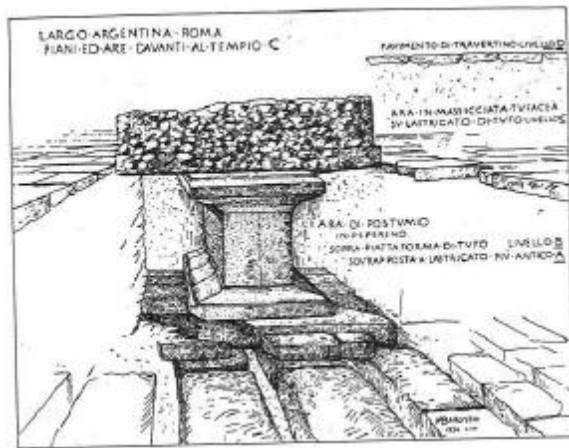
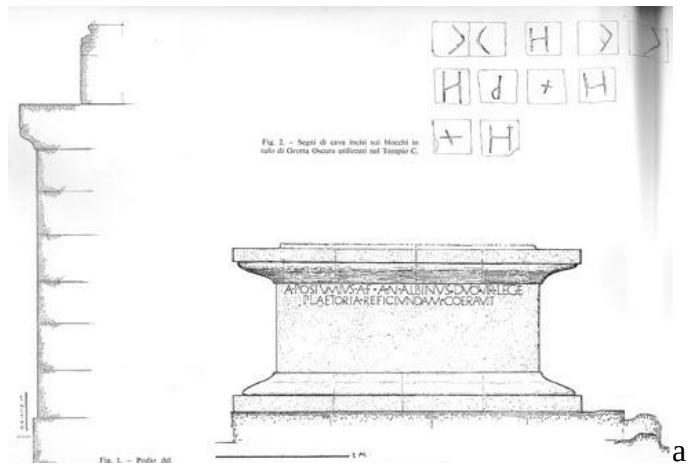


Figure 1.71a,b,c: a and b) drawings of Altar C (Marchetti Longhi 1960);c) photo of Altar C (photo by author)

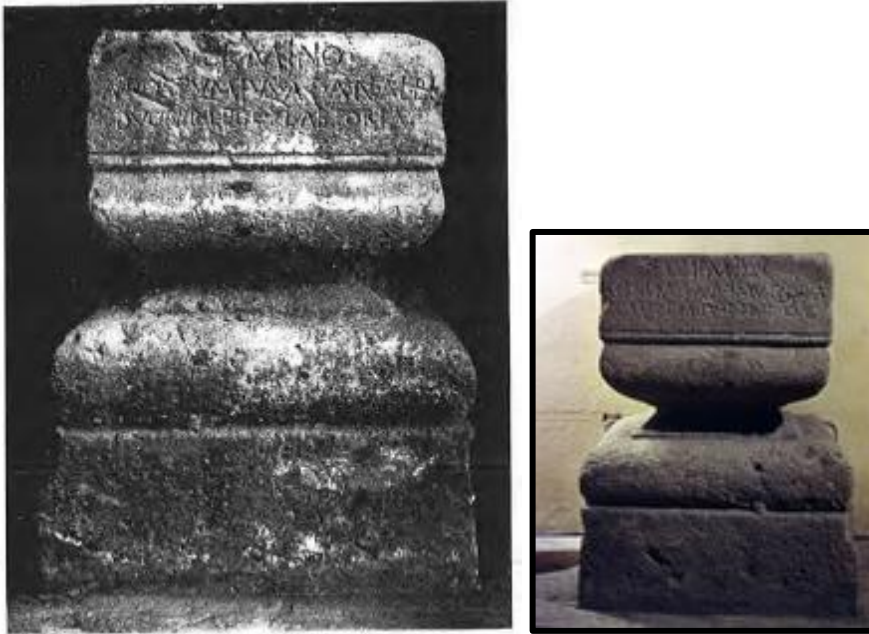


Figure 1.72a, b: Altar of Verminus (a) Castagnoli 1962; b) Montemartini Museum website (<http://capitolini.net/object.xql?urn=urn:collectio:0001:scu:01707>)



Figure 1.73: Altar of Temple C, present day (photo by author)

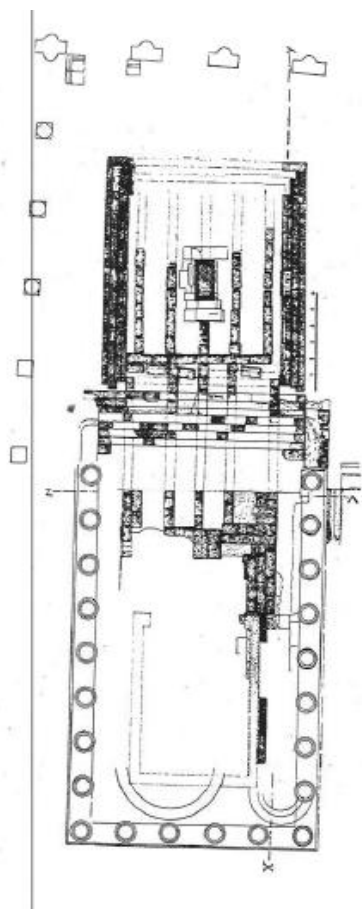
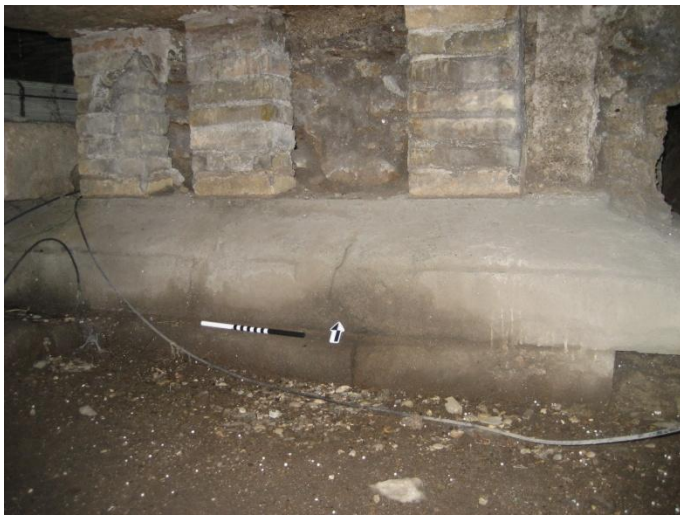


Figure 1.74: Plan of Temple A (Marchetti Longhi 1960)



a



b

Figure 1.75a,b: Photos of early phases of the altar of Temple A (photos by author)



Figure 1.76: Altar of Temple A, phase 3 (photo by author)



Figure 1.77: Layers of Altars of Temple A (photo by author)



Figure 1.78: Altar of Temple B (photo by author)



Figure 1.79: Well by Altar of Temple B (photo by author)

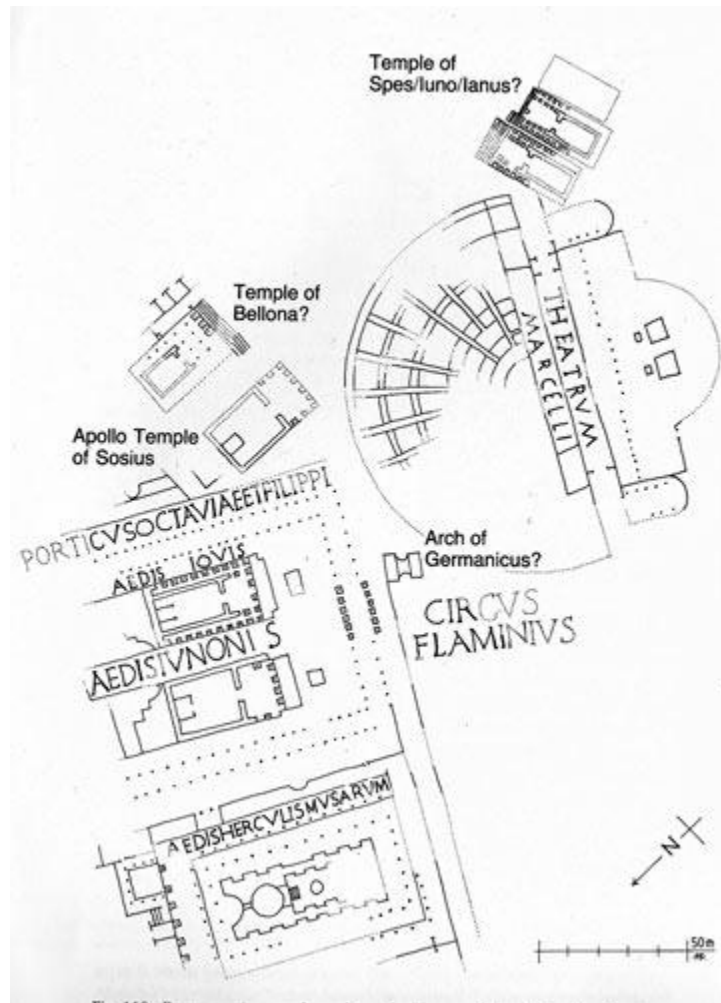


Figure 1.80: Temple of Hercules of the Muses (Forma Urbis) (image from http://www.uark.edu/ua/metis2/zanker/zanker_txt2.html)



Figure 1.81: Podium of Temple D, from the northern side (image from Marchetti Longhi 1960)

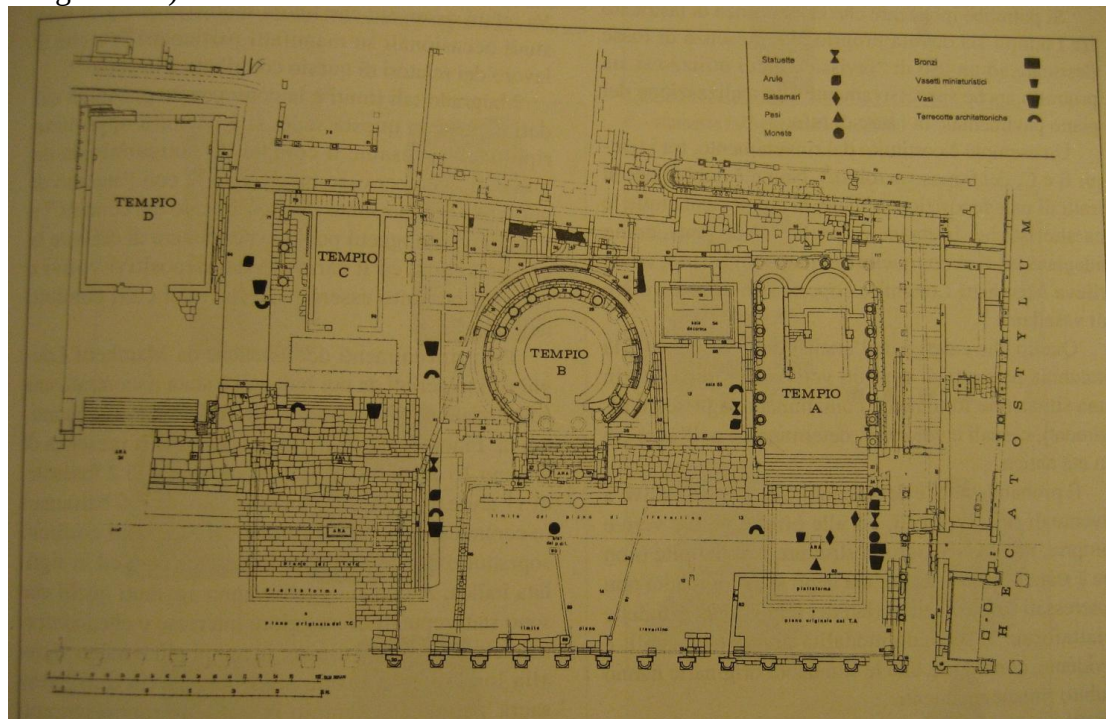


Figure 1.82: Location of votive finds (image from Andreani 2005)

FIGURES: Chapter 2

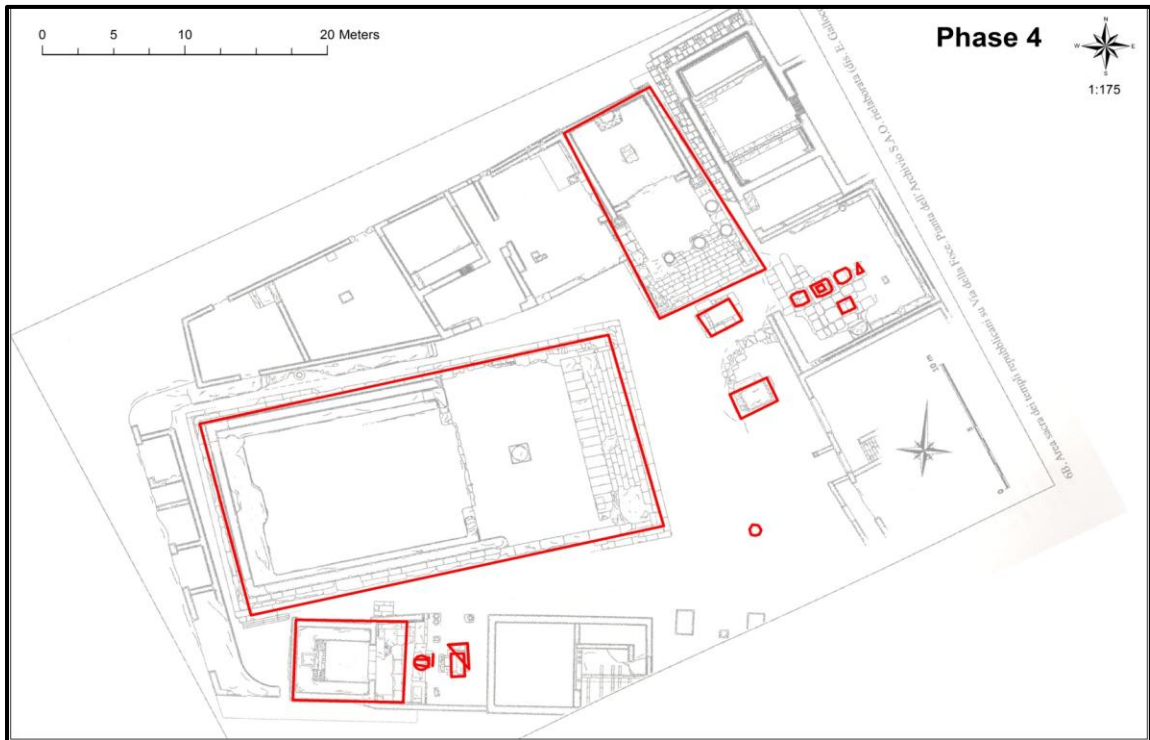


Figure 2.1: General Plan (all plans by Jessica Nowlin. Survey by Elizabeth Robinson)

