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Doctoral Dissertations, 2011-2026 Classics

2018

Uncertain Beginnings: Childbirth and Risk in the Roman World

Freidin, Anna Bonnell

Princeton, NJ : Princeton University

http://arks.princeton.edu/ark:/88435/dsp01bg257h767

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UNCERTAIN BEGINNINGS:

CHILDBIRTH AND RISK IN THE ROMAN WORLD

Anna Bonnell Freidin

A DISSERTATION

PRESENTED TO THE FACULTY

OF PRINCETON UNIVERSITY

IN CANDIDACY FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

RECOMMENDED FOR ACCEPTANCE BY

THE DEPARTMENT OF

CLASSICS

Adviser: Brent D. Shaw

April 2018

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Abstract

Most Romans understood childbearing as a woman's *telos*, her end purpose, as well as the greatest threat to her wellbeing. This double valuation prompts questions about how Romans responded to the risks of giving birth. Mistakes, misfortunes, and interventions in the process of human generation were seen to have far-reaching consequences, reverberating for generations, altering the course of people's lives, their family history, and even the fate of an empire. In this dissertation, I examine how the risks of childbirth were constructed, understood, and mitigated in the Roman world, and how they were subject to intense debate and a variety of techniques, often sharing assumptions about the female body. The project focuses on approximately the first three centuries of the common era.

I argue that the unseen process of generation – and its risks – were often understood through analogies and metaphors drawn from phenomena in the non-human environment. This viewpoint can help us understand the variable network of actors involved in the birth process and approaches to mitigating its dangers and uncertainties. Along with the complex relationship of the maternal-fetal pair, I move between the dynamics of the birthing chamber on the micro scale to demographic trends and Roman pronatalist ideology, setting the stage for close studies of medical approaches to the risks of childbearing, how amulets were understood to disrupt and affect childbirth, and perceptions of fortune, fate, and divine intervention. The dissertation offers a multifaceted perspective on what it meant to give birth in the Roman world – a key process in the generative cycle that shaped and defined the lives of the vast majority of women living under the empire.

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Abbreviations

With several exceptions (below), abbreviations of classical texts and standard reference works follow the *Oxford Classical Dictionary*, fourth edition (2012) (http://classics.oxfordre.com/staticfiles/images/ORECLA/OCD.ABBREVIATIONS.pdf, accessed November 2017).

Abbreviations of Hippocratic texts follow H. G. Liddell, R. Scott, and H. S. Jones (eds.), *A Greek-English Lexicon* (1996).

Abbreviations of Galen's works and editions follow R. J. Hankinson (ed.), *The Cambridge Companion to Galen* (2008), appendix 1, pp. 391–97.

Abbreviations of journals and series follow *L'Année philologique* (http://www.annee-philologique.com/files/sigles_fr.pdf, accessed November 2017).

Abbreviations of epigraphic works follow the Epigraphik-Datenbank Clauss/Slaby (http://www.manfredclauss.de/gb/index.html, accessed November 2017).

Abbreviations of papyri follow the *Checklist of Greek, Latin, Demotic and Coptic Papyri, Ostraca and Tablets* (http://papyri.info/docs/checklist, accessed November 2017).

Exceptions and Additions:

EAH = R. S. Bagnall et al. (eds.), *Encyclopedia of Ancient History* (2013).

Gyn. = *Gynecology*

Ilb. = J. Ilberg (ed.), *Gynaeciorum libri IV* (1927).

Joly = R. Joly (ed. and trans.), *Hippocrate: De la génération; De la nature de l'enfant; Des maladies IV; Du fœtus de huit mois* (1970).

K = C. G. Kühn (ed. and trans.), *Claudii Galeni opera omnia*. 20 vols. (1821–33).

Li = E. Littré (ed. and trans.), *Oeuvres complètes d'Hippocrate*. 10 vols. (1839–61).

Mat. Med. = *De Materia Medica*

Sor. = Soranus of Ephesus

Acknowledgements

This dissertation was written (primarily) at two institutions, Princeton and Yale, where I have found lifelong friends and mentors. The Princeton Department of Classics nurtured me, and I am grateful for all the guidance and encouragement I have received over the years. The Program in the Ancient World has been vital to my development as a historian. Thanks are also due to the Program in Gender and Sexuality Studies. The Yale Department of Classics was my second home from 2014–2017. I am indebted to its faculty, staff, and graduate students for their unwavering generosity. The Yale Program in the History of Science and Medicine welcomed and included me, and its impact on my intellectual development has been profound. I am deeply grateful for the support of the Harold W. Dodds Fellowship at Princeton in 2015–2016 and the American Association of University Women, which funded my dissertation work in 2016–2017.

It is hard to articulate the depth of my gratitude to Brent Shaw. He sees the big picture, but is a master of the details; he has pushed me to explore other disciplines and thought-worlds, all while anchored in the particularities of a historical period. His wonderment always inspires me to see and think in new ways and to appreciate the privilege of being a historian. He has encouraged me always to be true to my values, to be good to others, and to be good to myself.

Along with Brent, I have had the privilege of mentorship from Harriet Flower, Brooke Holmes, and Rebecca Flemming, who together formed a dream-team dissertation committee. Over the years, Harriet's support has sustained and buoyed me up in innumerable ways – from East Pyne to Mathey College. Brooke has made me bolder and

deeper in my thinking and expression, her creativity is infectious. Getting to know Rebecca has been one of the great gifts of the dissertation process, she has always gone above and beyond, and I am so fortunate she agreed to join me for this journey. Each committee member read and commented on this dissertation with utmost care. All errors and oversights in these pages are my own.

It was Emma Dench, dear friend and mentor, who made me a Roman historian. For their questions, guidance, and wisdom, special thanks are due to Yelena Baraz, Michael Flower, Bob Kaster, Joshua Katz, Nino Luraghi, Elizabeth Armstrong, AnneMarie Luijendijk, Heinrich von Staden, Keith Wailoo, Christopher Faraone, Emily Greenwood, Ann Hanson, Noel Lenski, Naomi Rogers, and John Warner. Andrew Johnston, Irene Peirano, and Joshua Billings have been generous friends and interlocutors across institutions and state lines. For his many bibliographic kindnesses, I am indebted to Colin McCaffrey. Stephanie Lewandowski patiently guided me – and many others – through graduate school's (and life's) ups and downs. My friendship with her has been a gift. Deep thanks also go to Jill Arbeiter, always an ally. She got me to the finish line.

The workshop I co-organized with Wangui Muigai in spring 2016, "Histories of Reproductive Risk," opened up new cross-temporal and cross-cultural ways of thinking about my work. I am thankful to Wangui, friend and co-conspirator, to the participants who shared their work and ideas, and to the many Princeton programs that supported us. Members of the Working Woman Doula Workshop in June 2014 taught me so much, I thank them for their openness. I would also like to express my gratitude to the members of the Princeton Classics Dissertation Writers' Seminar who commented on chapter three of the project. For stimulating questions and discussion, thanks are also due to audiences

at the Society of Classical Studies, the American Association of the History of Medicine, the Yale Department of Classics and the Program in the History of Science and Medicine, the Yale School of Medicine, and the University of Michigan History Department.

To study risk is to study both hope and despair. In this difficult age of ours, friendship has been a vital source of inspiration and consolation. This project – and its author – have grown through conversations with friends inside and outside the academy, including Rene Almeling, Neil Altuna, Sara Altuna, Stephen Blair, Sophie Buchanan, Frederic Clark, Meghan Freeman, Tom Geue, Megan Goldman-Petri, Matt Grant, Leon Grek, Ella Haselswerdt, Katharine Huemoeller, Jamie Kreiner, Isaac Nakhimovsky, Jeff Ostergren, Joanna Radin, Chitra Ramalingam, Calloway Scott, Annie Truetzel, Mathura Umachandran, and Colin Webster. My Princeton Classics cohort has always been a source of strength and support. Since our early days in Boylston Hall, Clem Wood and Tom Miller have been loyal friends and comrades. I cherish our friendship and our history. The jokes, love, and patience of Caitlin Hartman, Sarah Weisberg, James Powers, Isabelle Berner, Ross Arbes, and Alex Hiatt always remind me what matters.

My final thanks are for my family. Since I met Henry Cowles, my best ideas have grown from our conversations in small moments, thinking out loud, bantering, experimenting. Every day with him is a joy. The love and support of Katie, Michael, and Jane Cowles, and the many McLeans have made my life fuller and happier. I dedicate this dissertation on birth, generation, and becoming to my parents, Victoria Bonnell and Gregory Freidin. They inducted me into the dinner-table debate from my infancy and taught me to take intellectual risks, if not risks of other kinds. They have modeled the life of the mind and the truest, sweetest partnership.

Introduction

A great deal has been written on death in Roman culture, but not very much on birth. This imbalance can be attributed to a variety of factors. The gendered nature of our textual sources is one key issue: birth was a process that usually took place out of men's sight – in women's spaces, among women – and it is men, of course, whose literary legacy we possess. The birth process seldom receives direct treatment in Greco-Roman literature outside medical contexts, and even those accounts are few and far between. Death, conversely, and especially heroic death, could be a very public (and very masculine) affair. From a material standpoint, hardly any traces of birth and its rituals remain, whereas funerary art and epigraphy are a principle source of information about Romans from all walks of life – they seem to speak to us from the grave, sometimes with startling immediacy. In a more general sense, classical antiquity is often associated with 'deadness' rather than new beginnings – 'dead' languages, dead people, architectural ruins, buried objects, dust.[1]

There is much to be gained from a study of birth in Roman culture. Indeed, the manner in which a person came into the world was just as significant as the conditions of departure. Birth was seen as precarious, fraught with risks that extended out to the life course. In this sense, it was profoundly connected to death and entangled with a wide range of environmental, social, political, and cultural phenomena. As the foundation of a

[1] The corollary of this set of associations is the all-too-common language of "bringing to life" various aspect of Greco-Roman culture, e.g., describing spoken Latin as "living Latin," as opposed to "dead Latin" (a purely textual approach).

stable social order, childbearing provoked anxiety at the levels of family, community, and state.

The dissertation explores Romans' *perceptions* of birth and its risks, and how they tried to mitigate those risks. From conception to breast-feeding, specialists debated the causes and possibilities for harm to mother and child, and treated them with a wide range of techniques, often sharing assumptions about the female body. Ideas about the fragility of generation, gestation, and birth expose broader understandings of the fragility of communities and even empires, and how their fate reflected and was entangled with forces in the non-human environment. These ideas and understandings, in turn, highlight cultural priorities.

But first, what is birth? When does it begin and end? Understood as an event, birth is essentialized as the moment when the child emerges. This view lies behind many common metaphors and artistic representations. Take Botticelli's famous "The Birth of Venus": the goddess stands on a shell – the implication is that the birth is an accomplished fact; whatever the miraculous process leading up to her creation, it has already taken place, and she is presented to the viewer fully formed. In a way, this is a view of birth from a male perspective. In many cultures (including, until very recently, our own), it is customary for men to see laboring women disappear behind closed doors, emerging after the fact with a newborn. This lies behind the mid-twentieth-century stereotype of the 'expectant father' pacing in the hospital waiting room.[2] Birth, then, is experienced in at least two fundamentally different ways, and our historical sources, for

[2] Leavitt 2009 charts the transformation in the United States (beginning in the 1950s) that led to men to enter the space where their partners were giving birth – a truly new development in western culture.

the most part, tell only one side of the story. Birth is often tied to a product, epitomized more by the event of emergence than the process leading up to and following from it.

Birth – as a *process* – is a more flexible concept, one that can expand to encompass a more diverse set of practices and actors.[3] The term requires flexibility in its definition, as different cultures define the beginning and end of birth in different ways. I understand 'birth' as a malleable set of social and physiological processes that begin late in pregnancy and extend through the postpartum period, but which pivot around an infant's emergence. By considering birth in this way, the dissertation explores the unspoken assumptions that link it to many different aspects of Roman 'nature' and 'culture': perceptions of the generative female body, its relationship to forces in the non-human environment, techniques of care, and power relations in everyday life. Ultimately, I hope to give readers a new framework for thinking about the process of giving birth and what it says about approaches to risk, authority, agency, and determinism in Roman culture.

Birth is a key transitional stage within the longer processes of generation or procreation, terms I use to avoid the somewhat anachronistic implications of 'reproduction'. Indeed, strong arguments have been made that 'reproduction' has a situated, 'modern' theoretical core, separating it from earlier conceptualizations, classed under the term 'generation'.[4] A forthcoming volume edited by Nick Hopwood, Rebecca Flemming, and Lauren Kasssell shows how complicated this story is – far more complex than any introductory discussion allows. In general, however, I follow their lead in

[3] The usefulness of the concept of 'process' in the history and sociology of reproduction has been promoted by Almeling 2015.
[4] This argument is made forcefully in Hopwood, Flemming and Kassell forthcoming.

avoiding 'reproduction' in pre-eighteenth century contexts.[5] And while the use of 'etic' analytic terms can be very useful (more on this below), for our purposes, 'generation' and 'procreation' cover all the bases necessary without carrying the semantic and theoretical difficulties of 'reproduction'.

As a topic of study, childbirth links disparate issues and types of evidence in a coherent whole. It was a life-altering, repeated, and shared experience for the vast majority of women in antiquity, involving not just a mother and her baby; childbirth in the Roman world – as in most cultures, globally and trans-historically – includes a constellation of actors, both human and non-human, which are interconnected in crucial and remarkable ways. These include husbands, attendants, medical practitioners, assorted family members and friends, religious authorities, legislative bodies, as well as amulets, drugs, and medical tools (the list goes on). All these have been objects of study on their own, but my project brings them together.

For the reasons stated above (and more), no published monograph on childbirth in the Roman world has yet appeared. Nevertheless, we can observe a surge of scholarly interest in related subjects such as wet nursing, gynecology, the Roman family, medical tools, and infant burial, many of which draw on overlapping but distinct bodies of evidence.[6] Part of what allows this dissertation to pivot in so many directions is that childbirth falls under the rubric of several distinct fields of inquiry that have gained

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[5] Ibid. See in particular Hopwood's chapter on these terms and their transformation and entanglement.

[6] Respectively, examples include Sparreboom 2009; Obladen 2012; Dasen 2010; Pirenne-Delforge 2010 (wet-nursing). Flemming 2000; Dean-Jones 1994a; Demand 1994 (landmark books on Greek and Roman gynecology and women's bodies, discussed below); Bliquez 2015 (important and accessible volume on medical tools). Stevens 2013; Carroll 2011; Crummy 2010; Norman 2002; Norman 2003 (infant burial).

momentum in recent decades and to which this study is indebted. When we approach childbirth from the perspective of the mother and her body, the history of gynecology and the social and cultural history of medicine, more broadly, come into play.[7] From the perspective of the child and its relationship to kin and the *familia*, the study of the Roman family and, more specifically, childhood enter the picture.[8] The inquiry into Greco-Roman childhood has also grown to encompass infancy and the transition from fetal to neonatal life.[9] The present study combines these major trends in recent scholarship, since birth is a process that blends the history of gynecology and the family. This blend, in turn, places the project under the rubric of the historical study of 'generation' in the pre-

[7] The first wave of this trend began with scholars such as Gourevitch, Manuli, Rouselle, and Hanson. See, for example, Gourevitch 1984; 1987; 1988; Manuli 1980a; 1980b; 1982; 1983; Rousselle 1980; 1988 (Gourevitch, in particular, has continued to publish on these topics well into the 2000s). Hanson began publishing on ancient gynecology in the 1970s (e.g., Hanson 1975) and continued to do so for several decades (e.g., Hanson 1987; 1992; 1995a; 1995b; 2004a; 2004b; 2008). As with the study of ancient medicine, there is a robust Francophone tradition in the study of the female medical body (one could point to the work of a wide range of scholars, including but by no means limited to Gourevitch, Rouselle, Sissa, Aubert, Bonnet-Cadilhac, Congourdeau, Boudon-Millot).