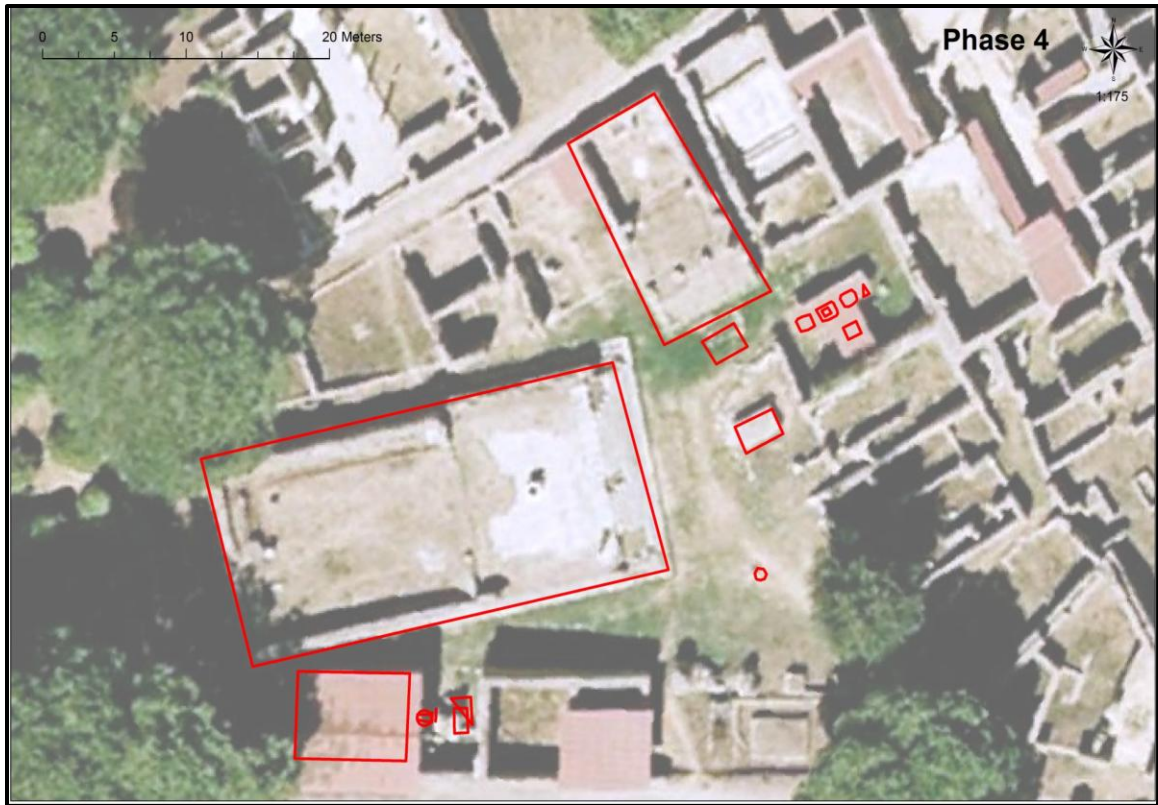


Figure 2.2: General Plan with all seven altars

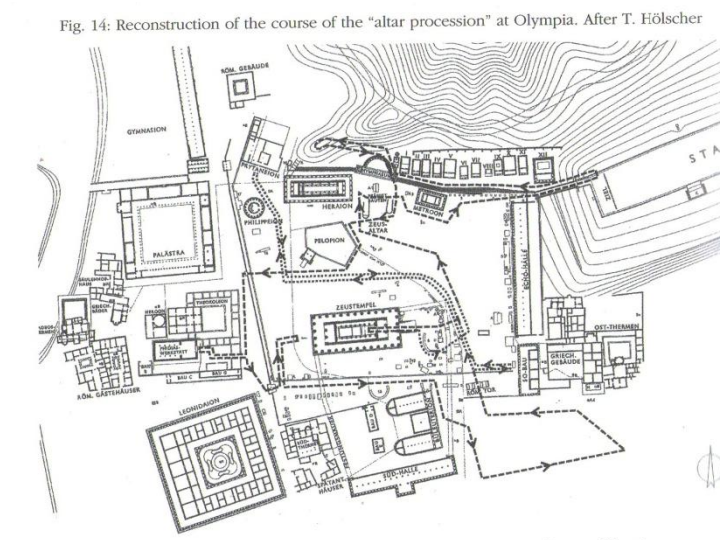


Figure 2.3: sanctuary of Olympian Zeus and multiple altars, after Mylonopoulos 2006:108

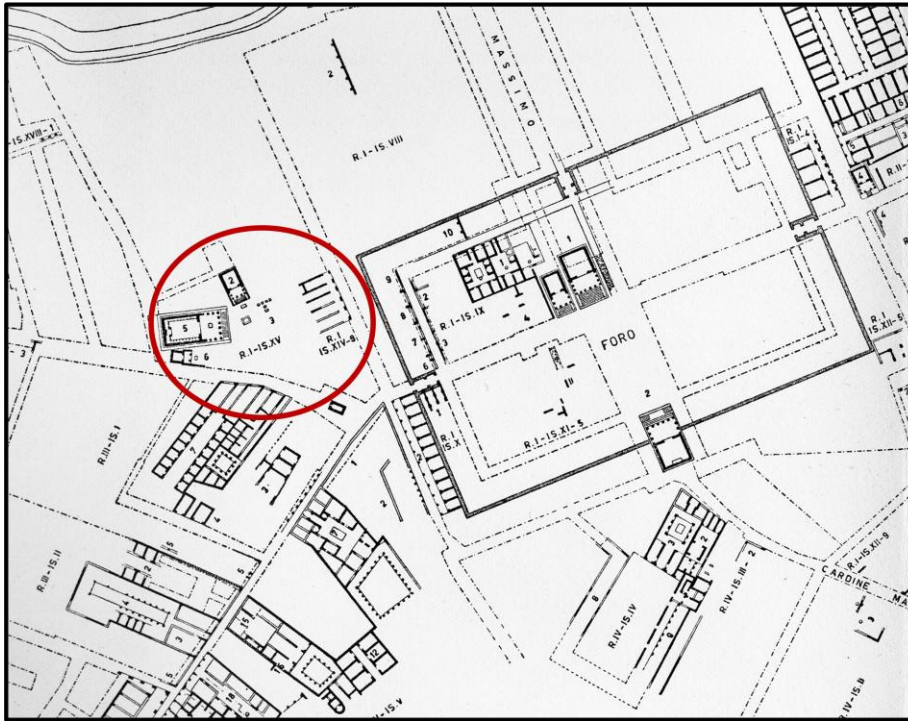


Figure 2.4: Layout of Ostia, (plan from Gismondi, in Ricciardi 1996)

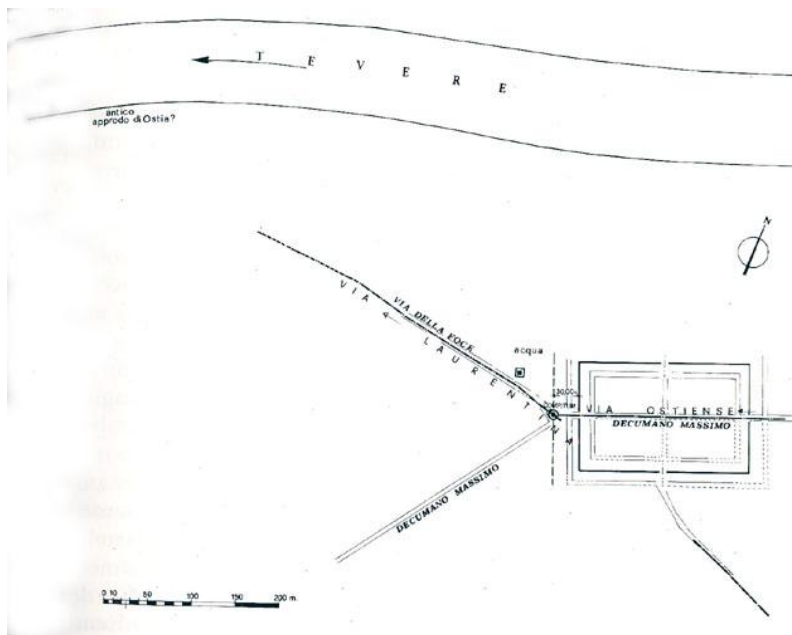


Figure 2.5: Castrum and Sanctuary (after Zevi 1996:73)



Figure 2.6: Boundary Stones (photo by author 2013)

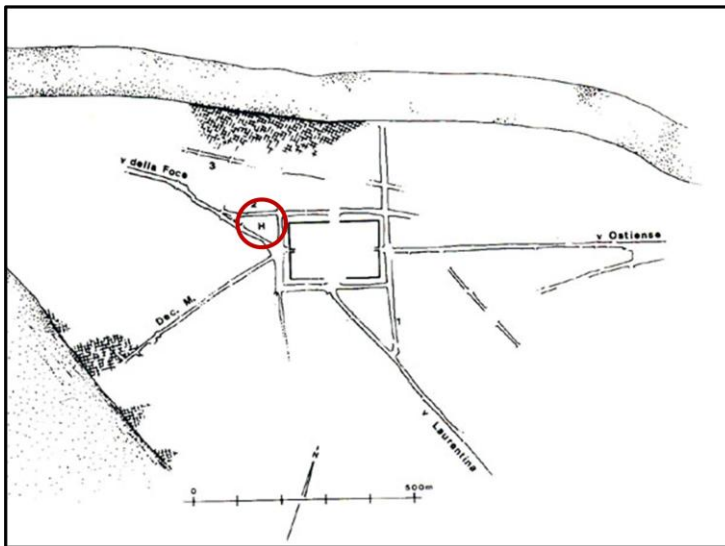


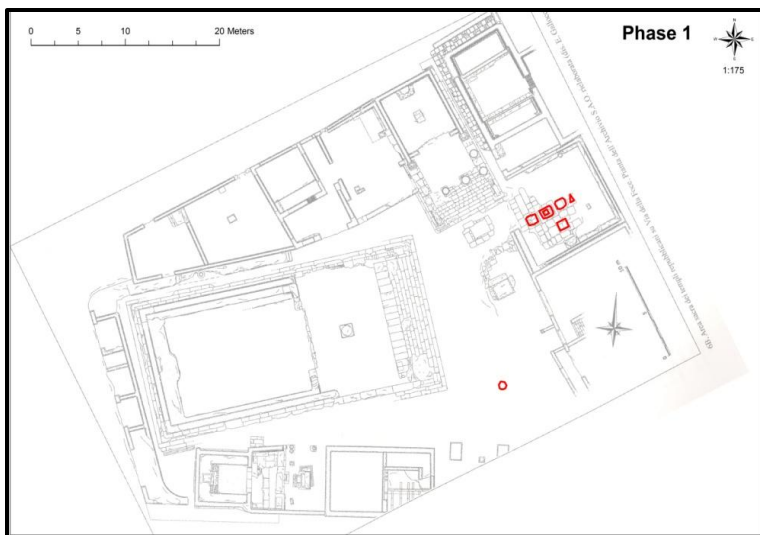
Figure 2.7: sanctuary and roads (after Mar 1996:119)



Figure 2.8: Roads as Boundaries (plan from Gismondi, image in Ricciardi 1996)



Figure 2.9: Compital shrine (photo by author 2013)



a



b

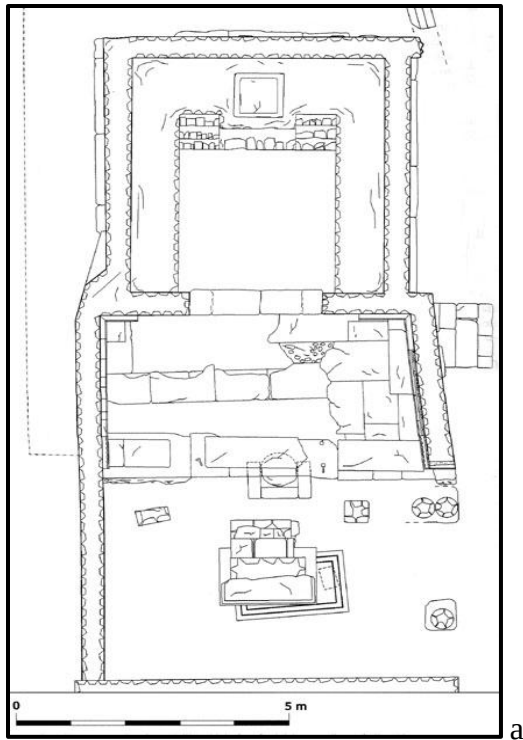
Figure 2.10a,b: a) Group of 4 altars (plan by Jessica Nowlin) b) photo of 4 altars (photo by author 2013)



Figure 2.11: 4 altars and original temenos



Figure 2.12: shrine in 4 altars area (after Rieger 2004)



a



b

Figure 2.13a,b: a) Plan of the Temple of the Round Altar (Pensabene 2007); b) Temple of the Round Altar (photo by author 2011)

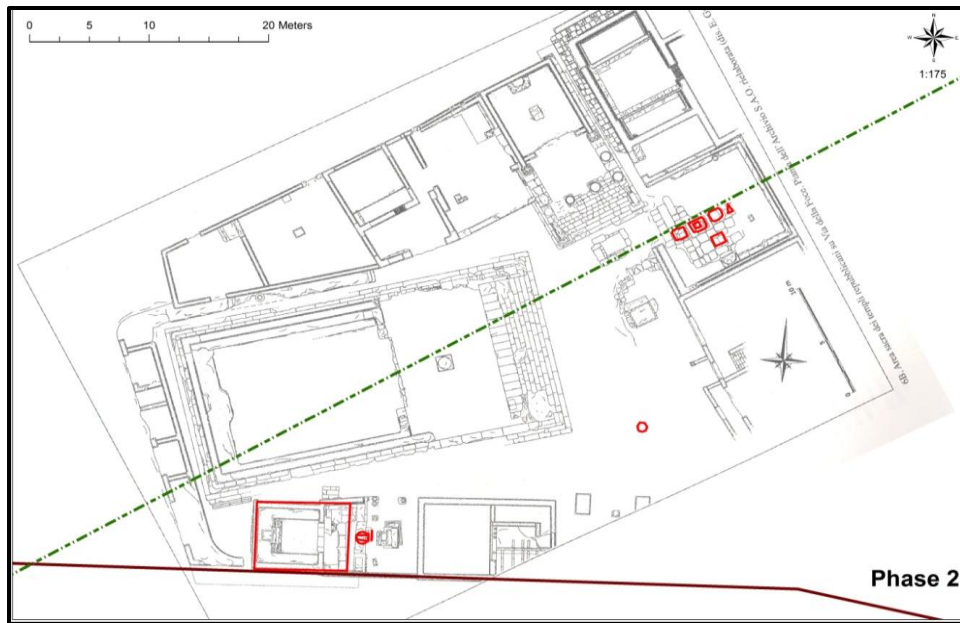


Figure 2.14: Location of Temple of Round Altar in the Sanctuary



Figure 2.15: Stairs to pronoas on right hand side (photo by author 2013)



Figure 2.16: Possible left hand stairs to temple (photo by author 2013)

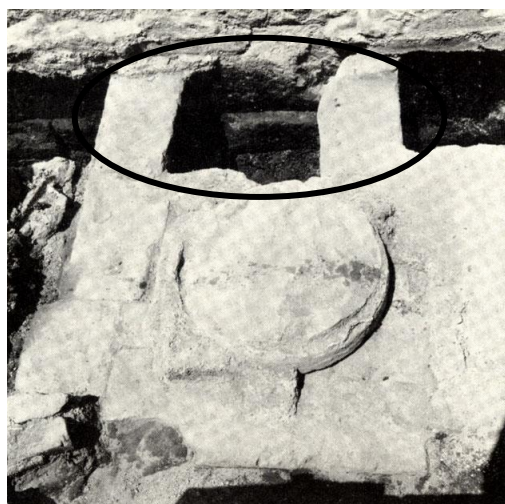


Figure 2.17: Platform of earliest altar for temple, circled (after Zevi 1977)

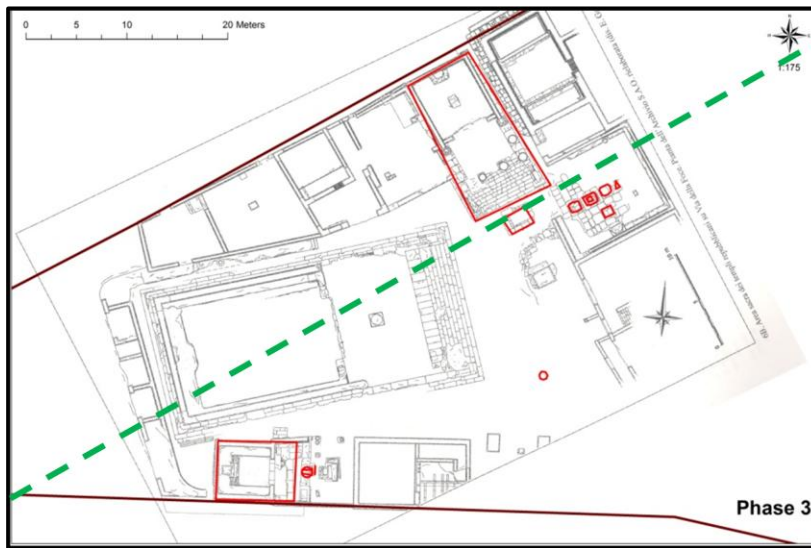


Figure 2.18: Expansion of temenos (new temenos demarcated in solid red line)

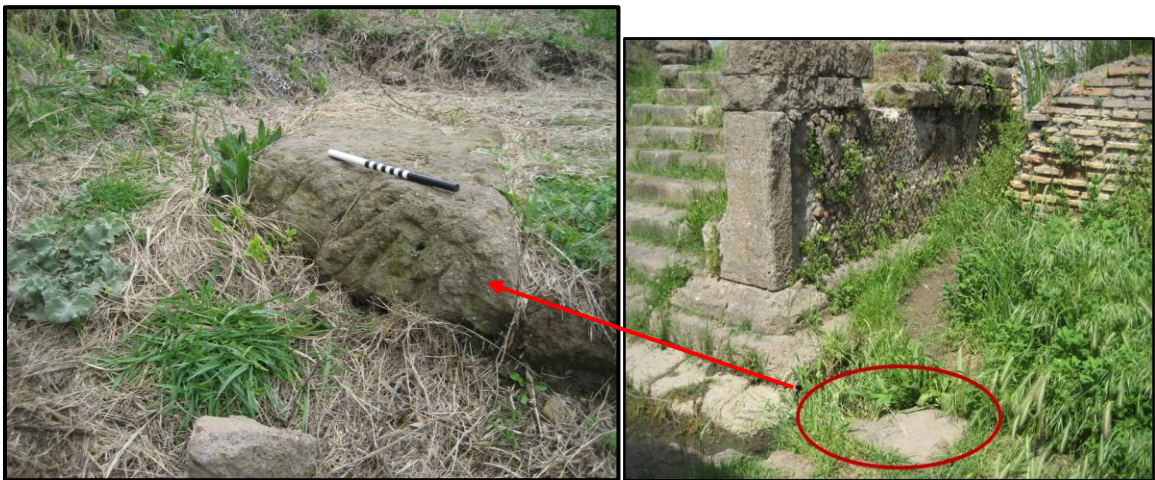


Figure 2.19: Pick marks for expansion of platform of 4 altars (photo by author 2013)

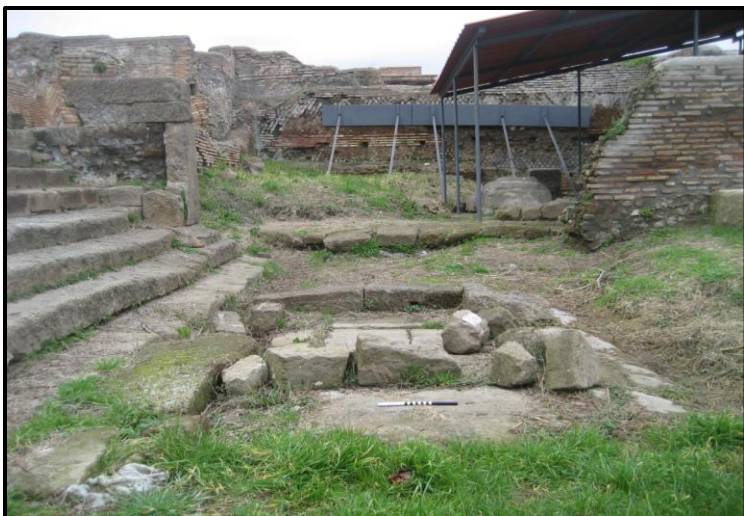
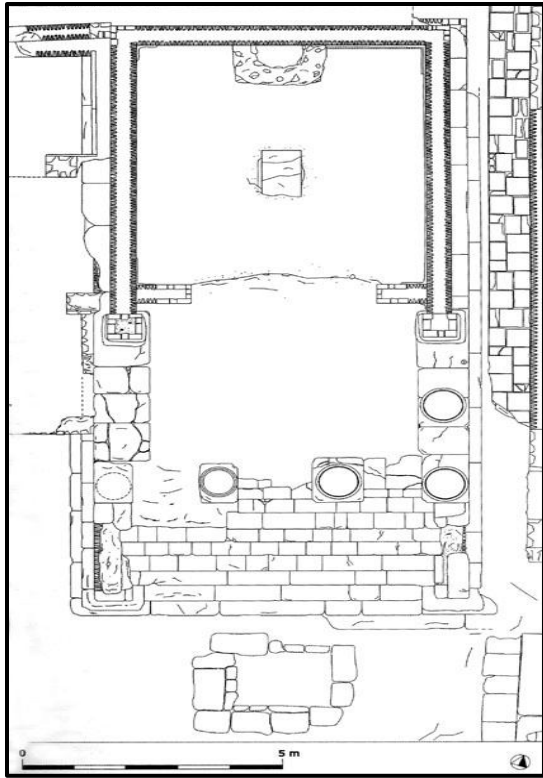


Figure 2.20: Altar of the Tetrastyle Temple (photo by author 2013)



Figure 2.21: Altar of Tetrastyle Temple (photo by author 2013)



a



b

Figure 2.22a, b: a)Tetrastyle Temple and its altar (image from Pensabene 2007); b)Photo of Tetrastyle Temple (ostia-antica.org)



Figure 2.23: 4 Altars and altar of Tetrastyle Temple (photo by author 2013)

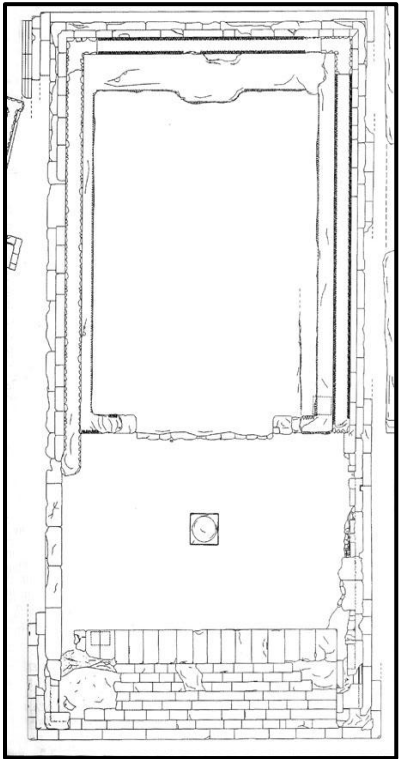


Figure 2.24: a) Plan of Temple of Hercules (after Pensabene 2007); b) photo of the Temple of Hercules (photo by author 2011)



Figure 2.25: Flavian altar of Temple of Hercules (photo by author 2013)



Figure 2.26: Central image of sanctuary (photo by author 2011)



Figure 2.27: Central image of sanctuary (photo by author 2013)

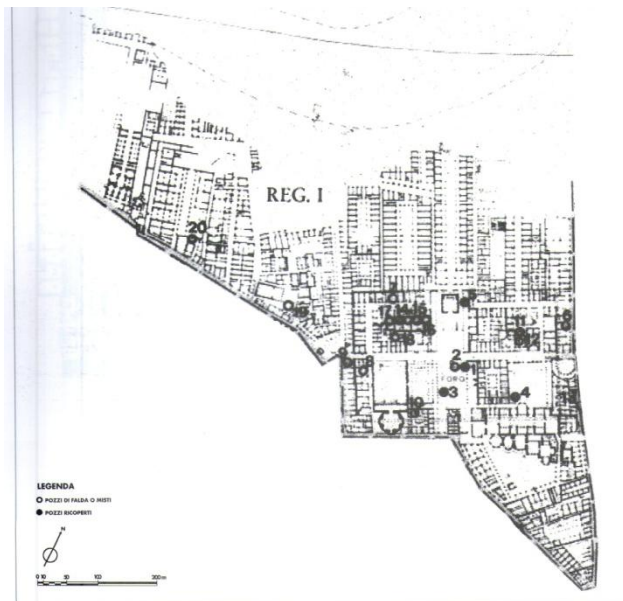


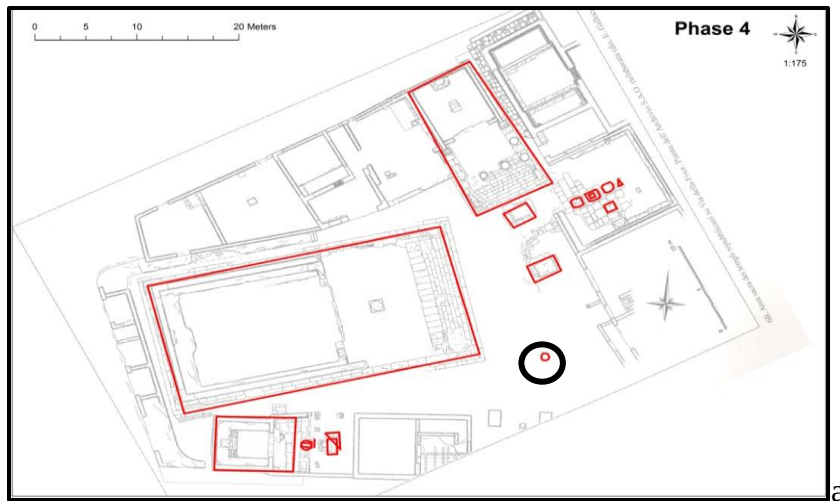
Figure 2.28: Plan of water sources in Regio I in Ostia (after Ricciardi 1996)



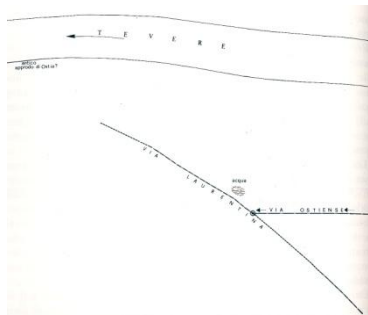
Figure 2.29: Sacred well (photo by author 2011)



Figure 2.30: Dolia on right side of Temple of Hercules (photo by author 2013)



a



b

Figure 2.31: a) plan of sanctuary with location of well (plan by J. Nowlin); b) map of Ostia with location of well (after Zevi 1996:72)

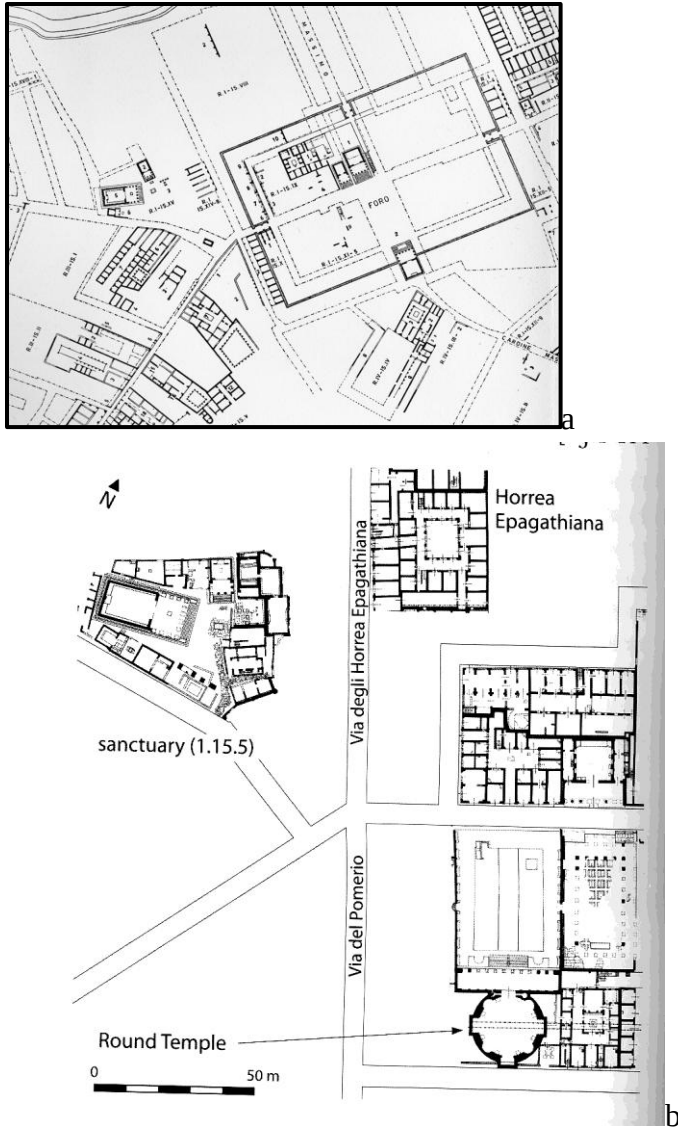


Figure 2.32: a) plan of sanctuary, all altars, and relation to castrum (plan from Gismondi);
 b) map of sanctuary in location to other streets and sanctuaries in Ostia (map after Boin 2010)

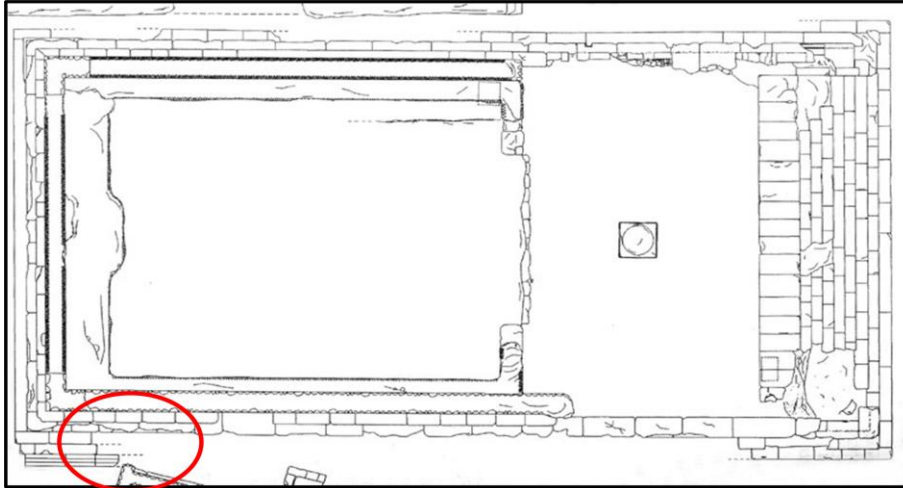


Figure 2.33: Podium of temple of Hercules and intersection with Temple of Round Altar (after Pensabene 2007)



Figure 2.34: Intersection of Temple of Hercules and the Temple of the Round Altar (photo by author 2013)



Figure 2.35: Triangular wedge between Temple of Hercules and the Temple of the Round Altar (photo by author 2013)



Figure 2.36: Central space of sanctuary (photo by author 2013)