[8] Much controversy in this field arose from Ariès 1996 [1960]: His major contention was that the concept of childhood did not exist in medieval society, arguing instead that the concept emerged in the seventeenth century, as a result of a combination of economic and social change. This energized the emerging field of family studies in the 1970s and 1980s. The 1980s saw an increase in the study of the family from a demographic perspective, owing much Saller and Shaw 1984. Rawson also emerged in the mid-1980s (e.g., Rawson 1986) as a pioneer in the study of the Roman family, and by 1990, the field had generated numerous monographs, including those of Néraudau 1984 and Golden 1990 on Greek childhood.

[9] Most recently, there has been a growth of interest in early childhood and embryology, exemplified by Dasen 2013. Tellingly, the volume in which Dasen's article was published, *The Oxford Handbook of Childhood and Education in the Classical World* (eds., Grubbs, Parkin and Bell 2013), begins with four chapters on fetal/infant life (along with Dasen, it includes a piece by Parkin on the demography of infancy and early childhood; Liston and Rotroff on infanticide in Hellenistic Greece; and Evans Grubbs on exposure and infanticide). The edited volume by Carroll and Graham 2014 also exemplifies this trend.

modern world.[10] This loosely bounded subfield is growing among ancient historians, particularly in conversation with historians of other regions and periods, as well as sociologists and anthropologists.[11]

Among classicists and ancient historians, these (sub)fields took shape in the late 1970s and 1980s, the medical/reproductive angle influenced by the feminist movement, and the study of the Roman family (relatedly) growing out of the interest in social history.[12] In particular, a wave of scholarship in the past two decades (or so) has set the stage for the kind of synthetic approach this project seeks to apply: on the Roman side, one might point to Flemming's *Medicine and the Making of Roman Women* (2000), which created a new framework for thinking about the "medical woman" in the Roman empire as part of a world of knowledge about the body and nature, while firmly establishing actors in the world of practice.[13] On birth, specifically – from a medical, religious, and 'medico-magical' angle – Véronique Dasen has contributed a great deal in recent years, most recently typified by *Le sourire d'Omphale: Maternité et petite enfance dans l'Antiquité* (2015). Her work blends a range of texts and material culture, and does boundary work at the juncture of medical history, cultural history, and the history of fetal life/infancy.

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[10] See above on Hopwood, Flemming and Kassell forthcoming.
[11] Scholarly works on generation and reproduction, broadly construed, are too numerous to list here, but the following examples constitute a sample of influential monographs outside classics: Almeling 2011; Armstrong 2003; Bridges 2011; Drixler 2013; Duden 1991; Green 2008; Leavitt 2009; Martin 1992; Morgan 2004; Murphy 2012; Reagan 2005; Richardson 2013; Stern 2005; Ulrich 1990.
[12] From a feminist perspective, the influence of Pomeroy 1995 [1975] cannot be overstated.
[13] On the Greek side, see King 1998; Dean-Jones 1994a; Demand 1994.

Where this study departs most significantly from its predecessors is in its use of 'risk' as an analytic, a concept discussed in more detail below. The term, which has no direct equivalent in Greek or Latin, is essentially a heuristic device. In the simplest terms, I use 'risk' as a short hand for the possibility of an undesirable outcome under circumstances in which the outcome is unknowable (fully or partially) in advance. While encompassing 'danger' or 'peril' (*periculum*, κίνδυνος, as well as verbs, e.g., *periclitor*, κινδυνεύω) and related concepts, risk as a term helps to highlight the high-stakes nature of the particular processes examined in this dissertation. And while linguistic signifiers such as *periculum* are no doubt important, risk can be expressed in many different ways in our sources (through mood and particular grammatical constructions, for example – think of the 'fear clause' in Greek and Latin).

Throughout this dissertation, I come back to the idea that childbearing was essentially seen as a woman's *telos* in Roman culture. Concerns about the *possibility* of a negative birth outcome, paired with the intense emphasis on childbearing as a woman's life purpose, make 'risk' an especially useful analytic. Risk can be described as an *etic* term, insofar as it does not map directly as an actor's category, but it allows for the grouping of a range of ideas and practices not usually considered together. In this regard, Carlo Ginzburg's advice to the historian is helpful, "One starts with etic questions, aiming to get emic answers."[14] Put another way, I am seeking to understand responses to a range of issues clustered under the term 'birth risks' (etic) – a malleable, baggy category – in the language and thought-world of my actors (emic). Risk, in short, is a

[14] Ginzburg 2013, 105; reprinted from Ginzburg 2012.

category that allows me to group and study ideas and practices that were linked in the Roman world.

With risk as a structuring element, the dissertation is organized around the following questions: what kinds of theoretical and practical tools did people use to classify and diminish the likelihood of negative birth outcomes, such as malformation of the infant or physical harm to it or to the parturient's body? How was authority deployed and managed to influence the procreative process and thus diminish its risks? To what extent did individuals believe they could shape birth outcomes through their actions? I draw on a range of texts and objects from across the empire's reach to elucidate the different strategies one could employ to understand the birth process and shore up the female body through practical interventions. These include medical texts, pharmacy and amulets, and religious practices, which all together offer a picture of the multi-pronged approaches people employed – up and down the social hierarchy – to pinpoint causes and manage the potential for harm.

Anxieties about birth risk in Roman culture were rooted in anxieties about the stability of community and society. In this latter regard, the dissertation is also about Roman politics – the personal is political, as the saying goes. The early empire, beginning with Augustus, provides a unique opportunity to study this concatenation. It was during Augustus' reign that the Roman state began to promote an official ideology of *fecunditas* or family fertility. The early imperial period provides some of the earliest evidence for the state regulation of citizens' procreative lives, for example, in the form of legislation rewarding families in which women bore three or more children. It is hard to overstate the importance of such legislation – an unprecedented entrance by the state into the

household and the bedroom. These innovations set a precedent that developed over the next several centuries, manifested in myriad ways. One might point to the imagery of the Arch of Beneventum and the proliferation of children in the paternalistic iconography of Trajan's reign, closely related to the development of the *alimenta* scheme. While politics come in and out of this dissertation, the political significance of birth and procreation is woven throughout.

The project focuses primarily on the first three hundred or so years of the Roman imperial period – beginning with Augustus' rise to power in the late first century BCE, through the era of the so-called high empire (late first to third century CE). The empire grew to its largest point during this period, and the city of Rome continued to thrive as the imperial cosmopolis. Rome, the center of the empire, is a geographical focus in the dissertation, but because of the scattered nature of our evidence, as well as the reach of Roman imperialism, I also draw on material from throughout Italy, the Latin west, and the Greek east. Indeed, many of the sources I use were written by Greek authors who circulated throughout the empire, spending time in Rome (such as the physician Galen, originally from Pergamon, who acquired the patronage of imperial elites), but maintaining close ties with their place of origin (as with the dream-interpreter Artemidorus, who pointedly associates himself with his hometown Daldis). In the early and high empire, medical discourse, in particular, took on a kind of globalizing rhetoric – reflecting a "joined up medical culture," discernable in our historical record through both text and material (such as medical instruments).[15] This is not to say that there was a

[15] Flemming 2013, 273: "The sense of a joined up imperial medical culture – of personnel, knowledge, understandings, and practices – is broadly supported by both the textual and material evidence. Much medical writing from Rome's Empire, or at least

uniformity to practice and understanding as it pertained to the birth process throughout the empire, which was fragmented, multi-ethnic, and overwhelmingly rural. But given the state of our evidence, it is hard to get at the fine-grained local distinctions that surely existed.

This brings me to the issue, more generally, of the nature and limits of our sources, to which I alluded in the opening of this introduction. While procreation and succession were sources of immense anxiety (and no doubt anguish) among many Greeks and Romans – for provincial centurions and emperors alike – we must often read between the lines. Birth, in the vast majority of cases, occurred in a women's space, attended by other women, a midwife, as well as other female attendants, perhaps slaves or female family members (depending on the factors such as social/financial status and urban/rural locale). These are not individuals who left behind a textual record, so we have no access to descriptions of their experience in their own words. Material culture cannot fill this gap, but it is helpful given these limitations. Birth, of course, also involved the most intimate parts of the female body, and as we shall see, it is very common for aspects of procreation to be described in metaphorical language, which, in turn, can provide a window into widespread structures of thought.[16]

I. Risk

The word 'risk', fittingly, has uncertain origins. It seems to have emerged in Europe sometime between the late middle ages and the early modern era; we find the

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from around its first three centuries, which is the period under scrutiny here, is delocalised in tone, and globalised in approach. It may deal with medicine as a whole, or in parts, and it may even engage with items on the borders of *medicina*, such as amulets."

[16] On this account, I follow Lakoff and Johnson 1980, discussed below.

Italian 'rischio' as early as the thirteenth century and the French 'risqué' in the sixteenth.[17] Its etymology is debated, but an Arabic origin is likely. In Europe, risk first referred to a financial instrument that was meant to mitigate the possible loss of property at sea – it was not originally synonymous with danger, as it is now in many colloquial contexts.[18] In American English, 'risque' was used well into the 1820s, signifying "the commodity exchanged in a marine insurance contract."[19] By the eighteenth century, there is evidence that risque was being used in colloquial English to describe a potential for loss. In Henry Fielding's novel *Tom Jones* (1749), for example, we find four examples of the phrase "to run the risque" in dialogue, meaning the potential for harm or misfortune (e.g., "I must run the Risque of my officer's displeasure," says the eponymous hero).[20] The origins of 'risk' as it evolved, then, are rooted in metaphor: the financial instrument 'risque' was meant to mitigate potential loss, and that very potentiality or danger was generalized and came to constitute the essence of the colloquial term, 'risk'.

There are many ways to write the history of risk. Recently, it has received treatment by historians of capitalism such as Jonathan Levy, whose book, *Freaks of Fortune*, shows how risk became a modern concept, bound up with the growth of American markets, financial management, and ideas about personal freedom and individualism (a timely topic in the wake of the 2008 financial crisis and subsequent

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[17] Levy 2012, 3; Eidinow 2007, 246, n. 43; cf. Luhmann 2017, 9.
[18] Douglas 1992, 40: "…the language of risk has become the language of danger." The monograph that will grow from this dissertation will include a comparison of Roman bottomry or transmarine loans (see, e.g., *Dig*. 22.2) with these early modern maritime loans – particularly vis-à-vis the concept of *periculum*, which is the vital concept at stake in Roman law on these matters, as in various other legal disquisitions on damage to property, especially in the process of buying and selling (*emptio, venditio*).
[19] Levy 2012, 3.
[20] Fielding 1975 [1749], 386.

recession). This version of risk is bound up with histories of the rise of probability as a tool of elites, exemplified by Ian Hacking's *Taming of Chance*.[21] Indeed, we are only beginning to understand the widespread consequences of risk in this sense.[22]

Risk has also received a range of theoretical treatments. Foucault studied risk from the perspective of 'governmentality', a complex approach focused on the ways neoliberal, western nation states have diffused their power through institutions (bureaucracies) that monitor risk (that is, deviation from statistical benchmarks), and in turn, how they inculcate into individuals the desire to conform.[23] Risk society theorists, most famously Ulrich Beck and Anthony Giddens, form another influential branch of scholars studying risk as a modern phenomenon. Elements of their theory are good to 'think with' for historians of Greco-Roman science and medicine (discussed below).

Finally, there are the proponents of a cultural theory of risk perception, pioneered by the anthropologist Mary Douglas. I am particularly indebted to Douglas' work on risk, as well as Esther Eidinow's application of cultural theory to the study of oracles and cursing in Greek culture (*Oracles, Curses, and Risk among the Ancient Greeks*, 2007).[24] In her 1992 book, *Risk and Blame*, Douglas describes Aaron Wildavsky asking her point blank, "is pollution behavior really different in tribal society [from our own]?" The answer, essentially, was 'not really'.[25] Indeed, one of the many things Douglas did so effectively, beginning with her (now classic) *Purity and Danger*, was to show how

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[21] Hacking 1990.
[22] On the medical side, see, e.g., Aronowitz 2015; Armstrong 2003.
[23] Foucault et al. 1991. Cf. Lupton 1999, 84–103, for an overview of this approach; Eidinow 2007, 248, n. 51. While I do not draw on the theory of governmentality, Foucault's work on care of the self has been very influential in my study of Soranus' *Gynecology* (chapter three), in particular.
[24] Also see Eidinow 2011, an introduction for a more general audience.
[25] Douglas 1992, 10.

approaches to impurity and taboo among groups living in tribal, non-industrialized conditions did not, in fact, differ in fundamental, structural ways from 'modernized', western approaches.[26]

The cultural theory of risk, as Douglas calls it, was developed to explain constructions of and responses to danger in any society. Her focus is presentist, but we catch glimpses of how she might use cultural theory to approach historical groups of the sort examined in this dissertation.[27] An illuminating example appears in the introduction to *Risk and Culture*:

> Much as in biology, the cultural theory of risk perception… sees the social environment, the selection principles, and the perceiving subject as all one system. It does not ignore the reality of the dangers around. Plenty of real dangers are always present. No doubt the water in fourteenth century Europe was a persistent health hazard, but a cultural theory of perception would point out that it became a public preoccupation only when it seemed plausible to accuse Jews of poisoning the wells. A cultural approach can make us see how community consensus relates some natural dangers to moral defects. *According to this argument, dangers are selected for public concern according to the strength and direction of social criticism*.[28]

It is my contention that ancient historians might fruitfully draw on this conceptual foundation, perhaps most helpfully when examining practices in Greco-Roman 'folk' medicine, ancient 'magic', and magico-religion that seem especially 'superstitious' to

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[26] At the time of original publication, these former groups were termed 'primitive', a word so evocative of the British imperialist anthropology.
[27] Cf. Eidinow 2007, 21–22.
[28] The italics are mine. Douglas and Wildavsky 1983, 7. It is important to note that Douglas is a 'soft' constructionist: "… Douglas sees risk as a socially constructed interpretation and response to a 'real' danger that objectively exists, even if knowledge about it can only ever be mediated through sociocultural processes" (Lupton 1999, 39). I sympathize with this compromise view between hard constructionists and objectivists.

modern sensibilities.[29] Risk, in this regard, can serve as a heuristic to describe a possibility (and cause) of harm, especially in high-stakes contexts.