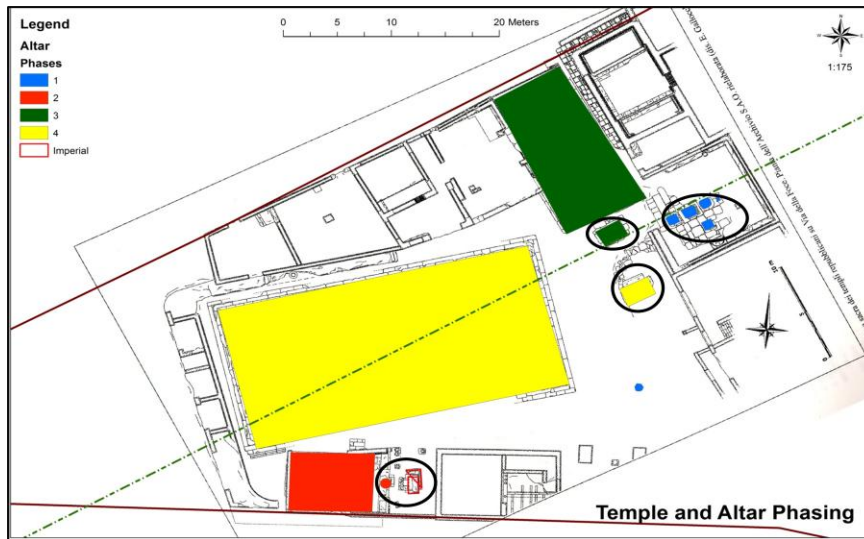


Figure 2.37: Central space of sanctuary (plan by J. Nowlin)



Figure 2.38: Aheneoarbus altar (after Ryberg 1955)

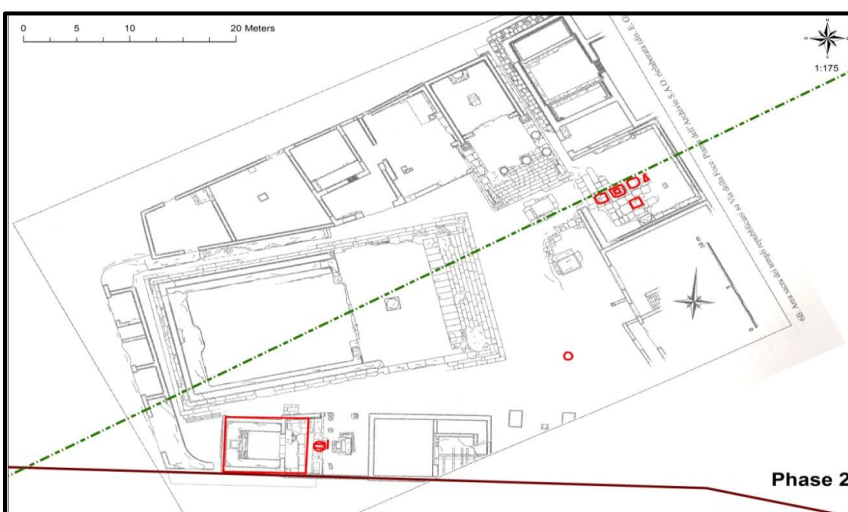


Figure 2.39: Plan in second phase with Temple of Round Altar and group of 4 altars

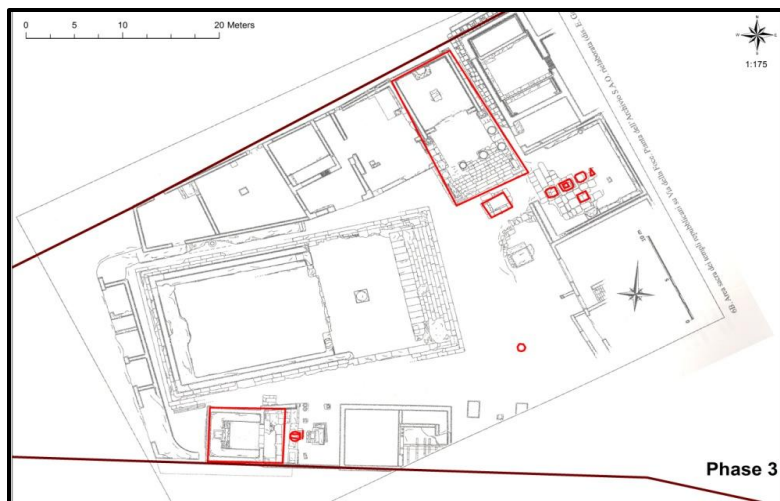


Figure 2.40: Plan in third phase with Tetrastyle Temple, Temple of the Round Altar, and group of 4 altars

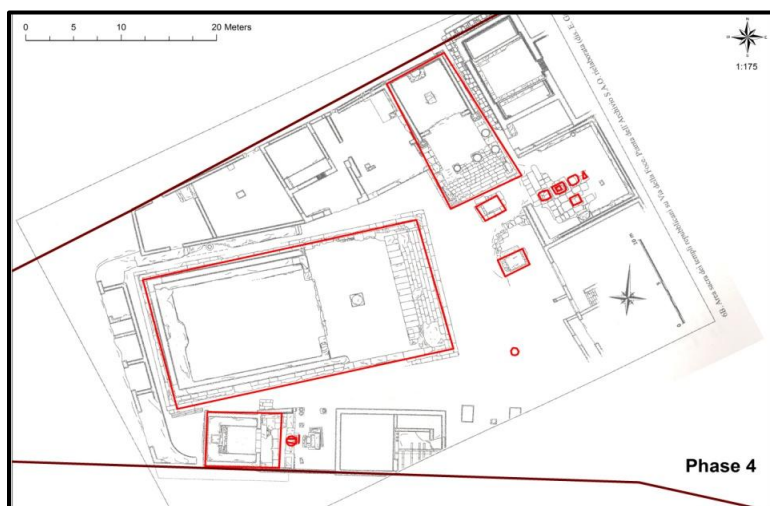


Figure 2.41: Plan in 4th phase with all temples and all altars



Figure 2.42: One of the four altars (photo by author 2013)



Figure 2.43: Central space of sanctuary (photo by author 2011)



a.



b.

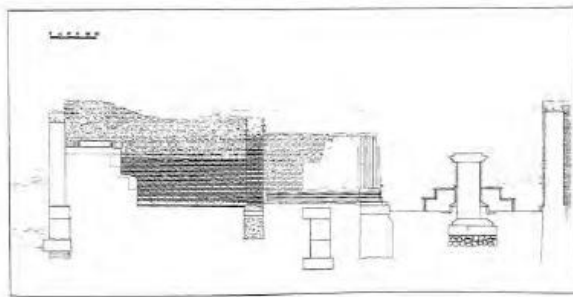
Figure 2.44a,b: a) Limits of tufa podium on which altars stand (east side); b) Limits of tufa podium on which altars stand (west side) (photos by author 2013)



Figure 2.45: Imperial phase of 4 altars (photo by author 2011)



a



b

Figure 2.46a,b: a) Rise in ground level (photo by author 2013); b) longitudinal plan of elevation (plan after Pensabene 2007)

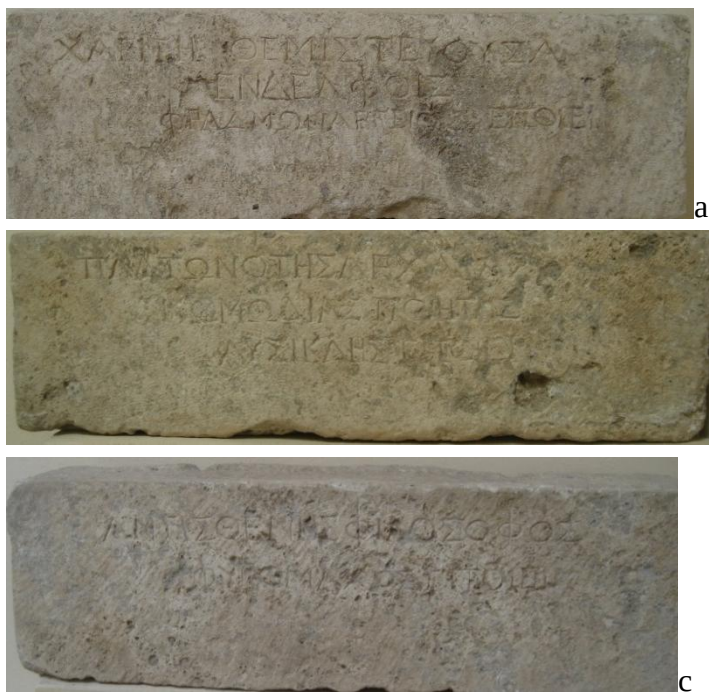
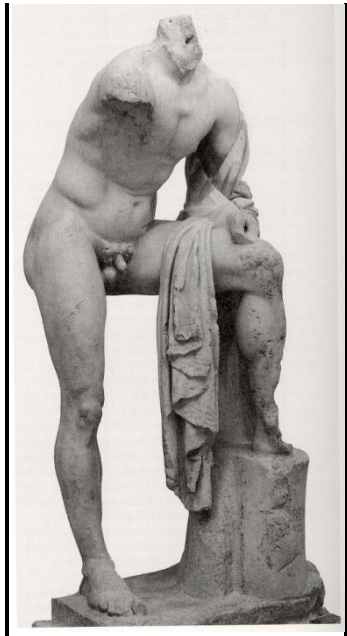


Figure 2.47a,b,c: Greek blocks (photos by author 2011. Ostia Museum)



Figure 2.48: Haruspex plaque (photo by author 2011 from Ostia Museum)



a



b

Figure 2.49a,b: a) Statue of G. Cartilius Poplicola; b) frieze of naval battle (both from ostia-antica.org)



Figure 2.50: Oblique altar, Temple of the Round Altar (photo by author 2013)

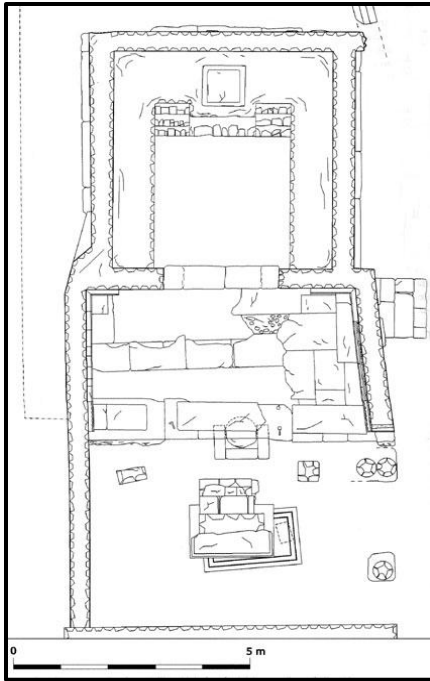


Figure 2.51: Temple of the Round Altar (after Pensabene 2007)



Figure 2.52: Brick colonnade, Temple of the Round Altar (photo by author 2013)



Figure 2.53a,b: Altar on top of oblique altar (photos by author 2013)



Figure 2.54: Ground level raising around Temple of Round Altar (photo by author 2013)

FIGURES: Chapter 3



Figure 3.1: Ointment jars from Largo Argentina (photo by author)

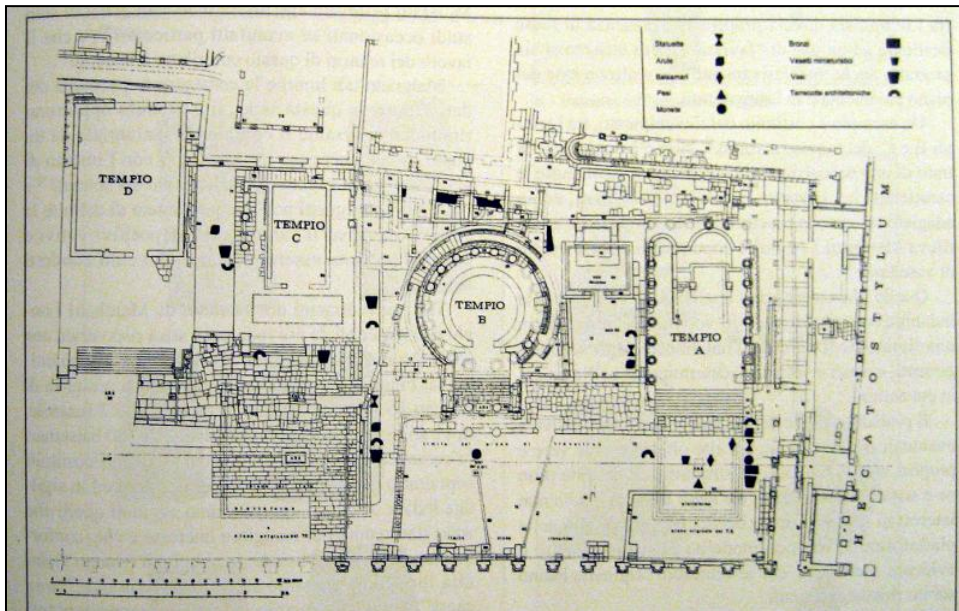


Figure 3.2: Location of votive deposits in Largo Argentina (image from Andreani et al. 2005:115)



Figure 3.3a,b,c: Details of manufacture of *arulae*, Largo Argentina (photo by author)

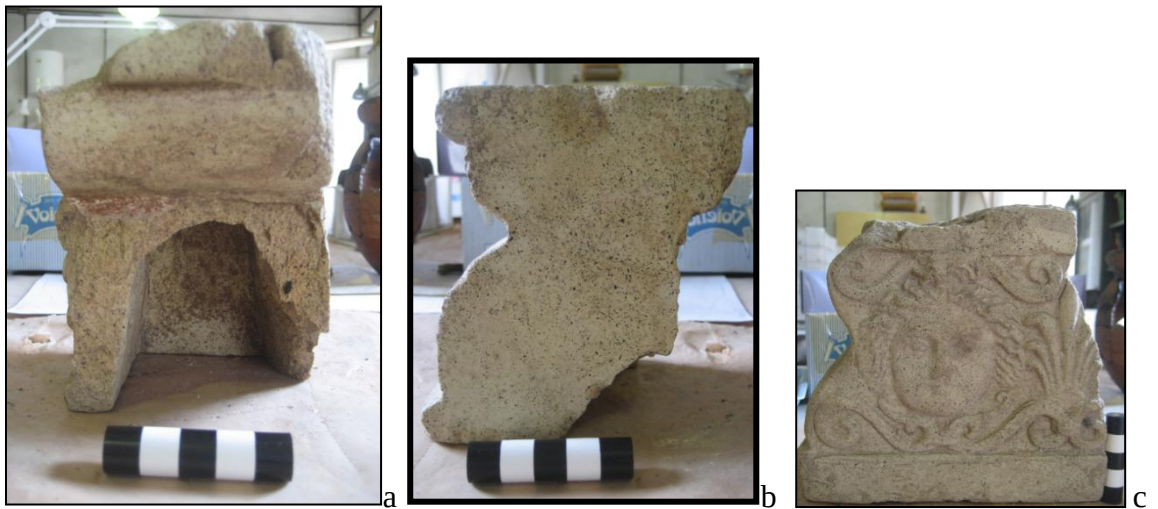


Figure 3.4a,b,c: *Arulae* from Lavinium (photo by author)