Douglas' *Purity and Danger* provided the foundation for her later work on risk. For the present study, some of this earlier work, particularly on the body, has also been influential. A major theme in *Purity and Danger* is the body's relationship to the body politic – the body as "conceptual microcosm" for a polity.[30] Policing the boundaries between inside and outside the body are a means to cope with issues of social stability and order within a culture. It is not hard to see how this notion is helpful for a historian of childbirth, a process that hinges on boundary-crossing from the interior of the body to the exterior. Indeed, throughout this dissertation, a persistent theme is boundaries – and the preoccupation with boundaries – that characterizes much Greco-Roman evidence on birth and the female body. In many contexts, purity and impurity are not the focus per se, but issues pertaining to bodily insides and outsides provide a perennial source of anxiety and fascination.

Among ancient historians, Esther Eidinow (2007) was the first to apply the cultural theory of risk to the study of classical antiquity. Her book draws on Douglas to frame an investigation of Greeks' perceptions of risk through the concerns and situations that prompted their use of oracles and cursing technologies. My own approach – like Eidinow's – values what cultural theory has to offer historians of ancient cultures. We differ, however, in a key respect: she enters the world of risk for everyday Greeks through a set of technologies or media (oracles, curses), ending up with a wide range of

[29] I concur with Eidinow 2007 on this approach. In fact, she begins the introduction to *Oracles, Curses, and Risk among the Greeks* with a discussion of magic as a category. See below on her work and its importance to this study.
[30] Lupton 1999, 40.

social situations/issues that qualify as risky for her actors. In this dissertation, I examine risk though the practices and ideas that surround – and constitute – the birth process. By its very nature, birth is high stakes (sometimes, a matter of life or death) and carries numerous dangers, some immediate, others long term (e.g., affecting the growth of the child or future fertility of the mother). Thus, by focalizing risks through birth's political, domestic, religious, or medical connotations, a more bounded set of concerns comes to dominate the core of this study.

The term 'risk' is not, by any means, new to Greek and Roman history. Before Eidinow, for example, Moses Finley and G. E. M. de Ste. Croix, among others, investigated whether ancient maritime loans in fact exemplify a more modern concept of financial risk (i.e., are they a form of insurance?).[31] The term is also employed quite freely by scholars working on Greco-Roman agriculture and the food supply, such as Thomas Gallant and Peter Garnsey, and in broadly pitched studies addressing (among other issues) strategies for subsistence, such as Nicholas Purcell and Peregrine Horden's landmark *The Corrupting Sea* (2000).[32] In these contexts, 'risk' is entirely etic in its connotations, referring to subsistence risk, that is, the possibility that people will not have enough food to survive (thus, there is much discussion of 'risk-buffering behaviors' among agriculturalists). These studies are not much interested in theories of risk, as such; indeed, in these latter works on subsistence, one is hard-pressed to find any attempt at definition or meditation on risk's conceptual multifacetedness (especially, risk as a function of perception and selection).

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[31] See, e.g., de Ste. Croix 1974; Finley 1999, 141ff.; Millett 1983; Reed 2003. The debate continues. Also see Toner 2013 on 'disasters'.
[32] Gallant 1991 (Greek domestic economy); Garnsey 1988 (Greco-Roman responses to famine, food supply challenges).

While the aforementioned studies may not engage much with risk as a theoretical category, their focus on the agricultural and maritime spheres is significant. They are, I believe, responding to our sources' configuration of these two spheres as especially dangerous but rewarding, a central idea in the dissertation. As I argue in chapter two, 'waterscape' and 'landscape' constitute two key conceptual domains from which Greeks and Romans drew imagery to imagine and understand the procreative process – and its risks. Symbols of agricultural and maritime success – the cornucopia and the rudder – are also the most common accouterments of Fortuna in the Roman imperial period, attesting to their symbolic power as signs, precisely, of success and triumph over danger, as well as the possibility of their subversion.

Throughout this dissertation, I invite my readers to reflect, as I have, on similarities and differences between ancient perceptions of birth risk and their own. This is important for many reasons, not least of all because a number of contemporary risk theorists emphasize the radical break between late modernity and what came before. Risk society theorists, most notably Beck (the theory's architect) and Giddens, see the rise of risk assessment and the snowballing of risk analysis and prevention as a defining feature of late capitalism and globalization. The proliferation and diffusion of risk is both a response to and cause of further pollution, inequality, and environmental degradation in the service of economic growth.[33] As Beck puts it in his landmark, *Risk Society: Towards a New Modernity*, "Risk may be defined as a *systematic way of dealing with hazards and*

[33] See, e.g., Beck 1992; Giddens 1999; also see Beck, Giddens and Lash 1994, where the concept of "reflexive modernity" is developed, essentially the notion that as industrial modernization poses the prospect of catastrophe (such as the nuclear meltdown at Fukushima or Chernobyl, or fears induced by climate change and rising sea levels), inhabitants of neoliberal western nation states begin to reflect on these possibilities of degradation and collapse. More development promotes the reflex of more reflection.

insecurities induced and introduced by modernization itself. Risks, as opposed to older dangers, are consequences which relate to the threatening force of modernization and its globalization of doubt. They are politically reflexive."[34] In this model, risk is inherently modern, while 'danger' or 'hazard' are pre-industrial and pre-modern.

Beck's work emphasizes the interconnectedness of people and the porosity of boundaries in globalized risk society. The very nature and fragmentation of risk society also means that responsibility is diffused, that is, one can always blame someone/something else. Blame is directed towards institutions, companies, and powerful individuals, unlike in pre-modern societies, Beck argues, where disasters could be attributed to the supernatural, to "demons or acts of God."[35] This kind of claim will frustrate historians of pre-modern cultures. Of course, Greeks and Romans did use gods in their explanatory frameworks, but divine wrath or intervention was far from the only mainstream causal account. From extispicy to the tenets of sectarian medicine, to Stoic physics and the 'world soul', individuals drew on a variety of explanatory frameworks and technologies (and no doubt, mixed and matched) to understand the non-human environment and how it affects human life. When we look to how Romans' coped with giving birth, a localized, routine, potentially hazardous process, we see that they deployed a wide range of approaches that varied from mechanistic to theological.

Despite these problems, ancient historians might productively engage with some continuities between risk society theorists' ideas about late modernity and worldviews that emerge from Greco-Roman sources. Beck's emphasis on the diffusion of risk and

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[34] Beck 1992, 21. The italics are his own. The book was originally published in German (1986) as *Risikogesellschaft: Auf dem Weg in eine andere Moderne*.
[35] Lupton 1999, 64.

responsibility is a case in point. In a globalized economy, agreements must be upheld across international lines because actions in one place affect another (e.g., pollution); consequences of industrial activity in one place might have unintended, dire effects on environmental conditions elsewhere. And while 'risks' might be calculable and quantifiable at a micro-level, an ever-growing and changing web of interconnections may render them incalculable. Pre-modern, pre-statistically quantifiable danger then comes to look a lot more like the kind of risk that Beck examines, taking us full circle.[36]

This idea of risk-entanglement is a fascinating analog to the vision of a cosmic web that emerges in many of the ancient sources discussed in this dissertation, where anything may be a sign, and distant forces can interact to produce particular outcomes – or engender particular risks. And while such a comparison is not explicitly pursued in this project, I want to suggest that we might juxtapose Beck's description of modern, globalized connectivity to ancient ideas about the interconnectedness of the universe – how plants, animals, planets, and so forth are all bound together through forces such as cosmic sympathy.[37]

While this is a project about birth and birth risks, I also hope that it will provide insight into risk perception more generally in Greco-Roman culture. In particular, the chapters engage with risks as they speak to the ways that forces, objects, and bodies are entangled in Greco-Roman views of the environment. Risk provides a lens through which to engage with questions of causality, potentiality, agency, and determinism in daily life,

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[36] Cf. ibid.

[37] Holmes' forthcoming monograph, *The Tissue of the World: Sympathy and the Nature of Nature in Greco-Roman Antiquity*, examines sympathy throughout Greco-Roman antiquity.

and how men and women, to put it bluntly, thought baby-making was related to world-making.

II. Metaphor and Analogy

As I noted above, there are many reasons why birth – as a process involving human and non-human bodies, flesh and blood – is not the object of a great deal of direct description in Greco-Roman sources. Yet its importance, as the culmination of the human effort to reproduce and perpetuate family, community, and state, means that it receives treatment in a range of indirect ways. Birth and procreation are thus often described through metaphors. Likewise, analogies and analogical reasoning served as a helpful set of tools to imagine systematically the obscure parts of the process, the hidden workings of generation and gestation.

Metaphor and analogy are not the same. Metaphor, in its capacity as a tool for comparison, is characterized by some as a species of analogy.[38] Other theorists argue that analogy is in fact a species of metaphor.[39] The term 'heuristic' has proven useful to

[38] Analogy has been an important topic in the study of ancient science. See the landmark monograph by Lloyd 1992 [1966], which cemented the consensus view of analogy as a fundamental aspect of ancient scientific thought (in relation to polarity). Interestingly enough, Hesse 1966 appeared in the same year, another now-classic work on analogy in science. Analogy remains an important topic of interest in the study of ancient science and medicine, see, for example, Wee 2017.

[39] Gentner and Jeziorski 1993, 452: "We view *metaphor* as a rather broad category, encompassing analogy and mere-appearance, as well as a variety of other kinds of matches. On this view, analogy is a special case of metaphor, one based on a purely relational match. The large-scale communication metaphor analyzed by Reddy…, as well as other conceptual metaphors analyzed by Lakoff and Johnson (1980)… are examples of systematic relational metaphors, that is, metaphors that could also qualify as analogies." Basically, they are arguing that one could see Lakoff and Johnson's 'conceptual metaphors', discussed below (e.g., 'love is war'; 'life is a journey') as analogies. A view

describe and group together the type of reasoning that structures the use of metaphor and analogy in argument.[40] While I shy away from placing analogy and metaphor in a hierarchical relationship, they do often serve similar argumentative and descriptive purposes for my actors. Their relationship is perhaps more helpfully construed through the lens of analogical reasoning as a category: some metaphors are based on analogical reasoning, others draw on particular similarities or other kinds of matches.[41] Analogy (i.e., a:b :: y:x), alternatively, is an explicit statement based in a species of systematic, relational, comparative reasoning. As I discuss in chapter two, analogical reasoning plays a big role in Greek medical texts, particularly in the comparison of women's bodies to the earth and, relatedly, fetuses to plants. These relationships are also articulated with metaphorical language in a variety of genres and contexts – they are pervasive. A similar set of considerations apply to the amulets discussed in chapter four.

Metaphor is the slipperier of the two terms. Like risk, there are many of ways to define metaphor, and a robust corpus of theory by philosophers, linguists, and literary critics offers overlapping and competing interpretations. Unlike risk, however, metaphor

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of metaphor that hinges on analogical reasoning fall into the category of the 'comparison view' of metaphor, closely related to the substitution view (also discussed below).

[40] Webster 2014 connects metaphor, analogy, and heuristic as follows: "By 'analogy' I mean the whole category of positive comparisons, including one and two term comparisons (a:b or a:b::y:x), similes (the longer, more figurative version of an analogy) and metaphors. Although they differ formally, they all function conceptually in a comparable way. The larger argumentative structure that they help construct I call simply a 'heuristic'… In other words, a heuristic is a conceptual apparatus that makes corollary claims comprehensible. It is a set of interrelated assumptions that cohere. Sometime these heuristics are made explicit by means of a comparison, while at other times, they are active even without the thinker necessarily being aware of it" (8–9).

[41] See Gentner and Jeziorski 1993, 450–51, where they lay out six "modern principles of analogical reasoning."

and analogy have a firm foundation in classical thought. Aristotle famously defined *metaphora* and *analogon* in the *Poetics*:

> "*Metaphora* is the transfer [to one thing] of a word that belongs to another thing, either from genus to species, species to genus, species to species, or by *analogon* … By *analogon* I mean [instances] when b is to a as d is to c: [a poet] will say d instead of b, or b instead of d…" (*Poet*. 21, 1457b6–19).[42]

Aristotle's view, focused on poetic language, is typically discussed as foundational of 'classical' theories of metaphor, and staking one's position in relation to Aristotle's remains a necessity for anyone theorizing the trope. Roman Jakobson, Max Black, and Paul Ricouer, for example, all essentially begin by defining their viewpoint in relation to Aristotle's position.[43] This is also true of a related, but rather different branch of theory on metaphor – the influential 'contemporary theory of metaphor' pioneered by George Lakoff and Mark Johnson in *Metaphors We Live By* (1980).[44] These theorists disagree about many aspects of metaphor, but one view they share is that Aristotle is essentially wrong (though, again, they differ in their reasons). I will keep this simple: for my purposes, it is crucial that Black and Ricoeur critique the 'substitutional' aspect of Aristotle's definition – that metaphor is the substitution of one word or sentence for

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[42] μεταφορὰ δέ ἐστιν ὀνόματος ἀλλοτρίου ἐπιφορὰ ἢ ἀπὸ τοῦ γένους ἐπὶ εἶδος ἢ ἀπὸ τοῦ εἴδους ἐπὶ τὸ γένος ἢ ἀπὸ τοῦ εἴδους ἐπὶ εἶδος ἢ κατὰ τὸ ἀνάλογον… τὸ δὲ ἀνάλογον λέγω, ὅταν ὁμοίως ἔχῃ τὸ δεύτερον πρὸς τὸ πρῶτον καὶ τὸ τέταρτον πρὸς τὸ τρίτον. As we can see here, Aristotle subordinates *analogon* to *metaphora*. Aristotle's treatise *Rhetoric* also features extensive discussion of metaphor. The translation above is adapted from Silk 2003.

[43] Jakobson 1956; 1960; Black 1962; Black 1993; Ricoeur 1977 (first published in French as *La métaphore vivre* in 1975).

[44] Their work self-consciously (Lakoff 1993, 203–04) grew out of the seminal Reddy 1993 [1979]. I should note: there are many, many people working on metaphor; the scholars mentioned here constitute a small group whose work has been especially influential – and whose work has been useful in the development of my own thinking.

another. Put another way, the substitutional stance characterizes "the entire sentence that is the locus of the metaphor as replacing some set of literal sentences."[45]

Black and Ricoeur, rather, take an 'interactional' viewpoint. Black's analysis of the simple metaphor "man is a wolf," provides an accessible case in point. As he explains, "If to call a man a wolf is to put him in a special light, we must not forget that the metaphor makes the wolf seem more human than he otherwise would."[46] The metaphor transforms not just the 'principle subject' (man), but the 'subsidiary subject' (wolf) as well.[47] The metaphor not only expresses a relationship between the two domains or fields, it transforms *both* subjects in the process. Ricoeur's interactional position in *La métaphore vivre* resists reduction, but suffice it to say that he assigns to metaphor "the power to redescribe reality and a significance that goes far beyond poetry."[48] Interactional views of metaphor – varied through they may be – do not characterize metaphor as a simple comparison or poetic technique; metaphor structures, shapes, and reflects how people perceive and live in the world.

An interactional approach, rooted in a belief in metaphor's capacity to transform both 'principle' and 'subsidiary' subject, possesses certain affinities with Latour's "actor-network theory," which has shaped my views on the interrelations of human and non-

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[45] Black 1962, 31, reproduced at Black 1993, 27. The comparison view is a subspecies of substitution view, which "takes the imputed literal paraphrase to be a statement of some similarity or analogy, and so takes every metaphor to be a condensed or elliptic simile" (Black 1962, 35–36; 1993, 27).
[46] Black 1962, 44.
[47] Lakoff and Johnson, followed by Kövecses, among others, uses the terms' 'source domain' and 'target domain' (see below).
[48] Silk 2003, 121. It is in this sense that Shaw 2013, 225, draws on Ricoeur as well: "Ricoeur observed that the reduction of the metaphor to a literary type diminished its value and impoverished our understanding of its greater significance. It is this larger field of meaning that we are embracing, in which metaphors are containers and extensions that are central to the most basic processes of human thought and communication."

human actors (an idea that figures centrally in chapter four).[49] Actor-network theory, in short, embraces the capacity of objects, as well as living beings, to act, to be actors in a web of interrelations. *Things* have transformative power, not just on or through the individuals who use them in particular ways. Both approaches – the interactional and actor-network – hinge on a two-way capacity for meaning-production and transformation. In both models, then, there is no 'active' or 'passive' component or individual.

Perhaps the most influential work on metaphor in the last several decades belongs to Lakoff and Johnson, who take a cognitive-scientific and linguistic approach, also questioning classical theorists – in particular, the focus on innovative, poetic usages. Lakoff and Johnson ask, "what are the generalizations governing the linguistic expressions referred to classically as 'poetic metaphors'?"[50] They argue that the "generalizations" underpinning metaphorical language (poetic or mundane) are in fact 'conceptual mappings' in thought. These conceptual mappings govern language in all contexts precisely because they are *mental*. A common 'conceptual metaphor', for example, "love is a journey" (rarely stated as such) is expressed through a wide range of 'linguistic metaphors', e.g., "This relationship is a *dead-end street*" or "I don't think this relationship is *going anywhere*."[51] Literary/poetic metaphor is just one instantiation of an

[49] A valuable introduction to actor-network theory is found in Latour 2005; Miller 2005 has influenced my thinking on materiality, especially in combination with Gordon 2015. The power of Latour's ideas in the study of ancient objects is illustrated by Van Oyen 2016; 2015; Van Oyen and Pitts 2017.
[50] Lakoff 1993, 202–03, provides an overview of this theory; cf. Lakoff and Johnson 1980, 7: "Since metaphorical expressions in our language are tied to metaphorical concepts in a systematic way, we can use metaphorical linguistic expressions to study the nature of metaphorical concepts and to gain an understanding of the metaphorical nature of our activities."
[51] Kövecses 2002, 6.

activity we engage in all the time.[52] Metaphors, in this model, offer important clues to a culture's values. Conceptual mappings, as Lakoff and Johnson argue, reflect priorities within a group. "The most fundamental values in a culture will be coherent with the metaphorical structure of the most fundamental concepts in the culture."[53]

These views of metaphor, from Black to Lakoff and Johnson, are united by a belief in metaphor's conceptual, transformative power. It is thus clear how careful attention to metaphors communicating ideas about the female body and birth process might offer the historian access to deeply held but unarticulated beliefs structuring, for example, not just how medical practitioners understood the female body, but how they understood their environment.[54] In essence, metaphor is a conceptual tool that pervades everyday life and thought, and it is this quality that enables us to use it in order to trace historical patterns of thought and meaning.

III. Outline of the Dissertation

The dissertation is divided into five chapters, each of which is concerned with a different approach to (and interpretation of) birth risk – different ways of understanding, protecting, and healing the maternal and fetal/infant body and understanding their situatedness in a web of interrelations. My focus is a broad set of themes: (1) the network of actors (both human and non-human) affecting birth outcomes; (2) the complex interplay of body and environment during pregnancy and childbirth; (3) what I call the

[52] Metaphor, of course, may also be visual: ibid., 63–75 (see related bibliography, ibid., 74).
[53] Lakoff and Johnson 1980, 22.
[54] As a topic of historical study, my approach to metaphor is deeply influenced by Shaw 2013.

'fluid economy' of generation, gestation, and birth; (4) efforts (primarily by male actors) to cope with the hiddenness of these processes and to control maternal and fetal bodies, often through metaphors and analogical reasoning; and finally, (5) the centrality of fertility and procreation to visions of Roman imperial power.

Chapter one provides an introduction to the birthing scene in the Roman empire from two distinct disciplinary perspectives. In the first half, I take the reader into a birthing room, beginning with a close reading of a funerary epitaph from the early third century CE for a young woman named Veturia. This provides the opportunity to sketch the group of actors that likely participated during Veturia's many births, and what we know about those actors. The birth process was firmly embedded in a web of social relations, where individuals might vie for control over the parturient and her infant. In the next section, I broaden and deepen this picture through an overview of demographic issues as they pertain to birth risk (e.g., maternal and infant mortality, age at first marriage, and inter-birth intervals), which likewise emphasizes the entanglement of birth outcomes with a multiplicity of factors – socio-cultural and environmental – from local disease ecology to age at first marriage.

The second chapter, rooted in the early imperial period, takes the reader into the conceptual world of birth risk in the Roman world. It examines how the risks of childbearing were understood through conceptualizations of agricultural and maritime risk ('landscape' and 'waterscape'). All three types of risk were vital to the robustness of communities, and metaphorical/analogical transfers from agriculture and seafaring helped individuals in many contexts imagine the hidden process of gestation – the interior of the female body was farmland or waterscape, the fetus a plant or passenger on a ship. These

connections, I argue, shaped views of and responses to birth risk and its impact on the health of communities. The goddess Fortuna, who was also associated with fertility, embodies this imagery, often portrayed with her signature rudder and cornucopia in imperial iconography. She can be understood, I argue, to embody *risk* – and to *gender* risk.

The third chapter turns to the rationalizing world of elite medicine and closely examines the intertwined relationships among women, their fetuses, and medical practitioners. This chapter focuses on Soranus (first/second century CE), a doctor whose treatise known as the *Gynecology* is indispensable for anyone studying women's health in the Greco-Roman world, especially the role of the practitioner in minimizing birth risk through regimen, dietetics, and more invasive means if necessary. In Soranus' view, nature requires the proliferation of communities (procreation), which conflicts with the optimal state of a woman's health (abstinence). The physician and his expertise then enters the scene, poised to minimize the risks of pregnancy, birth, and early infancy, and ultimately to close the gap between communal and individual wellbeing. In doing so, Soranus opens an interesting space to examine the dynamics of the maternal-fetal relationship.

In the fourth chapter, I expand the web of actors shaping the birth process to include non-human actors – in this case, amulets. This study explores pharmacy employed by women during childbirth, and what remedies (especially amulets) suggest about prevailing views of female physiology and the mitigation of risk. These healing techniques are inscribed in a view of procreation as the function of a delicate fluid economy, expressed through analogies with the very substances used to enhance birth

outcomes. In this latter regard, chapter four ties in to the discussion in chapter two on the circulation of fluids as emblematized and understood through both landscape (irrigation) and waterscape. The chapter also engages with the problems and opportunities presented by coordinating literary evidence for amuletic practice with material culture in the form of 'uterine' amulets.

The fifth and final chapter opens the network of actors even further, encompassing gods associated with birth, and how they were understood to exacerbate, mitigate, as well as embody its risks. In particular, I focus on Juno in her capacity as goddess of childbirth, known as 'Juno Lucina', and the Fates (as well as their analogs the Carmentes) in literary, epigraphic, and iconographic sources. These deities were implicated in ritual activity surrounding birth and the infant's purification and first bath. Again, the fluid economy is important here, both through the process of purification, as well as Juno Lucina's connection with the lunar cycle and its relationship to the flow of moisture in earthly bodies. I argue that we can see Juno Lucina and the Fates as embodiments of two competing, yet complementary views of the human ability to alter birth outcomes – respectively, an agentic and deterministic viewpoint.

There are many ways to approach birth risk, and this project, by necessity, has been selective. Indeed, writing a dissertation is a process both of discovery and selection. Briefly, I want to acknowledge and point towards other ways one could explore these themes. For example, a future version of this study will include birth prodigies and astrology as topics of additional studies (e.g., the meaning of a birthday in Censorinus *De*

Die Natali, and birth predictions in our fragmentary astrological sources).[55] Birth prodigies and astrological calculations locate birth in relation to – and as representative of – a potential future rooted in signs from the non-human environment, suggesting precisely a set of risks. On risk perception more generally, legal debates surrounding *periculum* and transmarine loans deserve a deeper treatment, as they too have much to teach us about Roman views of potentiality, quantifiability, and responses to environmental uncertainty and volatility.

Throughout the process of researching and writing this dissertation, I have continuously returned to the unique configuration of the female body and the non-human environment as a central theme and problem in the sources. This relationship constitutes a fundamental thread that runs through the project. The body/environment association can signify a kind of non-agentic, delocalized, essentialized female, which may seem troubling, especially in light of the overall absence of women's voices. The environment, however, and objects from the environment participating in the birth process, can also become tools to understand ideas and practices that give shape to embodied experience; to a certain extent, these were also the tools of female self-care. By trying patiently, piece by piece, to construct an understanding of all these aspects of the birth process, and by widening the network of actors (human and non-human), I hope to discern the contours of that space – that absence – left open by our sources, so we can work to fill it in. There will always be gaps and uncertainty, but this does not mean we cannot strive to do better.

[55] Lunar effects are a theme throughout the dissertation – not unrelated to the field of astrology.

Chapter One

Giving Birth

Birth is a social process. For women in the Roman empire, giving birth involved a web of actors, each with their own stakes in the outcome. These individuals might be kin, neighbors, slaves, midwives, doctors, lawyers – and the list goes on.[1] This chapter offers a preliminary exploration of the social and demographic conditions that shaped birth outcomes, demonstrating the richness of the networks, both human and non-human, in which mother and newborn participated. As the dissertation unfolds, the picture will acquire new dimensions, depth, and clarity. Each subsequent chapter will add new layers, examining different discourses and strategies for approaching the risks of childbirth. The following study provides the first step in our exploration of this multidimensional process.

The chapter is divided into two parts. First, we will enter the birthing chamber, a space filled with individuals bearing a range of priorities and stakes in the process. A funerary inscription for a woman named Veturia introduces us to a world of loss, laying bare the cycles of generation and bereavement experienced by women as a central, recurrent aspect of domestic life.[2] Literary sources sometimes offer a glimpse of this world of grief. In Plutarch's *Consolation to his Wife*, for example, we learn of the death of their beloved two-year old daughter, Timoxena, their third child to meet an early end.[3] While we learn of Plutarch's views on maternal grief and its appropriate expression, his

[1] On slavery and procreation, see Huemoeller 2016, 67–124.
[2] Cf. Golden 2004.
[3] Plut., *Cons. ad uxorem* 608c–d (Timoxena's charm and good nature); 609d (prior deaths of their two boys).

wife's perception of Timoxena's death is lost us. Indeed, our sources seldom provide access to women's quotidian experience, emotion, and spaces; yet we can, at least, gather the available resources to create a plausible picture – to imagine a world that has left few traces.

This view into the birthing chamber is complemented, in section II, by an exploration of the demographic conditions that impacted birth and birth risk – the range of demographic pressures to which women such as Veturia were subject. Some questions, as we shall see, have quantifiable answers, for which we can draw both on ancient evidence and comparative models. For other questions, such answers are fleeting. This survey of demographic issues ultimately provides further evidence for the multiplicity of ways in which childbirth was embedded not only in networks of human relations, but was also affected by and responsive to factors in the non-human environment, from seasonal change to malarial mosquitoes. Both section I and II, through different approaches, reveal the almost endless ways both human and non-human actors affected birth outcomes, and how they shaped – and were shaped by – their environment. This two-pronged approach combines and balances both the history of the individual (such as Veturia) and the population, the particulars of experience and trends in the society at large.

I. Veturia's Births

Let us plunge directly into the harsh world of the Roman reproductive life cycle to get a sense of how childbearing and childrearing played a definitive role in shaping a woman's identity. We shall begin with a funerary inscription, which sketches the contours a Roman family's life cycle and the entanglement of birth and death in the

domestic sphere. In the early third century, a woman named Veturia died in the Roman colony of Aquincum, now modern Budapest.[4] She was interred by her husband, the centurion Titus Julius Fortunatus, in a limestone sarcophagus shaped rather like a house or temple (the lid was designed to resemble a roof), now located in the Hungarian National Museum (fig. 1.1). The epitaph attests her bad luck in several lines of dactylic hexameter, written as if Veturia were speaking from beyond the grave:

> Here I lie, a *matrona*, my family and name are both Veturia. I was wife to Fortunatus, my father was Veturius. Unlucky woman, born (*nata*) twenty-seven years ago and married (*nupta*) for sixteen – one bed, one marriage (*unicuba, uniiuga*) – I died after six births (*sex partus*), only one remains. Titus Julius Fortunatus, centurion of the second legion *Adiutrix Pia Fidelis*, [made this] for his incomparable wife and as proof of his devotion (*pietas*) to her.[5]

Veturia lived twenty-seven years and gave birth six times. Still, only one child survived at the time of her death. Veturia was married for sixteen years – wed early, at age eleven – and is here portrayed as a virtuous Roman *univira*, a woman who shared her bed with a single husband (*unicuba*, *uniiuga*).[6] By any standard, Veturia was prolific and married

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[4] Aquincum was located south of the Danube Bend, in what is now the northwest district of Budapest, Hungary. The town became a *colonia* (*Septimia*) in 194 CE under Septimius Severus. Veturia's sarcophagus dates to the first half of the third century CE. The sarcophagus was damaged but has been restored.

[5] *CIL* III, 3572 = *CLE* 558: *Hic sita sum matrona genus nomen/que Veturia, Fortunati coniux de patre Vetu/rio nata ter novenos misera et nupta bis octo / per annos, unicuba, uniiuga, quae post / sex partus unio superstite obii. / T(itus) Iulius Fortunatus / (centurio) leg(ionis) II Ad(iutricis) P(iae) F(idelis) / coniugi incomparabili et insigni in se pietate.*

[6] From throughout the Roman empire, husbands/families celebrate women as *univir(i)ae*. Examples from across the empire include *CIL* VI, 31711 = *CLE* 1306 (Rome); *AE* 1981, 224 (Sinuessa, Latium); *AE* 1997, 1513 (Cappodocia); *ILAlg*. 2.1 1406 = *CIL* VIII.1, 7537 = *CIL* VIII, Suppl. 2.19470 (Numidia). On *univirae*, see, e.g., Lightman and Zeisel 1977.

very young.[7] And while her epitaph does not state whether she died in childbirth (epitaphs seldom do), that scenario is certainly possible.[8]

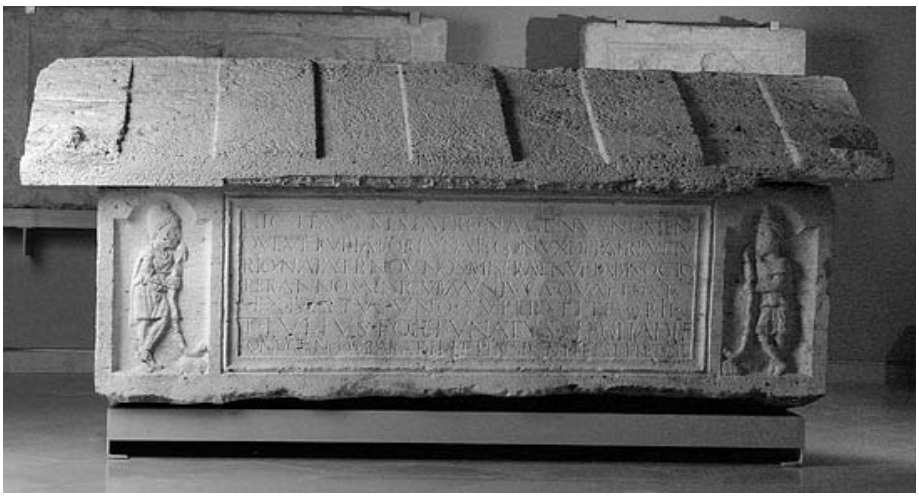

Figure 1.1: Veturia's sarcophagus, late third century CE, Aquincum.