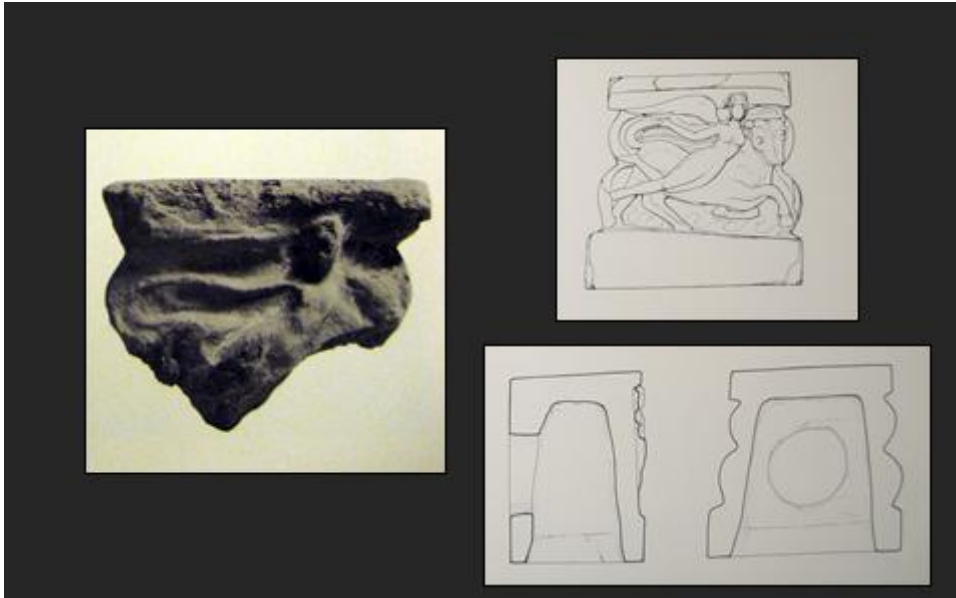


Figure 3.5: Hourglass *arula* from Largo Argentina (images after Ricciotti 1978)

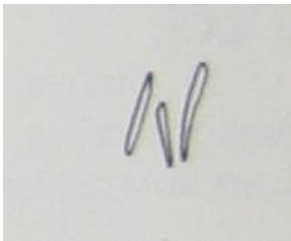


Figure 3.6: Marks of manufacture on back of hourglass *arula* from Largo Argentina (image from Ricciotti 1978:33 (#10))

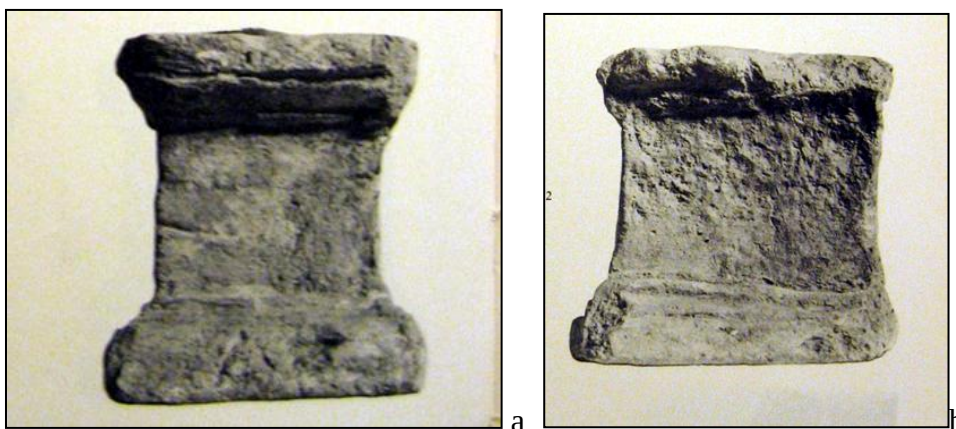


Figure 3.7a,b: Parallelepiped published *arulae* from Largo Argentina (images from Ricciotti 1978: nos 81, 96)



Figure 3.8: Fragment of *arula* with crown and base molding, Largo Argentina (photo by author)



Figure 3.9: detail of whitewash plastering on *arulae* from Largo Argentina (photo by author)



Figure 3.10: Stepped base molding (photo by author)



Figure 3.11: stepped molding (photo by author)



Figure 3.12: Curved horizontal bands (photo by author)



Figure 3.13: Fragment with cyma-like articulation (photo by author)



Figure 3.14: Fragment of torus and cyma recta-like molding (photo by author)



Figure 3.15: Altar of Temple A (photo by author)

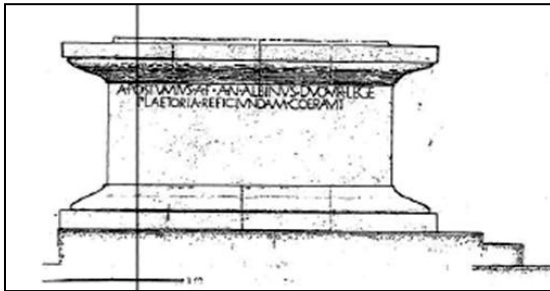


Figure 3.16a,b: a) drawing of altar of Temple C (Marchetti Longhi 1960:38); b) altar of Temple C (photo by author)

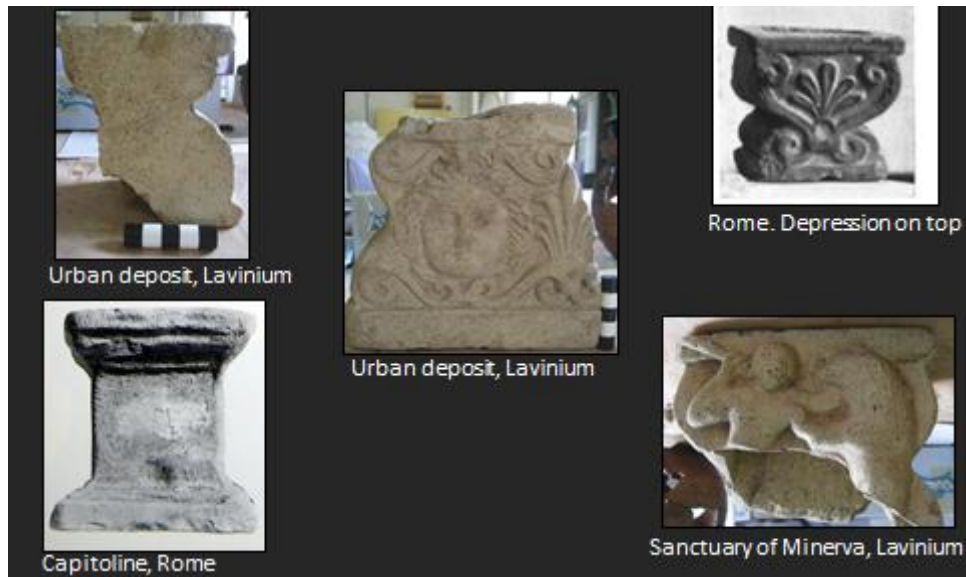


Figure 3.17: Examples of shapes of *arulae* (photos from Lavinium by author; top right after Van Buren 1918; bottom left after Ricciotti 1978).

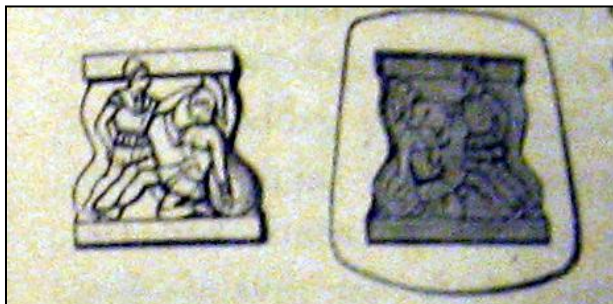


Figure 3.18: Mold of an *arula* from Ardea (image from Blümner 1879:135)



Figure 3.19: *Arula* from Lavinium with sphinx (photo by author)



Figure 3.20: Cylindrical *arula* from Morgantina (image from Bell 1981:no 910)



Figure 3.21: Cylindrical *arula* from Gela, Museo Archeologico Regionale di Gela, inv. Sop. BL 30 (image from <http://www.clevelandart.org/exhibcef/mgtampa/khtml/6777381.html>)



Figure 3.22: Cylindrical *arula* from Siracusa (image from *Archeologica della Sicilia sud-orientale*: 1973. P.123, no.385 Tav.XXXIX)



Figure 3.23: Cylindrical altar from Sanctuary of Demeter and Persephone at Morgantina (image from <http://angloulise.blogspot.com/2009/04/piazza-amerina-morgantina.html>)



Figure 3.24: Hourglass *arula* from Lavinium (photo by author)



Figure 3.25: Altar of Verminus, after Montemartini Museum website (<http://capitolini.net/object.xql?urn=urn:collectio:0001:scu:01707>)



Figure 3.26: Altar of C. Sextius Calvinus, Palatine Museum; (image by author)



Figure 3.27: Altar in front of Temple A at Fosso dell'Incastro, Ardea (photo by author)

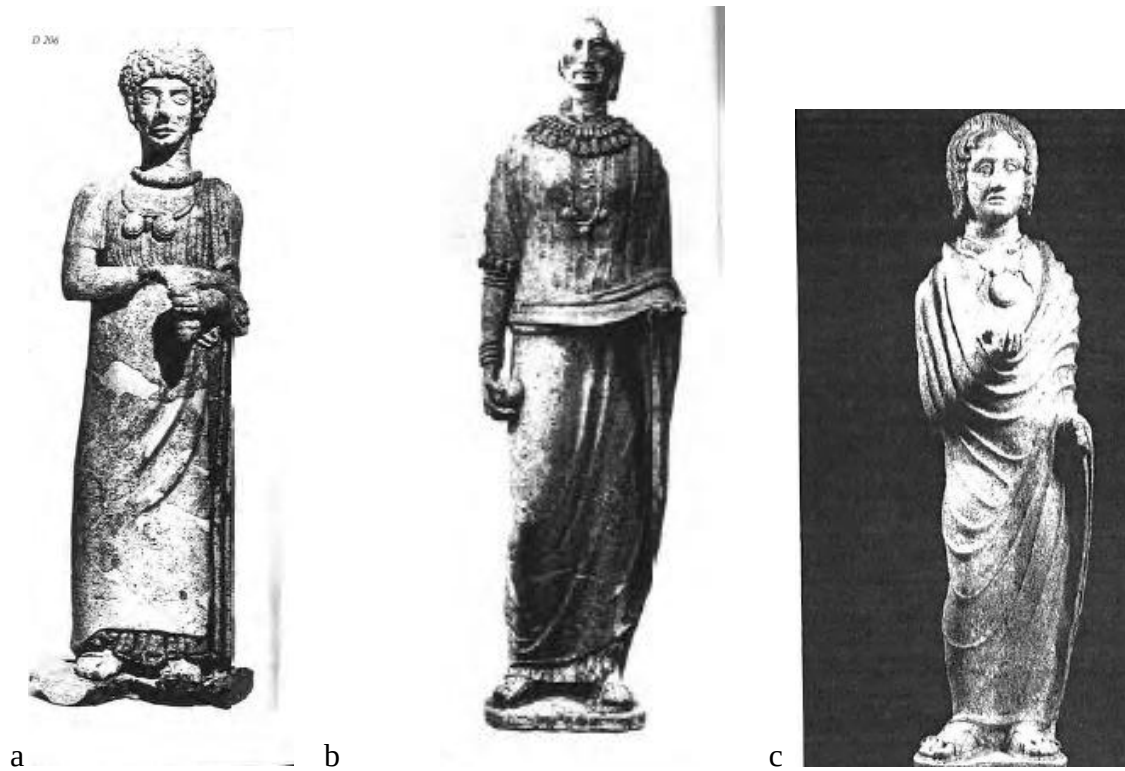


Figure 3.28a,b,c: Statues from Sanctuary of Minerva at Lavinium with *bulla* or jewelry (a and b after Castagnoli 1981:228,240; c after Fenelli 1991:495)



Figure 3.29: Variety of ointment jars from Largo Argentina (photo by author)



Figure 3.30: detail of glazed interior of an ointment jar from Largo Argentina (photo by author)



Figure 3.31: Votive statuette of animal from Largo Argentina (photo by author)



Figure 3.32: Typical types of statuette from Largo Argentina (photo by author)



a



b



c

Figure 3.33a,b,c: bases of vessels with Anina, Cyrsant(i?), and Axsuris (photo by author)



Figure 3.34: Votive altar with Oscan inscription, Naples Museum inv 2550 (photo by author)



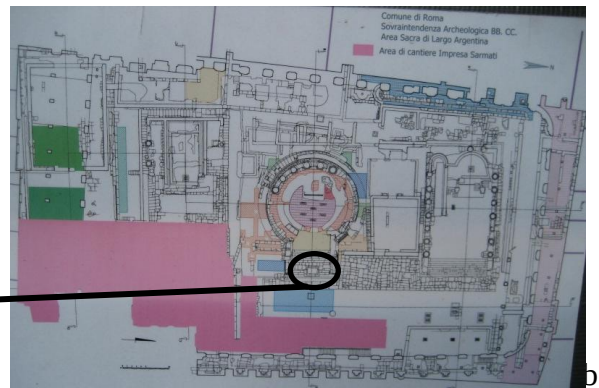
Figure 3.35: Well at Ardea (photo by author)



Figure 3.36: Thesaurus at Campo della Fiera (after Stopponi 2011:28, fig.29)



a



b

Figure 3.37a,b: a) Well in front of Temple B (photo by author) b) plan of Largo Argentina (plan from site)

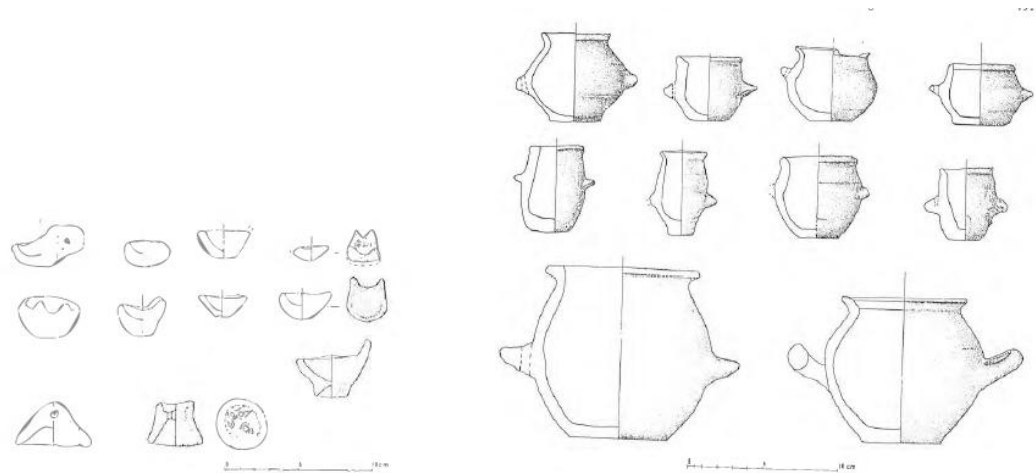


Figure 3.38: Miniature pottery and typical *olla* vessel shape from Sanctuary of Minerva at Lavinium (images from Fenelli 1991:490, 491)

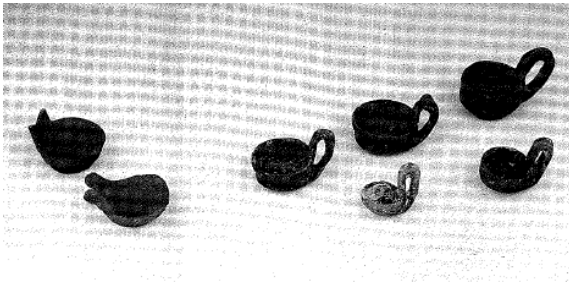


Figure 3.39: miniature vessels from S. Omobono (from Virgili 1989:52)