Kinship and procreation define Veturia's posthumous representation.[9] The epitaph opens by clearly categorizing her as a particular type of woman: she is a *matrona*, married and fertile. After positioning her vis-à-vis her closest male kin, we learn *when* she was born (*nata*) and the duration of her marriage (*nupta*). The content is presented in a chiastic construction: (a) *Fortunatus* (b) *Veturius*, (b) *nata* (a) *nupta* (husband-father,

[7] The issue of marriage age – and child marriage, specifically – is discussed below.
[8] Hug 2014, 271–72, briefly discusses this inscription, suggesting that Veturia may have died in childbirth. See p. 70ff. below on maternal mortality.
[9] Cf. *RIU* 1209 (also dated to the third century CE). The inscription is a fragmentary part of an epitaph inscribed on the side of a limestone sarcophagus (in worse condition than Veturia's; this one also is somewhat more roughly inscribed). This sarcophagus was for sixteen year-old girl, Caecilia Ingenua, whose mother was Julia Fortunata (*D(is) M(anibus) / Caeciliae Ingenua<e> quae / vixit annis XVI diebus XVII / Iulia Fortunata mater / [---*). The sarcophagus fragment was found in Dunaújváros, Hungary, the ancient site of Intercisa, also in Pannonia Inferior (a town located on the Danube, about 65 kilometers south of Budapest). The dating is imprecise, but it is certainly likely that Julia Fortunata was a relation of Titus Julius Fortunatus. The fragment of the sarcophagus (with inscription) is located at the Magyar Nemzeti Múzeum, Budapest (inv. 32.1912.2; for an image, see http://lupa.at/698).

born-married). After acquainting readers with these central kinship ties, we discover what (in the husband/author's view) characterized her life as she lived it, written as if Veturia herself were articulating the information: *I gave birth to six children, and five died*. The epitaph presents the opportunity to meditate on a very basic fact of life in Roman antiquity – that cycles of conception, pregnancy, birth, childrearing, and (infant) death were integral to the contours of many Roman women's quotidian experience and identity.

Let us dig a bit deeper to see what we can extrapolate about Veturia's childbearing years. It is very unlikely that she would have been able to conceive right after marriage because of her young age, so let us imagine that she began childbearing at fourteen, which is early but plausible.[10] (Indeed, if she began childbearing much later, she would have been pregnant almost non-stop until her death.) On average, this means Veturia was giving birth every twenty-six months (provided she did not have twins), with an interval of seventeen months between each birth and the subsequent conception, should all her pregnancies have come to term. While this kind of rigid birth-spacing is unlikely, Veturia's history offers an example of the degree to which many (if not most) women's married lives were characterized by a relentless cycle of childbearing. In this context, it also becomes clear that mourning children – in addition to rearing them – was a primary feature of a married woman's experience, a vital part of her domestic labor.[11] At risk of stating the obvious, I want to emphasize how intense – physically and emotionally – this cycle must have been for many women like Veturia.

Veturia's epitaph describes her as "unlucky" or "wretched," *misera*. Whether or not she herself died in childbirth, what we know of the demography of Roman

[10] This issue, of course, hinges on age at menarche, which is discussed below.
[11] Golden 2004.

populations (see section II below) would suggest the likelihood that several of her children died in infancy or before the age of five. Veturia's offspring suffered a fate common to children in many cultures, past and present, victims of the high toll of infant mortality. Indeed, the epitaph essentially defines Veturia's life through infant mortality. In most contexts, this loss was no doubt felt by other members of a woman's household, but the entanglement of fetal and maternal bodies, and the proximity of pregnancy, childbirth, and infant mortality puts mothers in a unique position to experience that loss.

Veturia's epitaph raises many questions about the ideas, hopes, and sorrows that defined the life cycle of the Roman family. To understand this world, it is helpful to ask what was happening on the ground. Who might have helped Veturia give birth? What kind of care and support would she have received from practitioners or other women she knew? What were the conditions of her loss?

Veturia's husband had achieved the rank of centurion at the time of her death. This position, a well-paid military post, was occupied both by legionaries promoted through the ranks, as well as by municipal magistrates and *equites*.[12] Fortunatus' status (or social aspiration) is embodied in the quality and ornament of his wife's sarcophagus – with its expertly incised epitaph flanked by twin, mourning Attis figures.[13] The sarcophagus is likely the work of local artisans in Aquincum, the *colonia* where Veturia died, a significant imperial outpost. It was a bustling, prosperous city during her lifetime, "an industrial and commercial center" in the region, fed by aqueducts built during the

[12] On the social mobility of centurions, see Dobson 1970.
[13] The Attis figures each hold a *pedum*, a shepherd's crook for catching hares, symbolically connected with death (Nagy 2012, 78). The lid of the sarcophagus was damaged by robbery, but it is now restored.

Trajanic-Hadrianic period.[14] Excavations of the site have revealed a forum, ornate public buildings, lavish villas, baths, and a large number of *tabernae* and shops.[15]

In urban centers throughout the empire, including Aquincum, it is very plausible that Veturia would have had access to a midwife or other female medical practitioners (*obstetrix, maia, medica, iatrinē*, *iatromaia*, and variants), even if she ended up giving birth with only the help of female slaves and/or relatives.[16] Indeed, in some contexts, it is possible that a local male physician might have been summoned by her husband if labor took a turn for the worse. Unlike some parts of the empire (including the Iberian peninsula and north Africa), however, there is little funerary epigraphy to confirm the presence of professional midwives, although that assuredly does not mean there were none.[17] There are several inscriptions from Aquincum, furthermore, attesting to the presence of *medici*, male doctors, roughly contemporaneous with Veturia.[18] It is not unlikely, then, that there was also an economy in midwifery as part of Aquincum's medical marketplace.

Midwifery and female healthcare, more generally, have been a source of interest among historians of ancient medicine for some time. Medical authors of the high empire, particularly Soranus and Galen, make it clear that there was a world of educated, elite

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[14] Lengyel and Radan 1980, 256.
[15] *Tabernae* and shops account for nearly one-third of the buildings, so there was a heavily commercialized downtown. Ibid., 255–56.
[16] On these different types of female practitioners and relatedly, their social status, see Flemming 2013; 2000, 35–44, 383–93.
[17] The only inscription from the Danubian provinces commemorating an *obstetrix*, to my knowledge, comes from Salona, Dalmatia (modern Solin, near Split, Croatia), *CIL* III, 8820 = *ILJug*. I, 125, discussed below.
[18] *Medici* in Aquincum (c. third century CE): *CIL* III, 3413 (*medicus* making a vow to Asclepius and Hygeia); *CIL* III, 3583 (epitaph for *medicus*, commemorated by his parents); *CIL* III, 3537 (epitaph for a military doctor, *leg(ionis) IIII Fl(aviae)*, commemorated by his wife).

midwives, who were not only literate but conversant in medical theory. "Now generally speaking we call a midwife faultless if she merely carries out her medical task," Soranus explains, "whereas we call her the best midwife if she goes further and in addition to her management of cases is well versed in theory. And more particularly, we call a person the best midwife if she is trained in all branches of therapy."[19] Galen dedicated his early treatise *On the Anatomy of the Uterus* to a learned midwife, no doubt a sign of respect; it is also clear that in the cosmopolitan environment of the imperial capitol, Galen might have viewed midwives as rivals because of their unmediated access to women's spaces and bodies.[20]

Some female practitioners engaged in medical writing, though the evidence (especially, allusions to their work in surviving medical treatises) suggests their contribution probably skewed more towards recipes than theory. As Flemming argues, medical culture in antiquity "was not gendered male in the way that the medical culture forged in the passage to modernity was."[21] We must be cautious, however, to remember that female spaces and knowledge were also sites for the exercise of male authors' imagination about "women's secrets" – for elaborating "folk knowledge, concerned with

[19] Sor., *Gyn*. 1.3, 5–10 = 1.4.2 Ilb. All translations of the *Gynecology* are drawn (unless otherwise indicated) or adapted (duly noted) from Temkin 1991. Temkin follows Ilberg's numbering, which I provide for each Greek passage, preceded by the numbers from the most recent edition in four volumes (Burguière, Gourevitch, and Malinas 1988–2003).
[20] The classic example of this dynamic (involving Galen, a high-end Roman midwife, and the wife of the consular Boethus) is discussed in chapter three. Mattern 2008, 89ff. Cf. King 2013, 90–93.
[21] Flemming 2007, 279. She notes, "…women participated in the less prestigious, more workaday, portion of medicine's literary culture on much the same terms as men; albeit in much smaller numbers. What exactly those terms were remains unclear, but there is nothing that particularly distinguishes the female minority from the male majority in this lack of clarity" (267). Cf. Parker 2012.

the body, fertility… and to a degree, exoticizing it."[22] In sum, female practitioners did participate in literate medical culture, as well as medical treatment up and down the social hierarchy.

There is evidence that female practitioners might – in some contexts – be valued commensurately with their male counterparts. At times, slave *medici* and *obstetrices* seem to have been appraised at the same amount (*Cod. Iust.* 6.43.3.1). Elsewhere in the *Digest*, midwives seem to be on equal footing with doctors.[23] Despite these examples, our medical sources indicate that female practitioners were not, by and large, on the same footing with their male counterparts, a topic to which I return in chapter three. There was overlap in training and practice, but on the whole, it existed within a hierarchical, gendered configuration.

Inscriptions for *obstetrices*, *maiai, medicae*, and their variants tantalizingly suggest the contours of a hierarchy within the ranks of female practitioners. Yet caution is required due to the dynamics of (self-)presentation and (self-)promotion in Latin epigraphy. For instance, an inscription from Rome celebrates an *iatromea* (second/third century CE) – a fusion of the Greek *iatros* (doctor) and *maia* (midwife); because of the inclusion of the term *iatros*, it has been suggested that an *iatromea* might be higher in status than a midwife (*obstetrix/maia*).[24] A similar argument has been made about the term *medica* as denoting a higher status female practitioner than an *obstetrix*. In the case of the *iatromea*, however, the terminology is hard to interpret. Did the dedicator simply choose a more highfalutin title as a way to celebrate a typical *obstetrix*? Epigraphic habit

[22] Flemming 2007, 275. A related set of issues is explored in chapter four vis-à-vis amulets, material culture, and literary conventions.
[23] *Dig.* 50.13.1–2. See French 1986, 83, n. 36.
[24] *CIL* VI, 9477. Laes 2010b, 273, n. 61, citing Bounopane 2003, 119.

is tricky, especially when we try to parse the relative status implied by terms that appear infrequently in the historical record. We are, furthermore, dealing with a culture lacking medical regulations, medical organizations, governing bodies, and standard examinations of competency, so the titles used in such inscriptions may be more about ideals and aspirations than status as such. As a result of this lack of standardization, medical titles may also have meant different things in different places and contexts.

Latin epigraphic evidence suggests that midwives in the western empire often had servile backgrounds.[25] In a recent catalog of *obstetrix* inscriptions, over four out of every ten are freedwomen, and a further three out of ten are slaves.[26] Based on this evidence, over 70%, then, were born in bondage. As many as half of the epigraphic dedications for *medicae* (likely female practitioners who engaged in midwifery, along with more generalized medical care for female and sometimes male patients) appear to be for slaves or freedwomen as well.[27] Some urban, aristocratic families clearly owned slaves who worked as midwives, presumably tending to both elite, pregnant women in the household, as well as other slaves.[28] We find inscriptions for provincial midwives, too, such as Aelia

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[25] Inscriptions honoring Roman midwives are collected in Laes 2010b; Flemming 2000, 383–93, provides an appendix collecting inscriptions for *medicine*, *iatrinē*, and related titles. Also see Flemming 2013; French 1986.

[26] Laes 2010b, 271.

[27] Bounopane 2003, 123–25. The question of whether female practitioners treated male patients has been debated. Flemming 2013 makes a convincing case, concluding: "A man taking medical instructions from a woman would have simply been a variation on a constant theme; and there are issues of how much choice about personnel and therapy would have been available as size of cities, and buying power, dwindled. A situation in which female physicians treated at least some men, as male physicians treated at least some (and probably more) women, seems, therefore, the most likely scenario in the cities of the West" (289).

[28] Laes 2010b, 272. He notes that the number of midwives commemorated in columbaria from the city of Rome by powerful families may skew the dossier of *obstetrices* in the

Sotere from Salona (Dalmatia), who died at age thirty-five and was commemorated by her former master, Aelius Antonianus Themistocles.[29] It is possible that upon her manumission, she put her skills, which she had honed as a slave, to use in the medical marketplace.

If we turn from the Latin- to the Greek-speaking regions of the empire, a somewhat different picture emerges through dedications for *maiai*.[30] In a divergence from the Latin dossier, well over half of all Greek midwives appear to have been freeborn.[31] The sample size necessitates caution, and likewise, epigraphic habit must be taken into consideration, particularly with regard to the relatively common commemoration of slaves and freedpersons by (former) masters in Latin. This may skew our evidence towards those of servile background in the west. With these caveats in mind, however, the inscriptions do perhaps suggest a degree of conformity with the view that learned medicine and its practitioners fell somewhat lower on the social scale in the western empire in relation to the culturally Greek east. I would, however, urge caution in drawing too stark a contrast between Latin west and Greek east, given the cosmopolitan nature of medical expertise in the high Roman empire.[32]

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servile direction (see his dossier, ibid., 280–81, nn. 5–17), a view I share. Cf. French 1986, 72.

[29] Laes 2010b, 280, n. 1 = *CIL* III, 8820 = *ILJug*. I, 125: *D(is) M(anibus) / Aeliae Sotere ob/stetrici def(unctae) an(norum) XXXV / Ael(ius) Antonianus / Themistocles / libertae b(ene) m(erenti)*.

[30] Inscriptions honoring Greek midwives are collected in Laes 2011.

[31] Ibid., 156.

[32] See Flemming 2013, 274–75. A stark dichotomy has been drawn between east and west by Nutton 1992, 41, also see Nutton 2012, 168. He argues that doctors' status was considerably higher, in general, throughout the Greek east than in the Latin west. Flemming 2013, 275, n. 21, points out that Mouritsen 2011 positions himself at the opposite end of the spectrum from Nutton. The reality is probably somewhere between the two. Pleket 1995 presents a somewhat different picture in the eastern context,

There is little evidence of the prices Roman midwives charged for their services, though we do possess a mid-third century CE marriage contract from Oxyrhynchus in Egypt, which specifies the amount a husband must pay his wife to cover the costs associated with birth in the event of a separation during pregnancy. This money presumably covered a midwife's fee, as well as the purchase of oil, cloth, and other necessities for childbirth.[33] The amount comes to forty drachmae for a "childbirth fund," δαπάνη λοχεῖα.[34] The amount is not insignificant: stewards made forty drachmae per month, while common laborers might get four to eight.[35] Indeed, as I pointed out above, there is evidence that midwives could be paid – and valued – commensurately with *medici*, despite overall trends pointing to higher valuation of male over female labor for similar tasks.[36] These prices would have varied a great deal regionally (especially in urban and rural environments). To return to the δαπάνη λοχεῖα, it seems plausible, reading between the lines, that women might have perceived abandonment and the

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concluding (based on the epigraphic evidence), that "[t]he majority of all physicians, whether urban or rural, *archiatros* or just plain *iatros*, never got beyond the level of decent (upper-) middle-class craftsmen: the equivalent of what Pliny the Elder called the *plebs media*" (33). This issue of physicians' status is revisited in chapter three.