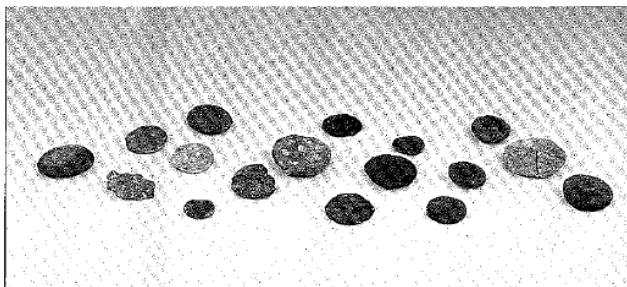


Figure 3.40: Miniature sacrificial cakes (from Virgili 1989:53)

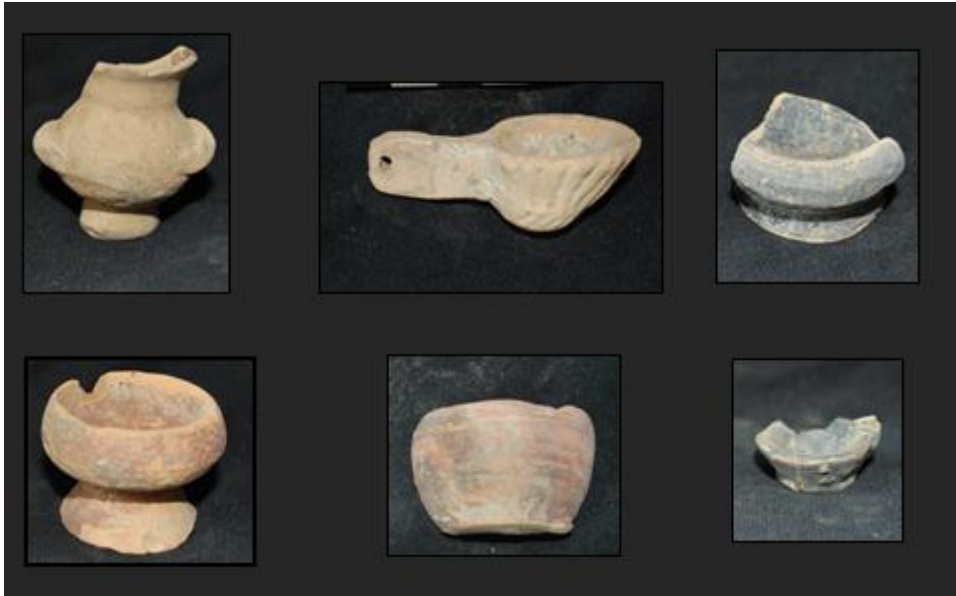


Figure 3.41: Miniature vessels from Largo Argentina (photo by author)



Figure 3.42: Miniature ladle from Largo Argentina (photo by author)

FIGURES: Chapter 4



Figure 4.1: Panel LXXXVI, Trajan's Column (photo by author from cast in EUR Museum, Rome)



Figure 4.2: Relief from Severan arch of the Argentarii (photo by author)

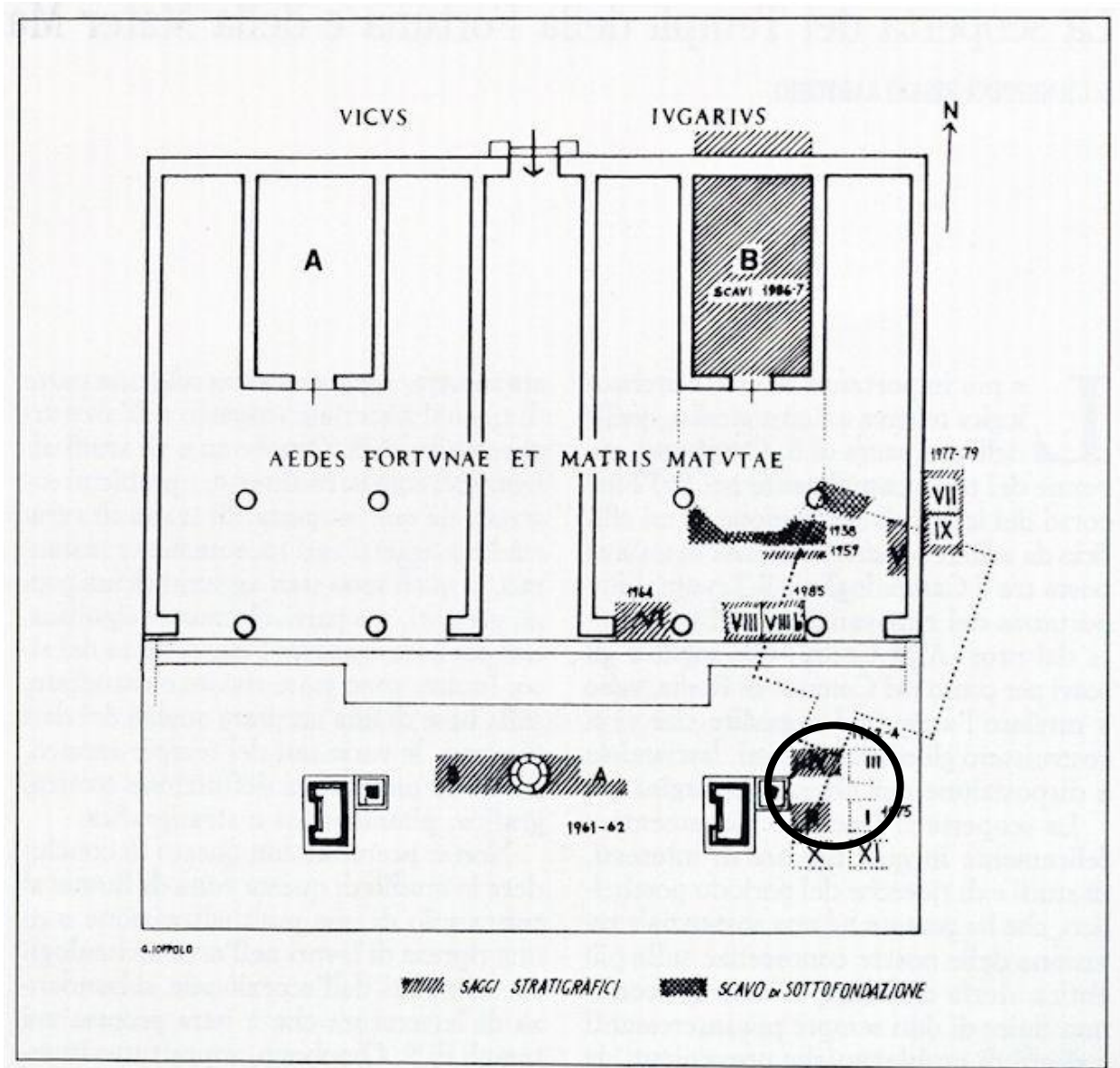


Figure 4.3: Trenches I, II, III, IV at S. Omobono in area of Imperial *tabernae* (after Ioppolo 1972)

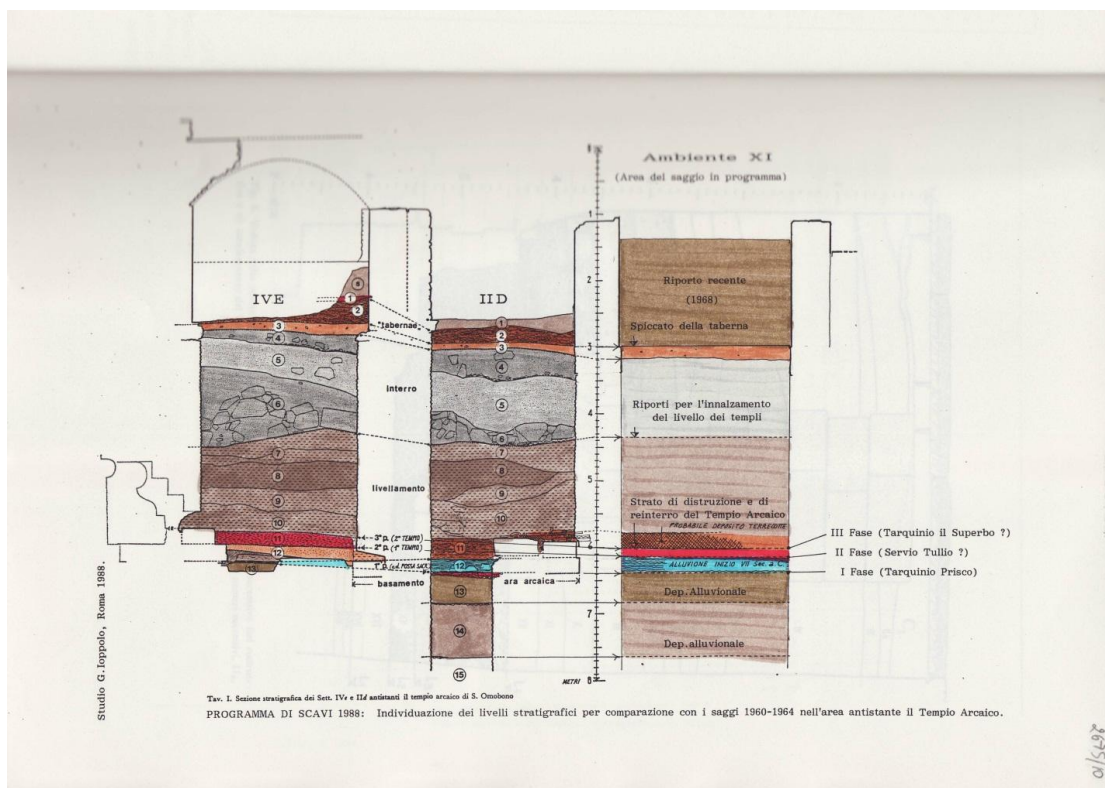


Figure 4.4: Ioppolo's strata of sectors II and IV (plan from archives).

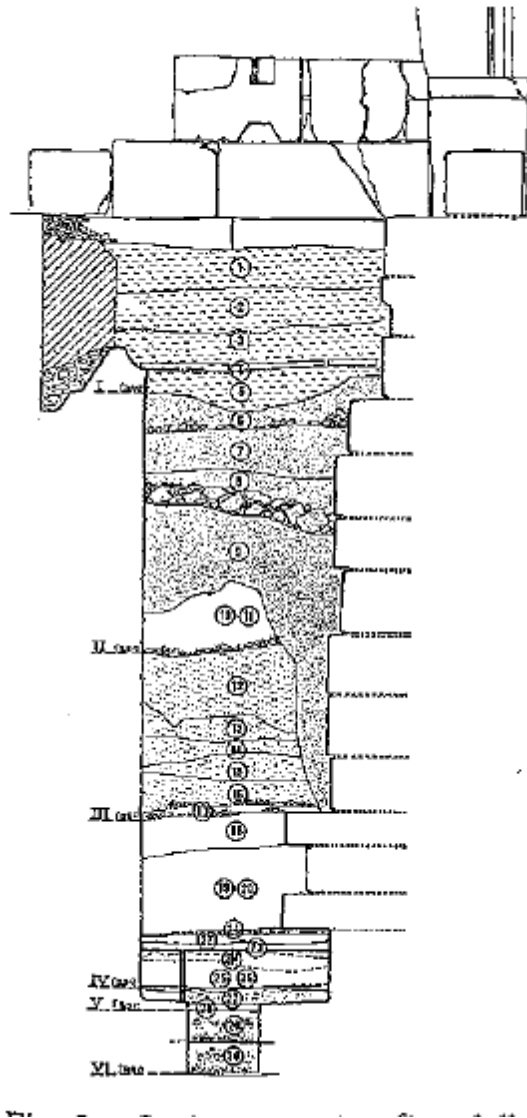


Figure 4.5: Virgili's strata (after Virgili 1977)

FIGURES: Chapter 5

Photos and plans taken from archives at S. Omobono are thanks to Nicola Terrenato, Paolo Brocato, and Carlo Regoli.

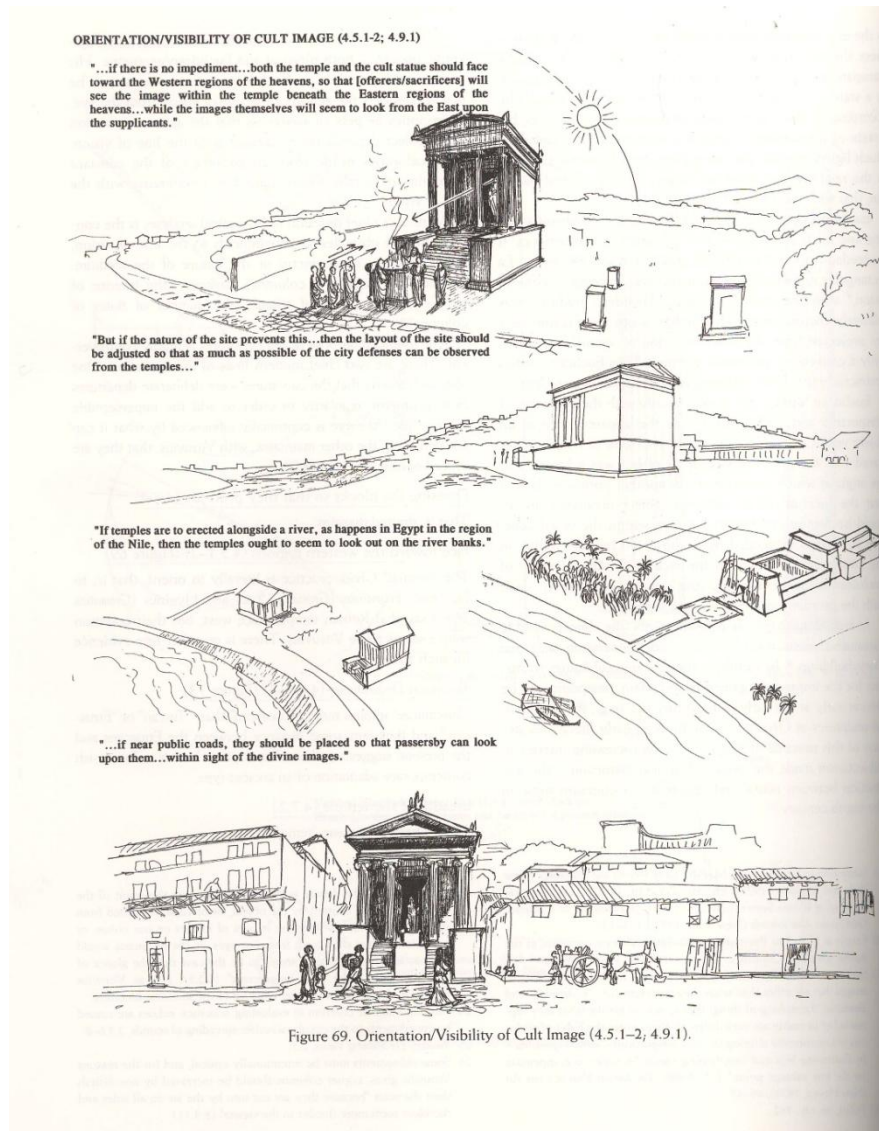


Figure 5.1: Interpretation of Vitruvius' passage on altars, temples, and orientation (Rowland 1999)

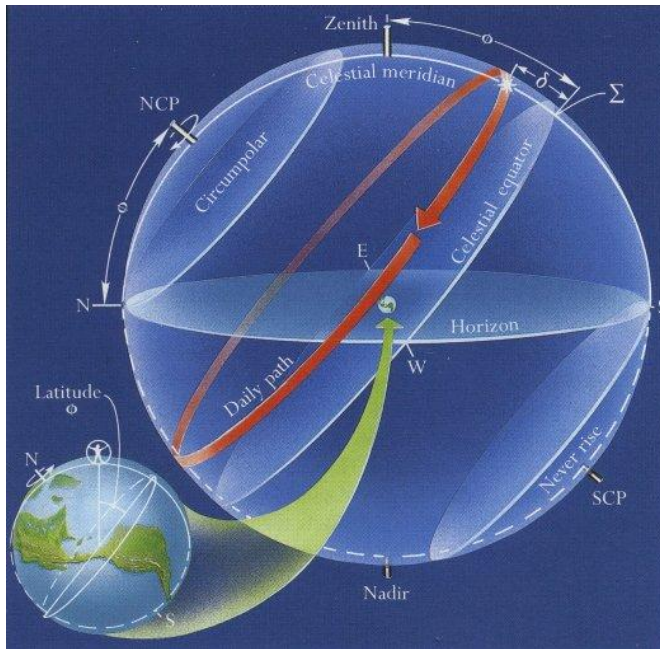


Figure 5.2: Daily path of stars (image from <http://stars.astro.illinois.edu/celsph.html>)

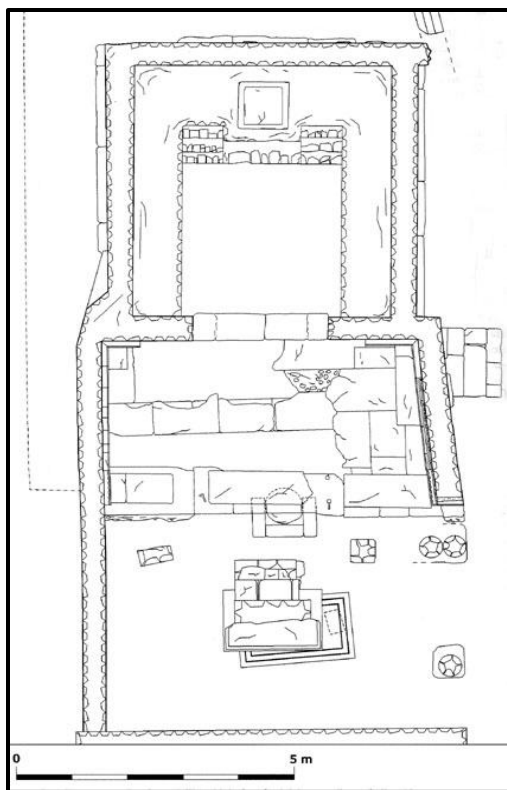


Figure 5.3: Altars in front of Temple of Round Altar (after Pensabene 2007)

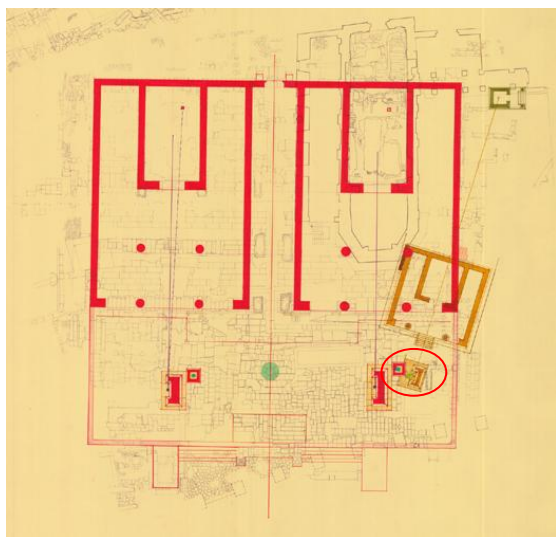
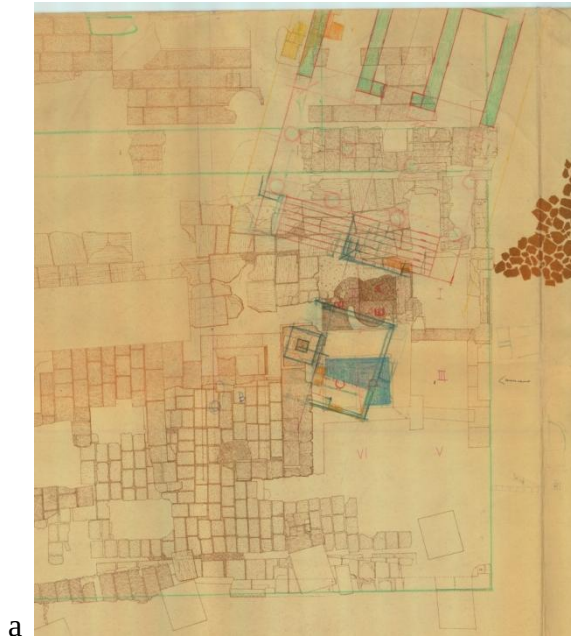


Figure 5.4: Archaic temple and altar at S. Omobono (plan from archives)



a



b

Figure 5.5a,b: Archaic altar at S. Omobono (plans from archives)



Figure 5.6: foundation of archaic altar, S. Omobono (photo from archives)
Remains of the Archaic altar, the impasto cup (center), and architectural terracottas (center, top, and between the stone block and the wooden planks) in Settore II (AFSRCM, S. Omobono, b. 31, 1, c. 4051.10).

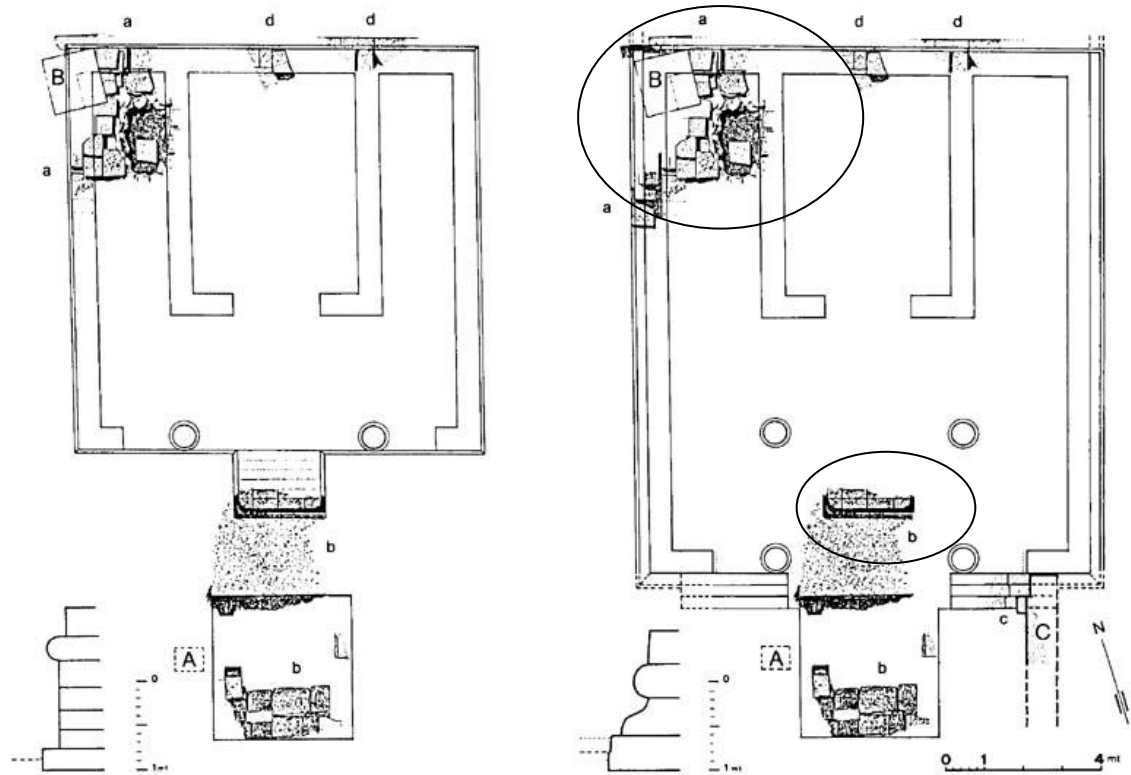


Figure 5.7: Placement of archaic altar in second phase (after Colonna 1991) (the top circle indicates the remains of the NW corner of the podium of the temple; the lower circle indicates the placement of the altar in the second phase of the archaic temple according to Colonna)

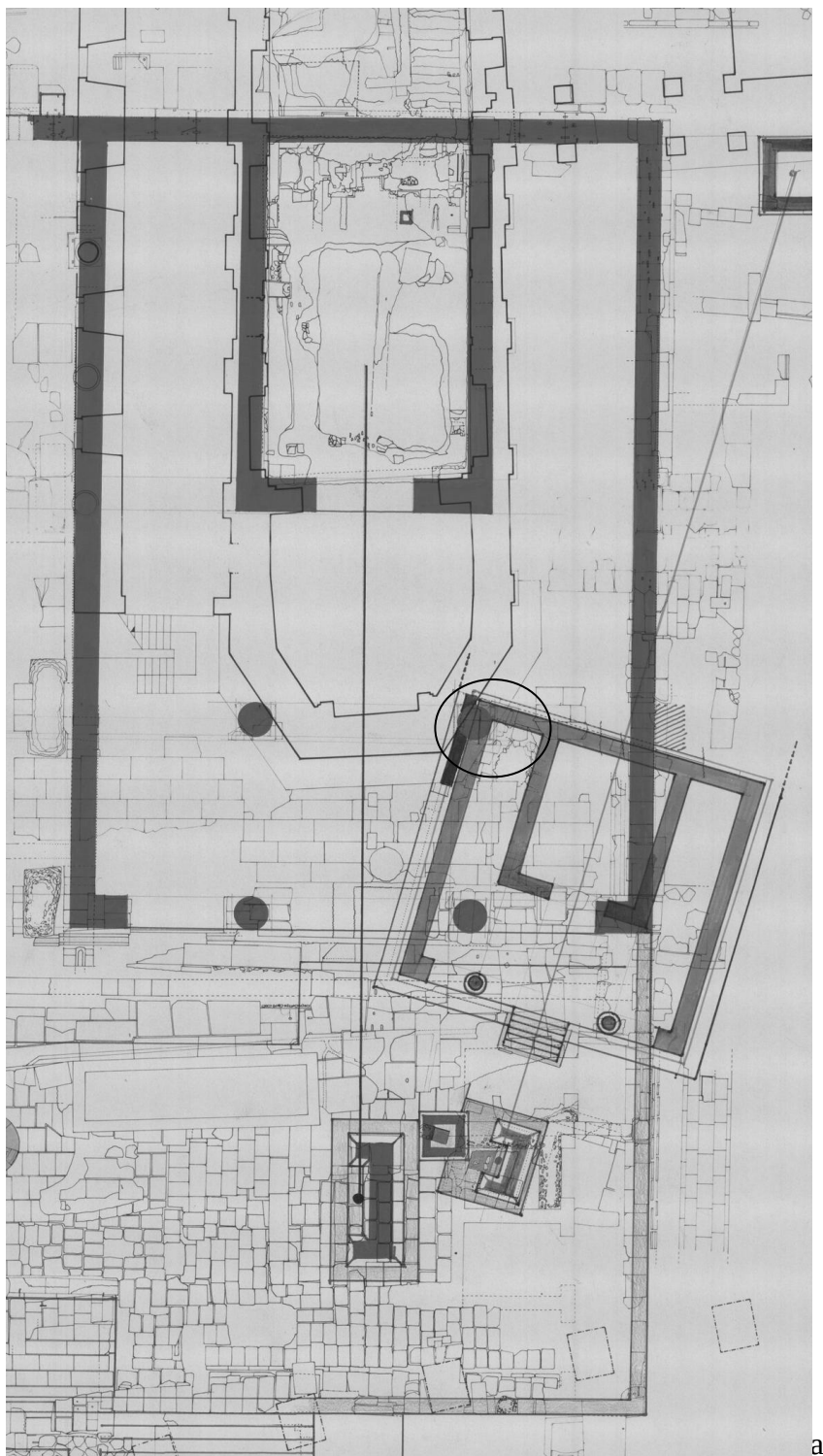


Figure 5.8a: NW corner of podium (circled) (plan from archive)

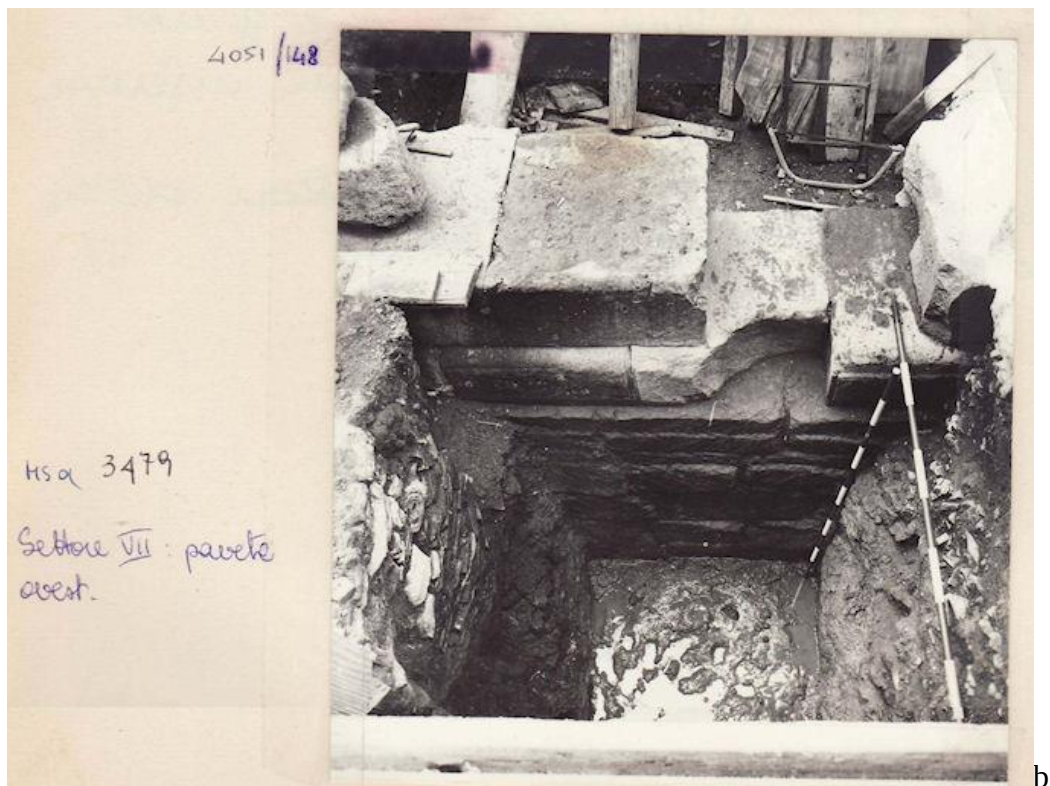


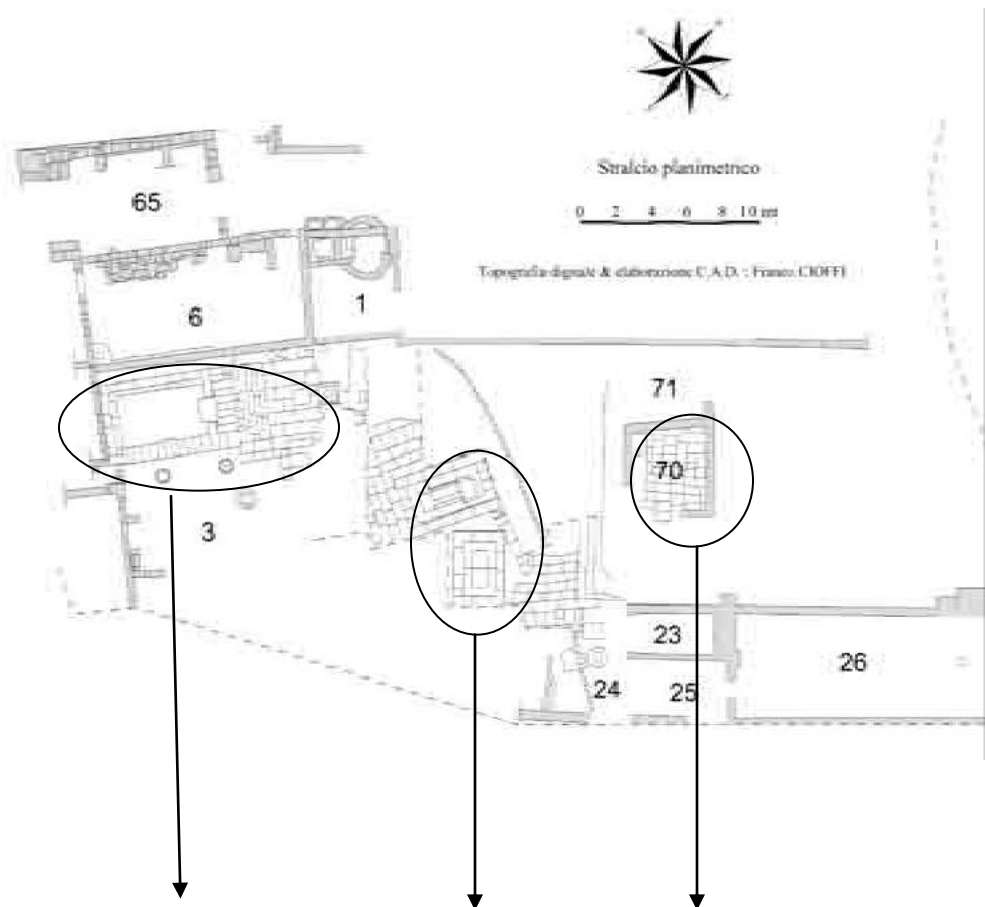
Figure 5.8b: Photograph of Settore VII-IX from the east (AFSRM, S. Omobono, b.31, 5, c. 4051. 148) (image from archives)