[33] For labor Soranus recommends preparing "olive oil, warm water, warm fomentations, soft sea sponges, pieces of wool, bandages, a pillow, things to smell, a midwife's stool or chair, two beds, and a proper room." Among foods/medicaments to help a woman during labor, he recommends "things to smell (such as pennyroyal, a clod of earth, barley groats, as well as an apple and a quince, and, if the season permits, a lemon, a melon, a cucumber, <and> everything similar to these) to revive the laboring woman" (*Gyn*. 2.1.7-19 = Ilb. 2.2.2).

[34] French 1986, 73 (see n. 34); *P.Oxy*. 1273, 33–34: [ἐὰ]ν [δὲ] καὶ ἐπὶ τῆς ἀπαλλαγῆς ἐγκυος ἦν ἡ γαμουμένη, δότω αὐτῇ ὁ γαμῶν εἰς λόγον δαπάνης λοχείας δραχμὰς τεσσαράκοντα.

[35] Ibid., 83, n. 34.

[36] On the relative economic valuation of female slaves over time in various professions (weaver, nurse, prostitute), see Bussi 2003, who concludes that based on our (admittedly limited) evidence, "La valutazione del loro lavoro risulta comunque inferiore a quella degli uomini" (286).

inability to cover the cost of care as a risk during pregnancy – a risk mitigated by the inclusion of such a clause in the marriage contract. It is possible that a woman in such an unfortunate situation would return to her family's home to give birth, but surely not all women could count on that fallback.

We might imagine Veturia's husband paying a similar kind of fee for a midwife, perhaps accompanied by attendants. Veturia's female family members and/or slaves might also serve that function. Midwives who marketed their skills freely (as opposed to slave midwives, without the autonomy to do so) were not necessarily hired for a birth alone; rather, they might attend women during pregnancy to prescribe a regimen or medicaments, allay anxieties, or treat other gynecological ailments. Indeed, midwives could be purveyors of medical care in a more generalized sense, though they were sometimes objects of male suspicion. A primary expression of this suspicion is channeled through anxieties about their ability to provide abortifacients, as Juvenal's *Satires* attest. Such a practice would curtail men's claim to (potential) male heirs. Soranus alludes to this reputation, encouraging midwives not to be greedy for money, by pedaling abortifacients for profit.[37] If we look to the big picture of population growth and strategies for family limitation, it is clear that such practices, however widespread or well known, did not impact overall population structure (discussed in section II). These stereotypes no doubt speak to male anxiety, and the negative characterizations in Juvenal and Soranus

[37] Sor., *Gyn*. 1.3.28–29 = Ilb. 1.4.4; Juv., *Sat*. 6.592–601. See below on the arguments against the idea that Roman women were engaging in widespread use of contraceptives and abortifacients for the sake of family limitation. Again, this is not to say that *some* women did not employ contraceptive and abortive methods and drugs, it just was not a quotidian phenomenon.

grew from a more generalized distrust of midwives, exemplified by the drunken, untrustworthy midwife in Roman comedy.[38]

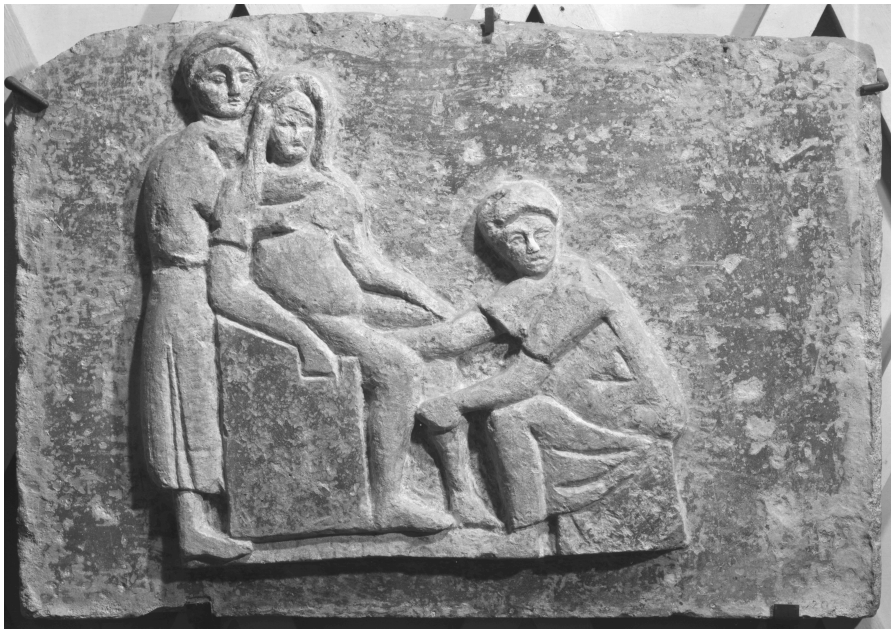

Figure 1.2: Relief from tomb of Scribonia Attice, first half of second century CE, Ostia.

Very few images remain that depict women giving birth in the Roman world. From the western empire, I know of only two surviving images that depict women giving birth (figs. 1.2, 5.4), which I am confident are not forgeries. These images, however, are vivid and evocative. Fig. 1.2, often reproduced in scholarship on women's medicine in antiquity, is the funerary relief depicting Scribonia Attice from the Isola Sacra at Ostia, part of a husband-wife medical team. Sometime in the first half of the second century CE, Scribonia Attice was interred with her husband, Marcus Ulpius Amerimnus, along with various members of their *domus*.[39]

[38] E.g., Ter., *An*. 229–33.
[39] Helttula 2007, 155–56, n. 133 (Ostia). *H(uic) m(onumento) d(olus) m(alus) a(besto) // D(is) M(anibus) / Scribonia Attice / fecit sibi et M(arco) Ulpio Amerimno / coniugi et*

Flanking the inscription are two reliefs. On the left, Marcus is depicted dressing a patient's leg wound, beside a large-scale depiction of his medical/surgical tools. Although not identified as such, he was almost undoubtedly a *medicus*. Scribonia probably called herself an *obstetrix* or, as a counterpart to her husband, *medica*.[40] In a parallel relief to the right of the inscription, Scribonia is pictured in the midst of a birth. She kneels before the parturient, who sits on a birthing chair, reaching her right arm up between the woman's legs. Her face looks away from the woman in labor (towards the viewer), in deference to her modesty, a gesture Soranus in fact encourages.[41] Bracing the birthing woman from the back is an attendant, perhaps a slave who accompanied Scribonia to births or a member of the parturient's household.

The image roughly reproduces the scene Soranus describes in his *Gynecology*, as well as other brief descriptions of birth, such as Galen's in *On the Natural Faculties* III.[42] Once a woman's cervix is adequately dilated, Soranus recommends that the midwife seat her on a birthing chair, surrounded by attendants to soothe and brace her. If a woman in

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Scriboniae Calli/tyche matri et Diocli et suis / et libertis libertabusque poste/risque eorum praeter Panara/tum et Prosdocia h(oc) m(onumentum) h(eredem) e(xterum) n(on) s(equetur). The final two individuals appear to be slaves in Scribonia and Marcus' household, who are excluded from burial in the tomb, perhaps because of a dispute. We might compare this to the pointed punishment of various members of the household in the *Testamentum Dasumii* (*CIL* VI, 10229), who apparently behaved badly.

[40] Flemming 2013, 285–86.

[41] Sor., *Gyn*. 2.1.124–26 = Ilb. 2.6.2.

[42] Sor., *Gyn*. 2.1.20ff. = Ilb. 2.3.1ff. (on the birthing chair); Soranus' text is unfortunately mutilated at the point when he describes birth (in normal cases). Also see Gal., *Nat. Fac*. 3.3 = 2.151–52K (this passage relies on a description of the uterus' "expulsive" faculty during birth, versus the "retentive" faculty exemplified by conception and pregnancy, discussed briefly in chapter four).

attendance is robust enough (and there is no birthing chair), the parturient might sit in her lap, so the attendant can brace her from the back.[43]

As I shall discuss in detail in chapter three, the birth itself would be accomplished among women if all goes according to plan. Husbands and other close male relations might be present beforehand in the preparation for the birth or come in after to see the child, but a normal birth was basically a female affair. Depending on who was giving birth, the room might be crowded with female slaves, family members, midwives, and their attendants.[44] In cases where the birth process deviated from the expected (such as breech presentation, obstructed labor, or hemorrhage), a male doctor was more likely to be summoned, if available. The male presence is traceable in medical texts through the use of masculine participles, which appear when things get difficult or a surgical intervention is required, such as embryotomy. Male physicians are the ones, by and large, who seem to be performing surgical procedures, a notion suggested by the gendered medical imagery of Marcus and Scribonia's tomb: he works with sharp tools, she with her hands.[45]

I want to emphasize the crowded, messy, and socially complex atmosphere of many birthing rooms. If we imagine that Veturia died in childbirth, she could well have spent her final hours surrounded by a throng of people – slaves, midwives, doctors, and family members, bearing a range of objects and medicaments to soothe her and ease her suffering. Her father might have summoned his most trusted physician, and her husband

[43] Sor., *Gyn*. 2.1.86–91 = Ilb. 2.5.2.
[44] See Hanson 1994, a detailed, helpful account of the birth process, drawing on medical texts from the Hippocratics to Soranus to Mustio and Caelius Aurelianus.
[45] The hand-off from midwife to male doctor is discussed extensively in chapter three.

another, if they disagreed. A second midwife might have been sent for, if the first was making little progress.

The scene at a difficult birth might have had a good deal in common with a *legally* complicated birth, when various family relations would compete for control.[46] Roman law provides a regulatory structure to handle situations in which a man has died, leaving a pregnant widow behind. These regulations primarily concern who can be in attendance before, during, and just after a birth, representing both the woman's family (and thus her child's claim to legitimacy) and the deceased husband's family (and their concern about illegitimacy, or the introduction of a foundling to secure an inheritance). At difficult moments, with so much at stake for a range of parties, family members might jostle to intervene, using whatever means were available. Ulpian quotes the praetor's edict on this type of situation, which I reproduce here because of the remarkable scene it depicts:

> The [pregnant] woman [whose husband died] must notify the parties interested or their procurators thirty days before she expects to give birth, so that they can send people to observe the delivery if they want to. The room where the woman is to give birth must have only one entrance. If there are more, they must be boarded over on either side. Three freeborn men and three freeborn women with two companions must keep watch in front of the door of this room... When the woman goes into labor, she must notify all the interested parties or their procurators, so that they can send people to be present at the birth. Up to five freeborn women can be sent so that as well as the two midwives, there are not more than ten freeborn women in the room, and not more than six female slaves. All of those who are going to enter the room must be searched in case they are pregnant. There must be at least three lights in the room… When the child is born, it must be shown to all interested parties or their procurators, if they wish to see it.[47]

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[46] This argument is put forward in Hanson 1994.

[47] *Dig*. 25.4.1.10; trans., Watson 1998. See Hanson 1994, 175–76; she compares this situation to that of Petronilla (from Egypt) in *P.Gen*. II, 103–104.

Soranus never speaks of more than one midwife and three attendants present at the birth, but here we encounter *two* midwives, up to ten freeborn women in the room, and as many as six slaves.[48] While such a case was probably exceptional, the passage indicates just how crowded and public a birth could be. Indeed, rather than thinking about such a situation as extraordinary, the passage reminds us how many people might have a vested interest in a birth. Because the process was fraught with dangers, it required constant surveillance by experts and other trusted individuals. Birth did not just bear risks for a mother and child, reverberating through their own futures; it impacted – and was impacted by – a range of individuals who formed a web of social relations, some of whom found their way into the birthing chamber to participate in the process.

II. Demography and Birth Risk

How was Veturia embedded in a set of broader demographic trends? What can demography – and the kind of big-picture view it offers – teach us about birth risk and motherhood? What can demography illuminate about the perinatal period and infants' chances at life? When many people hear the phrase "birth risk" or "reproductive risk," their first questions are often demographic. These sorts of questions are bound up with modern associations of 'risk', as a category, with statistical quantifiability. In what follows, the risks of childbearing are analyzed from this angle, zooming out to the level of population-wide patterns. From this perspective, some questions can be answered – at least very approximately – through modeling (comparative or otherwise); others

[48] Hanson 1994, 176.

questions, not so much. For these latter cases, I turn to other types of evidence (such as funerary epigraphy) to give a sense of what we *can* know at a very basic, local level.

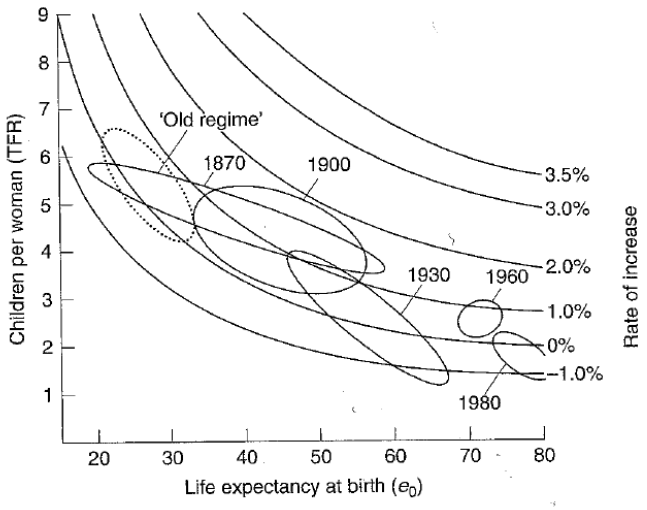

Figure 1.3: The correlation between TFR and life expectancy at birth (e_0), "The strategic space of growth for 17 European countries (nineteenth through twentieth centuries)." Livi-Bacci 2009, fig. 4.1.

A population's "growth potential," as the demographer Massimo Livi-Bacci explains, "may be expressed as the function of two measures… (1) the number of births, or children, per woman, and (2) life expectancy at birth."[49] From our perspective, it is obvious how these two factors relate directly to birth risk – (a) the number of times a woman is exposed to particular dangers during the birth process and (b) a child's chances of life at birth. Fertility and life expectancy in a population, as seen in fig. 1.3, are closely correlated: the lower the life expectancy at birth (e_0), the higher the total fertility rate (TFR).[50] Accounting for large variations in ecological conditions, it is safe to say that the

[49] Livi-Bacci 2009, 9.
[50] Cf. Bagnall and Frier 1994, 143.

Roman empire, with all its diversity, had a low life expectancy at birth, high fertility demographic regime.