Figure 5.9: S. Omobono to Palatine (google earth)



Figure 5.10: Dschubba rising (Image from
<http://skychart.skyandtelescope.com/skychart.php>)



Temple A

Altars in front of B

Temple B

Figure 5.11: Fosso dell’Incastro, Ardea (after Di Mario 2007)



Figure 5.12: U-shaped and Rectangular altars in front of Temple B, Ardea (photo by author)



Figure 5.13: Altar in front of Temple A, Ardea (photo by author)

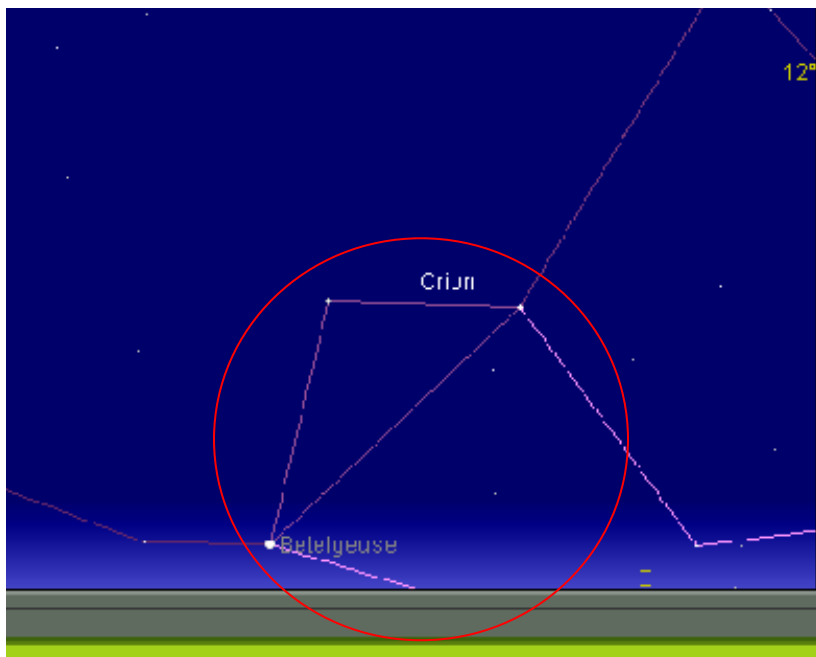


Figure 5.14: Betelgeuse, Castor rising (image from <http://skychart.skyandtelescope.com/skychart.php>)

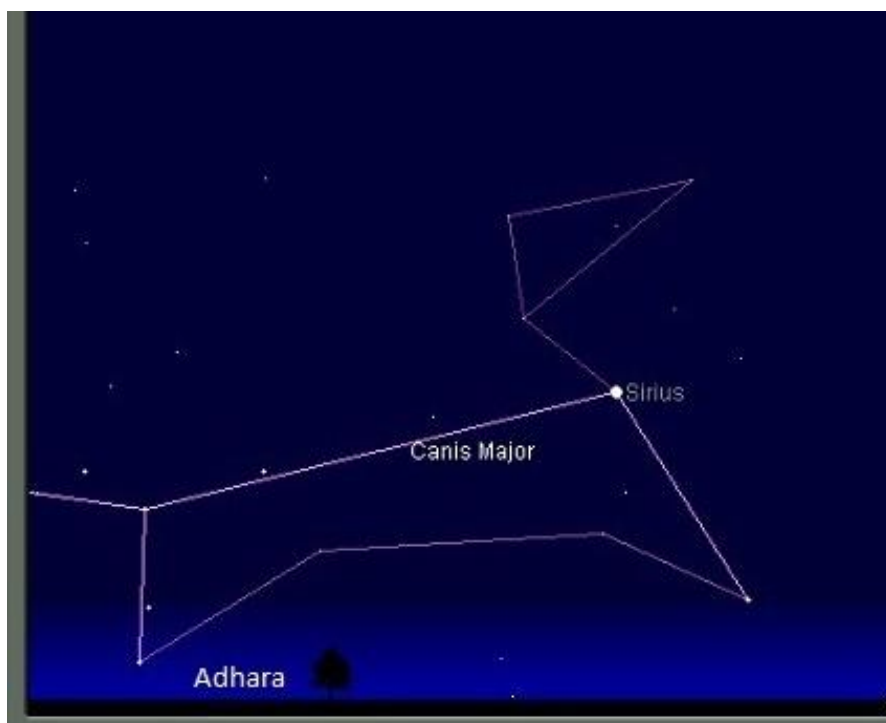


Figure 5.15: Adhara, Canis Major, Morning setting (image from <http://skychart.skyandtelescope.com/skychart.php>)

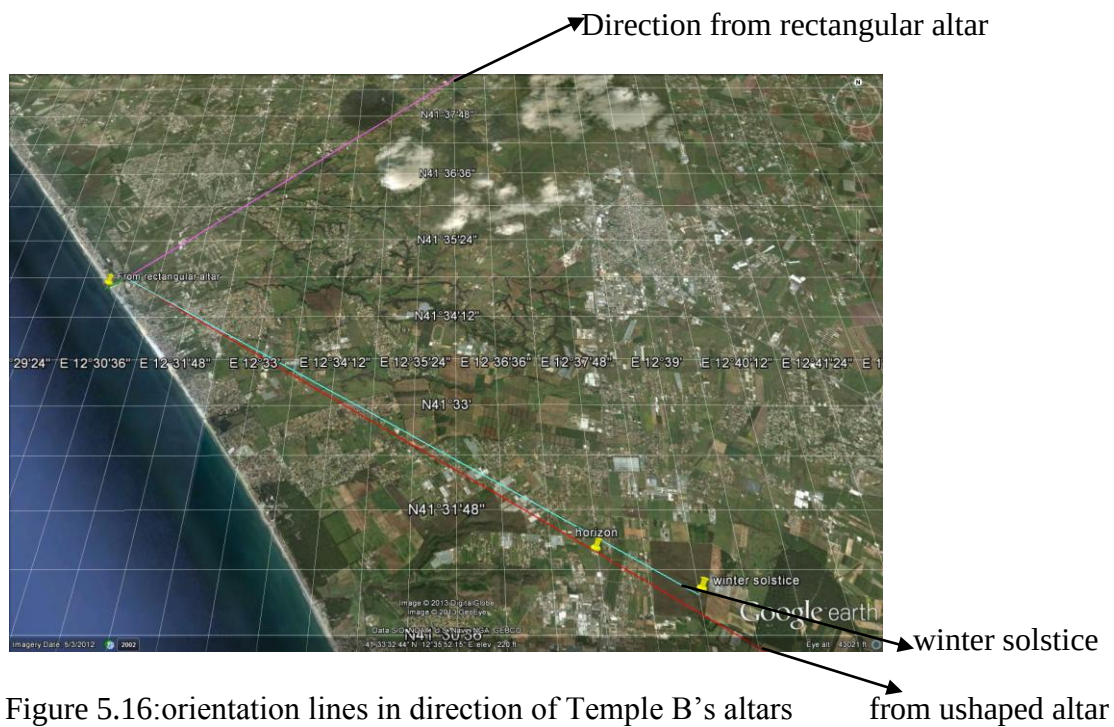


Figure 5.16:orientation lines in direction of Temple B's altars

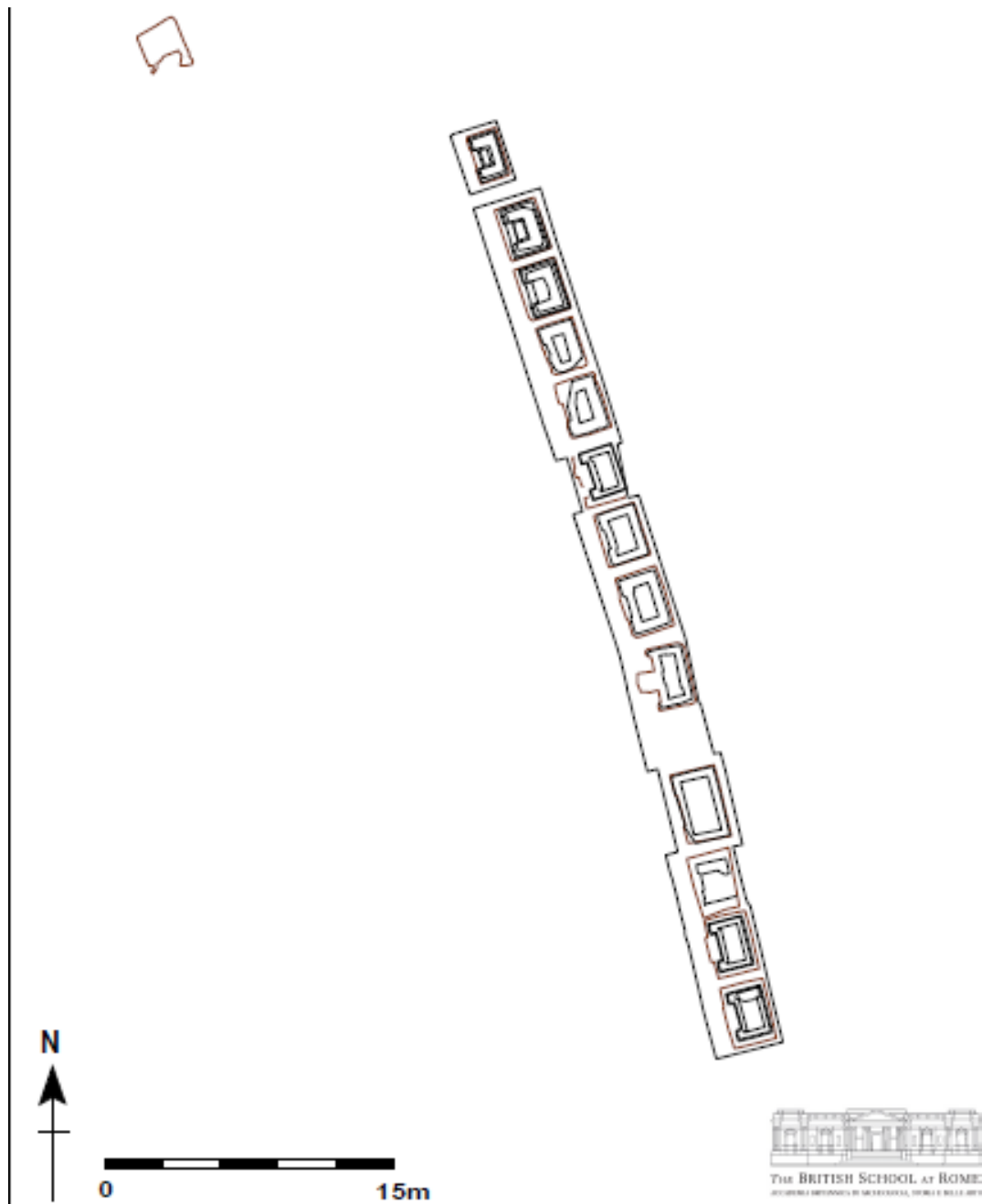


Figure 5.17: 13 altars at Lavinium (map drawn by Sophie Hay, British School at Rome)



Figure 5.18: nautical dawn (photo by Brendan Loy, from http://farm4.staticflickr.com/3158/2758587214_9feb8ec9ee_z.jpg?zz=1)

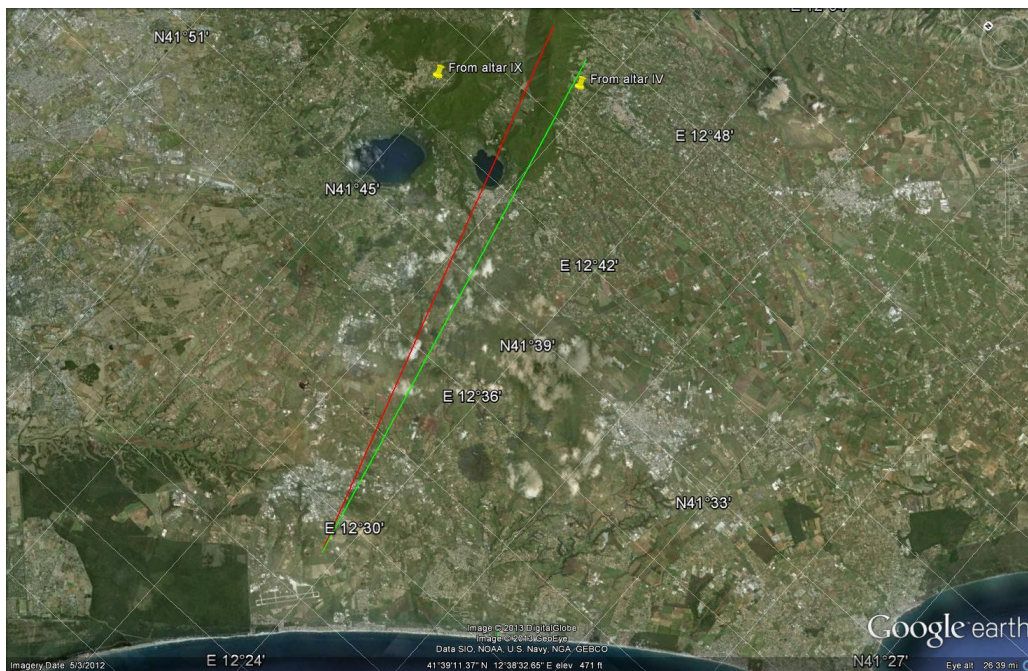


Figure 5.19: orientation lines from altars IX and IV at Lavinium (google earth)

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