Historical demographers have sought concrete evidence for life expectancy at birth in the Roman empire. Life expectancy at age x (e_x) measures how many more years an individual is likely to live at a given age.[51] The general consensus is that life expectancy for men and women in the Roman empire fell between 20 and 30 years at birth ($e_0 = 25$ is often used as a mean, but a few years above or below this age do not affect my claims substantially).[52] In such a population, life expectancy peaks in early childhood. If a child survived until age five, her life expectancy might rise to about 40 years and then begin to taper off as she matures. It should be emphasized that, for the purposes of our investigation, life expectancy at birth is a crucial measure and predictor of mortality patterns in a population, which, in turn, are entangled with fertility, nuptiality, disease ecology, and a host of other factors.

Various strategies have been employed to obtain adequate data for life expectancy at birth in the Roman empire, drawing on epigraphic evidence (gravestones and town records, such as the Album of Canusium), skeletal remains, literary and legal evidence (such as Ulpian's 'life tables', referred to in *Dig*. 35.2.68 pr.), and census papyri from Roman Egypt, often mapped against model life tables for fit (a strategy discussed below). Unfortunately, many of these forms of evidence have proven both misleading and inadequate. They are proxy data for statistics we simply do not have, leaving gaps that are often filled with problematic assumptions. Epigraphic sources, for instance, particularly gravestones, offer historians a wealth of useful information, but the

[51] The best consideration of recent work on the topic is found in Hin 2013, 101–71.
[52] Ibid., 106.

information they provide, inherently, tells us about *commemorative* habits rather than population structure. Gravestones systematically over-represent some groups and under-represent others (such as infants), while varying across time, space, and social class.[53] Skeletal remains, unlike tombstones, are not nearly as prevalent, and there is simply not enough consistent evidence to draw convincing population-level conclusions from them. Bio-archeology does offer some tantalizing clues to regional disease ecology, however, such as the work done on remains of individuals who died at Pompeii and Herculaneum in the 79 CE eruption of Vesuvius.[54]

Some promising conclusions have been derived from evidence available for elite families, especially given the current consensus that elites and non-elites, overall, suffered similar levels of mortality in classical antiquity.[55] One such example is to be found in Scheidel's study of emperors and their wives who died of 'natural' causes, which he compares to evidence for other elites. Among these individuals, he shows that male life expectancy at birth was around 26.3 years, with women at similar levels.[56] These findings are comparable to the hypothetical life expectancies derived from the Album of Canusium (*CIL* IX, 338), a list of local council members for a town in Apulia (223 CE). By back-projecting the career paths of members, it is possible to arrive at

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[53] Pointedly noted in Hopkins 1987, an article aptly titled, "Graveyards for Historians." Cf. Woods 2007.
[54] Hin 2013, 105.
[55] See ibid., 107, who notes, "There were no substantial divergences in life expectancy between the elite and the masses seems to be the new orthodoxy among ancient historians."
[56] Scheidel 1999; e_0 for emperors' wives surveyed in the study correspond to the Coale-Demeny model life table for $e_0 = 27.5$. Scheidel uses Coale-Demeny model West for comparisons (for men the best fit is level 4; ibid., 256).

estimates for their ages and a plausible age structure.[57] This strategy, however, is necessarily very speculative.

'Model life tables' have proven a popular, if controversial resource for modeling the Roman population. These tables model mortality patterns using statistics from well-documented populations. The Coale-Demeny model life tables, in particular, utilized by Roman demographers in the last several decades, are based on data from populations after 1850. They are divided into four templates for stable populations: North, South, East, and West, with data drawn from a variety of countries and regions. Model West and Model South are used as 'fits' for the Roman empire (more often Model West).[58] For best 'fit' with the population data acquired from the census records of Roman Egypt, Bagnall and Frier draw on Coale-Demeny Model West (levels 2 for women and 4 for men).[59] Following Parkin, I offer a middle ground in table 1.1, with Model West, level 3 (female, $e_0 = 25$) with a guide to the terms (table 1.2).[60]

Coale-Demeny life tables use statistics from populations with much higher life expectancies than those of pre-modern populations, and the tables with lower life expectancies at birth are extrapolated from this data. Thus for high-mortality regimes, the tables are not based on statistics from *actual* high-mortality populations; they are projected from evidence for well-documented groups living in very different

[57] Duncan-Jones 1990, 93–96, whose results are discussed in Scheidel 1999. Frier believes 20-30 years to be the best range overall for life expectancy at birth (Frier 2008, 789).
[58] For a list of the countries from which the data is drawn, see Coale and Demeny 1983, 11–12.
[59] Bagnall and Frier 1994, 77 (women), 100 (men).
[60] Parkin 1992, 147, table 9.

environments in very different eras.[61] For a variety of reasons, then, a number of historical demographers have expressed doubts about the usefulness of Coale-Demeny model life tables for ancient populations.[62] Besides issues with the data's origins, the models do not account for migration.

x	q_x	d_x	l_x	$1000m_x$	L_x	T_x	e_x	C_x
0	0.3056	30556	100000	381.3	80139	2500000	25.000	3.21
1	0.2158	14988	69444	62.9	238224	2419861	34.846	9.53
5	0.0606	3300	54456	12.5	263206	2181638	40.062	10.53
10	0.0474	2424	51156	9.7	249963	1918431	37.502	10.00
15	0.0615	2998	48732	12.7	236465	1668468	34.237	9.46
20	0.0766	3503	45734	15.9	220261	1432003	31.312	8.81
25	0.0857	3617	42231	17.9	202472	1211742	28.693	8.10
30	0.0965	3728	38614	20.3	184121	1009269	26.138	7.36
35	0.1054	3677	34886	22.2	165603	825148	23.653	6.62
40	0.1123	3504	31208	23.7	147633	659545	21.134	5.91
45	0.1197	3315	27705	25.4	130566	511911	18.477	5.22
50	0.1529	3728	24389	33.0	112999	381345	15.636	4.52
55	0.1912	3950	20661	42.1	93828	268346	12.988	3.75
60	0.2715	4537	16712	62.4	72670	174518	10.443	2.91
65	0.3484	4241	12175	83.7	50695	101849	8.366	2.03
70	0.4713	3739	7934	121.8	30694	51154	6.448	1.23
75	0.6081	2551	4194	174.8	14596	20459	4.878	0.58
80	0.7349	1208	1644	254.1	4755	5864	3.567	0.19
85	0.8650	377	436	375.6	1004	1109	2.544	0.04
90	0.9513	56	59	551.9	101	105	1.784	0.00
95	1.0000	3	3	810.6	4	4	1.234	0.00

Table 1.1: Coale-Demeny Life Table, Model West, level 3 (female, $e_0 = 25$), Parkin 1992, 147, table 9.

[61] Hin 2013, 109.

[62] Scheidel 2001b offers a powerful critique; also see Parkin 2013, 48ff., who critiques some of his own work with model life tables in Parkin 1992.

Term	*Definition*
$\mathbf{x}$	Age (years)
$\mathbf{q_x}$	Probability of death between age x and next age (x+n)
$\mathbf{d_x}$	Number of deaths between age x and next age (x+n)
$\mathbf{l_x}$	Number of survivors at age x
$\mathbf{m_x}$	Age specific mortality rate
$\mathbf{L_x}$	Number of person-years lived in a particular interval of x+n, taking into account people dying over that period of n years
$\mathbf{T_x}$	Sum of all the L_x values
$\mathbf{e_x}$	Life expectancy at age x (T_x/l_x)
$\mathbf{C_x}$	Proportion of total population the age group represents

Table 1.2: Guide to model life table terms.

Most importantly, an awareness of the variability and diversity of population age structures in different regions of the empire has led to increased discomfort with the kind of one-size-fits-all approach the Coale-Demeny models imply. Alternative life tables, based on data from historical populations, have thus been introduced into the debates on Roman demography to address these short-comings. For example, Woods has drawn together a set of alternative model life tables from other regions and historical populations, focusing on data from Liberia, Chile, Taiwan, and Sub-Saharan Africa. Using a technique called Brass modeling, he quantified 'best fit' with ancient evidence.[63] Based on his data, the 'Southern Europe Model', which uses data from Chile, fits the ancient evidence best (he focuses on Ulpian's 'life table', a choice criticized by Hin), while the Morogoro from Tanzania are a close second.[64]

Yet these alternative models share some of the same problems as the Coale-Demeny models. Climate and micro-environmental variations make it certain that very divergent disease ecologies existed throughout Rome's Mediterranean empire, sometimes

[63] Woods 2007; Hin 2013, 110–28.
[64] For a brief and clear discussion of Ulpian's evidence, see Frier 2008, 790ff.

varying enormously even within the same region.[65] Take two figures from nineteenth-century Italy by way of comparison: inhabitants of the city Grosseto, in a malarial region, suffered a life expectancy at birth as low as twenty years while the population of Treppio, about 150 kilometers due north, had a life expectancy at birth as high as thirty-seven years.[66] The likelihood of death, likewise, varied throughout the year based on climate. As Shaw has made clear, seasonality matters a great deal for fertility, mortality, and nuptiality (discussed below).[67]

Gender also affects life expectancy, based on cultural, economic, and social factors. Overall, it is very likely that men had an advantage over women in life expectancy because of their position of relative social privilege and access to resources, part of the "demographic holocaust" suffered by women cross-culturally for thousands of years.[68] However, once we get past very broad generalizations, i.e., that Rome had a high mortality, high fertility demographic regime, the historian must be aware that no fine-grained, one-size-fits-all model can accommodate divergent cultural practices, micro-climatic conditions, and disease ecologies.[69]

Hin has improved upon this type of alternative modeling, using census data from Roman Egypt *and* Ulpian's evidence, comparing (for fit) Coale-Demeny Model West with Woods' Southern Europe Model, as well as alternative models from Ghana (Africa

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[65] This point on micro-climates and ecology is made by Scheidel 2001b, 18. On micro-climates and their impact, also see Horden and Purcell 2000.
[66] Hin 2013, 125.
[67] He tackles these issues in a series of articles: Shaw 2001 (seasons of birth); 1996 (seasons of death); 1997 (seasons of marriage).
[68] Shaw 1994, drawing on Sen 1990. The issue of "missing women" has been explored by historians of medieval Italy, with interesting implications for historians of the Roman world; see Barbiera, Castiglioni and Dalla Zuanna 2017.
[69] See, e.g., Sallares 2002; Scheidel 2001a; 2001b.

Navrongo Model), Tanzania (Africa Morogoro Model), and Ethiopia (Africa Butajira Model).[70] Without going into too much detail, the results of Brass modeling do show that there are better alternatives to the Coale-Demeny life tables. Ultimately, though, as Hin concludes, these alternative models do not move the needle much in terms of our overall understanding of life expectancy *at birth* in the Roman world: "It is only the distribution of the risk at death over the life-course," she explains, "that was probably slightly different from what was implied by the Coale and Demeny West Model."[71] The alternative models suggest slightly higher life expectancies at birth with more mortality variation in adulthood as a result of infectious disease (which, again, would have varied by region). In the end, the Coale-Demeny models obscure the variability in ancient populations' age structures, but they also provide a helpful guide to historians who wish to understand the basic contours of an ancient population and the kind of reproductive pressures that existed on a broad demographic scale.

All these different analyses of life expectancy at birth point to very high levels of *infant* mortality, even if we were to take a conservative reading of our evidence. As I have noted, infant mortality rates (IMRs) certainly varied among regions and groups, and were influenced by a wide range of environmental and cultural factors.[72] To give a sense of scale, in the mortality regime of Coale-Demeny's Model 3 West (female, $e_0 = 25$, table

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[70] Hin 2013, 110–23, see especially tables 4.1-6. There are flaws to all these models, however. She shows that the close fit with the Chilean data, for example, is more a function of coincidence than shared disease ecology.

[71] Ibid., 118.

[72] Woods 2007 argues we have overestimated infant mortality and underestimated adult mortality. This view is echoed by Hin 2013, 118–19, noting that in the four alternative models she examines the "death rates for children aged 0–4 are lower than in Coale and Demeny's model. This lends some force to earlier suggestions that infant mortality in the Greco-Roman world may have been lower than thought. If so, we also must assume that mortality among adults was higher."

1.1), around a third of children died by their first birthdays and nearly half by their fifth birthday. In Wood's Southern European Model, that number would be reduced to about 40% by the fifth birthday. Recently, Parkin has also adopted a cautious approach, suggesting an IMR of about 200 per 1000 infants (before the first birthday), and 450 per 1000 by age five.[73] For comparison, in 2016, the IMR in the United States was 5.8 infant deaths per 1000 live births (ranked fifty-sixth globally). In that year, Monaco had the lowest IMR, with 1.8 infant deaths per 1000, and Afghanistan the highest, at 112.8.[74] Taking into account wide variations in the Greco-Roman context, these numbers point to dramatic rates of infant mortality – at least twice as great as the Afghan rate in 2016. It is a reminder that even in the harsh living conditions endured by much of the Afghan population, modern shifts in medical practices make a serious difference.

What kinds of factors would have contributed to high infant mortality rates in the Roman empire? There are many causes of infant mortality, but major reasons include low birth weight (due to a variety of causes), infant feeding and weaning practices, overall nutrition (which may vary by gender), and, relatedly, infection. Any discussion of these issues should emphasize the inextricability of environmental factors and cultural practices, which shape family structure, creating and responding to reproductive pressure.

Infant mortality is correlated with low birth weight, which is often due to preterm birth caused by poor maternal health during pregnancy. In terms of disease, malaria offers a good example, since it was likely endemic to parts of Italy (including low-lying

[73] Parkin 2013, 50.
[74] "CIA World Factbook," 2016, https://www.cia.gov/library/Publications/the-world-factbook/rankorder/2091rank.html.

areas of Latium and the city of Rome) and many regions in Egypt, such as the Fayum.[75] The strain of malaria known as *P. falciparum*, which was probably prevalent in parts of Roman Italy, can be especially detrimental to the health of pregnant women. Babies born to malarial women often have a lower-than-average birth weight (by 200 grams or more), which makes the infants weaker and more susceptible to pathogens.[76] Malaria also makes humans more prone to gastrointestinal illness, which has been a leading killer of infants and small children, especially in urban environments.[77] As recently as 1970 in Egypt, infantile diarrhea accounted for over half of all recorded infant deaths.[78] Sallares has argued that malaria and gastrointestinal illness formed a deadly partnership in Roman Italy, with especially dire results for the most vulnerable, thus contributing heavily to infant mortality rates.[79]

The prevalence of gastrointestinal illness brings us to the issue of feeding practices, which are intimately tied to the levels of pathogenic exposure among infants. If we are to believe our medical sources, some neonates were not initially breast-fed in the first hours and days after birth, a practice that would put them at great risk for infection. To the horror of modern pediatricians, the physician Soranus argues that colostrum – a highly nutritious form of breast milk that comes in just before or at birth – is putrid. He describes this indigestible, "cheesy" (τυρώδες) milk as the product of an agitated,

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[75] Sallares 2002, 125: "The most severely affected internal organs are the brain (causing cerebral malaria), the kidneys and the heart and the liver, and (most importantly for the discussion at this point), the placenta in pregnant women (especially primigravidae), in whom any acquired immunity to *P. falciparum* malaria tends to break down in the second and third trimesters."
[76] Ibid., 126.
[77] For the science behind this linkage, see ibid., 125ff.
[78] Scheidel 2001a, 65.
[79] Sallares 2002, 129. Cf. Scheidel 2001a, 75.

suffering maternal body.[80] Rather than colostrum, Soranus recommends feeding the newborn boiled honey and water, hydromel (ὑδρόμελι), for the first couple of days. This was a rejection of the alternate views of the physician Damastes, whom he cites as a proponent of the view that a mother's breast milk *is* healthful just after birth. Hydromel is a better alternative to butter or barley meal, Soranus explains, which upset the newborn's stomach. He goes on to suggest mixing goats' milk with hydromel and feeding it to the neonate if a wet-nurse is not at hand. This recommendation would make many infants very ill. "In preindustrial societies," Parkin comments, "to feed an infant unpasteurized animal milk was tantamount to manslaughter."[81] Soranus' discussion of this range of recommendations suggests the diversity of approaches to infant feeding that existed in the Roman empire, presumably varying by region and community.

A range of sources suggests most children were breast-fed by nurses or their mothers for the first two to four years of life (full weaning likely by age three), with solids first introduced at approximately six months.[82] Weaning can be one of the more precarious moments in an infant's life, and it is not surprising that skeletal evidence from Isola Sacra shows a mortality spike among infants at six to nine months, likely when solid foods were first introduced.[83] Skeletal evidence from Roman Britain shows another spike in children between two and three years, likely the time of full weaning; similar findings hold true for samples from Isola Sacra.[84] At this time children become prone to

[80] Sor., *Gyn*. 2.7.58–69 = Ilb. 2.18.
[81] Parkin 2013, 53.
[82] Ibid., 55. Cf. Sor., *Gyn*. 2.17 = Ilb. 2.46.
[83] FitzGerald 2006.
[84] Prowse *et al*. 2004; Fuller *et al*. 2006.

so-called weanling diarrhea. After children passed through these precarious stages, their life expectancy would have increased significantly.

Wet-nursing and breast-feeding in the Greco-Roman world have attracted interest for a variety of reasons, including their impact on family relations.[85] Under the empire, it appears that wet-nursing was very widespread, from slaves' children to those of the ultra-elite.[86] Elites might have owned a slave who nursed their children, as well as the children of other slaves. Sometimes a slave-owner might also farm out a slave wet-nurse to another family for a fee so she could nurse both freeborn infants and slaves in another household.[87]

From a demographic perspective, the question of whether mothers were nursing their infants is of great import. In addition to breast-feeding's impact on infant mortality, protracted nursing serves to lengthen the interval between births because of a phenomenon known as lactational amenorrhea, the (typical) absence of menstruation while lactating. In short, breast-feeding can be a tactic to delay pregnancy and lengthen birth spacing. Alternatively, sending infants to be fed by wet nurses can decrease inter-birth intervals, thereby increasing fertility. In a treatise by Plutarch called *On the Education of Children*, he notes that among the reasons for employing a nurse (such as a mother's bodily weakness after birth), some women may do so because "they are in a

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[85] E.g., Masciadri and Montevecchi 1984; Bradley 1986; 1991; Joshel 1986; Fildes 1988; Laskaris 2008; Dasen 2010; Ehrenreich and English 2010; Powell *et al*. 2014. Also see the helpful survey of the issue in Parkin 2013, 50–57.

[86] See Sparreboom 2014, 149–56; also see the discussion of *collactanei* (co-nurslings) in Bradley 1991, 149–54. *Collactanei* could consist of a servile and freeborn pair nursed together, for example, a slave nurse's own child and one of her master's. There are also contracts for nursing slave children, e.g., *BGU* 4.1106, 1107. G.

[87] E.g., Rowlandson 1998, 296–77, no. 214 (*P.Oxy*. I, 91, 187 CE). This letter concerns a servile wet-nurse who nursed a freeborn child, but it was also very common for such nurses to take care of slave children.

hurry to have more children" (πρὸς ἑτέρων τέκνων σπεύδουσαι γένεσιν; *Mor*. 3d). Plutarch seems to be pointing directly to the contraceptive effects of breast-feeding, likely a well-known phenomenon with a clear explanation in Greco-Roman medical theory (discussed below).[88]

Despite knowing that women may conceive sooner after a birth if they avoid breast-feeding, there is literary evidence that (at least some) elite men adopted a moralizing viewpoint about its virtues, arguing that mothers ought to nurse their own children. This view is exemplified in a well known speech by the philosopher Favorinus, transmitted in Aulus Gellius (*NA* 12.1). In the anecdote, Favorinus went to the home of a Roman aristocrat, a friend, whose wife had just given birth to a son. The philosopher exclaims, "*Nihil… dubito quin filium lacte suo nutritura sit*" ("I have no doubt [the mother] will nurse the child with her own milk!" 12.1.4–5). The young woman's mother replies that her daughter should be spared the onerous task of breast-feeding after the difficulties of birth, and a wet-nurse will be hired. This prompts a long speech from Favorinus, drawing on popular medical theory.

Favorinus understands breast milk as concocted from menstrual blood, which previously nourished the *fetus in utero* – in essence, the substance is all part of one finely-tuned cycle. To be a mother *in accordance with nature* thus necessitates breast-feeding, and failing to do so represents a kind of short-circuiting of a woman's bodily teleology.[89] Whether or not Favorinus knew about the relationship between breast-feeding

[88] See Sparreboom 2014, 148–49.
[89] Gell., *NA* 12.1.13-14: *Nonne hac quoque in re sollertia naturae evidens est, quod, postquam sanguis ille opifex in penetralibus suis omne corpus hominis finxit, adventante iam partus tempore, in supernas se partis perfert, ad fovenda vitae atque lucis rudimenta*

and fertility, fulfilling this teleological role would appear to be more important than maximizing the frequency of a woman's pregnancies. Epigraphic evidence supports the notion that some women were commended for being mothers who nursed their own children, both "mother and nurse," *mater (et) nutrix*.[90] No doubt most women could not afford wet-nurses, so we must assume that to a considerable extent, many infants were breast-fed by their own mothers, effectively lengthening inter-birth intervals.

The topic of inter-birth intervals brings us to the issue of 'natural fertility', the term used by demographers to describe populations in which "intentional contraception" is not being used "for the purpose of controlling either the number of births or their timing."[91] There has been some debate regarding the question of whether women in the Greco-Roman world constituted a 'natural fertility' population. Relying largely on pharmacological and medical texts, Riddle has argued that women used effective methods of contraception and abortion in classical antiquity, significantly impacting fertility rates. His conclusions have met with serious challenge from scholars such as Frier and more recently Hin. There are strong arguments against Riddle's thesis, hinging on its problematic assumptions about our medical texts (as representative of widespread practice and knowledge) and what we know about Roman demography, especially strategies for family limitation (such as breast-feeding) and population growth. The kind of population control Riddle imagines is not borne out by the demographic evidence, which suggests that the Roman population was in fact slowly but steadily growing (in the

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praesto est et recens natis notum et familiarem victum offert? Chapter two and four offer further discussion of this fluid economy in the female body.

[90] E.g., *CIL* IX, 1154 = *ILS* 6486; *CIL* VI, 21347; *CIL* VI, 19128 = *ILS* 8451 praises a mother who raised her children "with her own breasts" (*propriis uberibus educavit*).

[91] Livi-Bacci 2009, 10.

west, and even more so in the east, especially Egypt).[92] Thus, while the concept of 'natural fertility' must necessarily be elastic based on cultural practice and disease ecology, this study treats the Romans as a natural fertility population for all intents and purposes.

The marital fertility rate under the Roman empire was much higher than the non-marital fertility rate. Our information on the size of Roman families, however, is very limited. What we do know is that the Roman population was not shrinking. To achieve a stable population with a 0% growth rate when $e_0 = 25$ (this is of course hypothetical; the population was likely growing), women who lived to be 45 would have to bear four to six children.[93] In this demographic regime, only one of those children was likely to survive to 55 or 60 years of age.[94] In Roman Egypt, by comparison, Bagnall and Frier argue for a total *marital* fertility rate of nearly nine children, with non-marital fertility around 0.175. They observe that the census data from Roman Egypt is consistent with a population growth rate of 0.2%, and that such a growth rate would have been relatively easy to

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[92] Frier 1994, 329–30. He concludes his critique, "Even if ancient sources do contain accurate knowledge about 'chemical birth control agents', such knowledge does not in itself entail widespread family limitation in antiquity; other sources of possibly accurate knowledge were at hand. In any case, comparative evidence stands firmly against the probability of wide-spread family limitation, and so too does the only available statistical evidence from the Roman world. As a general rule, therefore, ordinary Roman couples did not successfully limit their families through contraception and abortion. If in fact these couples had access to reliable means for effecting family limitation, then either they altogether failed to consider limitation, or they considered and rejected it because they did not want smaller families" (333). Family limitation, in general, was also not in keeping with Roman family values, as I have already indicated, which put a premium on women's procreative capacities.

[93] Hin 2013, 172–73, drawing on the Coale-Demeny Model West life tables. Cf. Parkin 1992, 112.

[94] Parkin 1992, 112.

maintain, "…there is no reason to believe that the Roman empire fell short of it."[95] On this estimate, there were probably many, many women in the empire who spent their adult lives gestating, birthing, rearing, and burying children, in an almost ceaseless cycle.

Household configuration and age at first marriage are also implicated in fertility patterns. In many cultures, the age at first marriage (AAFM) is correlated with the time when women begin procreating. Comparative evidence, however, points to the importance of marriage rates over age at first marriage as the deciding factor in determining a population's fecundity.[96] For both men and women, AAFM also reinforces – and is influenced by – the structure of the household.[97] In a pioneering study by Hopkins (1965), he analyzed 464 previously collected funerary inscriptions from *CIL* I-VI that include information on length of marriage and age at death (LOM/AAD).[98] He argues that around half of women were wed by fifteen, and men by twenty-four.[99] In the 1980s, however, Saller (focusing on male AAFM) and Shaw (on female AAFM) came to question these findings, based on a larger group of inscriptions from a far wider swath of the empire. Saller and Shaw traced the age cut-off when individuals begin to be commemorated by their spouses rather than their parents, arguing that the shift should

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[95] Frier 2008, 805; Bagnall and Frier 1994, 81–90, 144–45.
[96] Scheidel 2007, 399–400. Cf. Caldwell 2015, 7.
[97] Saller 1994, 25ff.; 1987; Shaw 1987; Scheidel 2007. Beginning with Laslett and Hajnal, this has been a source of great interest to scholars of the family (see Viazzo 2003 for an interesting overview of the history of scholarship on the topic), in particular, the relationship between marriage age and neo-local, nuclear households vs. extended kin households (i.e., leaving the home to set up a new household after marriage as opposed to marrying and staying at home). As Viazzo shows, cut-and-dry regional divisions cannot account for all variations in household configurations, which, in many cases (as the census data from Roman Egypt shows), are often in a state of flux.
[98] The inscriptions used in Hopkins 1965 were drawn from Harkness 1896. See the discussion of these and other relevant studies in Hin 2013, 176ff.; also see Saller 1994, 25ff.
[99] Hopkins 1965, 319 (women), 325 (men).

indicate the general transition from an unmarried to married state.[100] Based on this logic, the epigraphic evidence indicates that outside the elites, women were married in their late teens and men in their late twenties, leaving (approximately) a decade-long age gap. Among elites, however, a pattern of earlier marriage likely prevailed for daughters, lengthening the age gap between spouses and likely exposing girls to heightened risks in their early years of childbearing.[101]

Scheidel has reinforced Saller and Shaw's conclusions, arguing that their conclusion represents the best interpretation of the data.[102] Still, critics of their methodology have objected to the assumption that "commemorative practices were habitually governed by marital status" rather than by other factors and family ties (such as the presence of a living *paterfamilias* or successful childbearing, as Lelis, Percy and Verstraete have argued).[103] Based on comparative evidence, furthermore, there may be reason to believe that future studies should focus more on the urban/rural divide in AAFM.[104] Indeed, in Roman Egypt, for comparison, where rather different marriage patterns prevailed (including brother-sister marriage in some regions), census evidence shows men and women from urban environments marrying a few years later than those in

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[100] Saller 1987; Shaw 1987. These studies followed on the collaboration of Saller and Shaw 1984, tracing commemorative habits among family members (especially the nuclear family) in the Roman empire.
[101] Shaw 1987, 43–44; elite office holders may have sometimes married earlier for political reasons.
[102] Scheidel 2007, 402. Also see Hin 2013, 178–79.
[103] Scheidel 2007, 391. Lelis, Percy and Verstraete 2003 contend that, *pace* Saller and Shaw, the shift in commemorative practice (from parents to spouse) could be attributed to different factors. They argue that wives (rather than parents) began to commemorate men after the death of their *paterfamilias*; husbands began to commemorate wives after they bore children. This argument, however, also involves two problematic *a priori* assumptions.
[104] Scheidel 2007, 400.

rural environments.[105] Yet it remains to be seen how closely this pattern in Roman Egypt correlates with practices in the Latin west. Without belaboring the point, we must contend with the fundamental limitations in our evidence, especially the biases of urban epigraphy.

Legal sources provide another glimpse into marriage in the Roman empire, particularly in elite circles. While the epigraphic evidence does point to girls being married in their late teens, both literary and epigraphic sources show that some girls were married off at twelve or younger. Weddings were conducted in a basically unregulated manner in the Roman world, but by the early empire, twelve was set as the minimum legal marriage age for girls and fourteen for boys.[106] The legal evidence is quite clear, however, that girls younger than twelve were still being married, though to what extent is hard to say. Indeed, while the mode AAFM was likely higher that previously thought for females, there was still a wide range, especially at the lower end of the age-spectrum among girls. In the city of Rome, inscriptions attest to girls married as young as seven.[107] These marriages were not legally valid for Roman citizens until the girl reached age twelve, and as a result, there are references in the *Digest* to a "quasi-dowry" (*quasi dos*) and "quasi-wife" (*quasi uxor*).[108] Before the legal ages for marriage were set, the standard

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[105] Bagnall and Frier 1994, 117–18

[106] Frier 2015, 662–63, *contra* Piro 2013, who pegs the transition in the Severan period.

[107] Frier 2015, 661, n. 69; the epigraphic references are drawn from Musca 1988. E.g., Cicero's friend Atticus married his daughter Caecilia Attica to Marcus Agrippa when she was about fourteen (Nep., *Att*. 12.1, 19.4; Sen., *Epist*. *Mor*. 21.4; Suet., *Tib*. 7.2). Cf. Lelis, Percy and Verstraete 2003, 121ff., "Appendix II: First Marriages of Roman Women"; also see Plin., *Ep*. 8.10, 8.11, describing his very young wife's miscarriage and recovery. Epigraphic evidence for girls marred at age seven in Rome: *CIL* VI, 21562; *ICUR* IV, 12018; *ICUR* VIII, 21599; *ICUR* IV, 11755. Musca 1988.

[108] Frier 2015, 657, n. 45. E.g., Ulpian, *Dig*. 42.5.17.1, 24.1.32.27 (*quasi uxor*); 5.3.13.1 (*quasi dos*).

metric to determine legality was whether the girl was able to sustain sexual intercourse with a man, in Latin, the graphic and disturbing term is *viripotens*.

The very concept of *viripotens* suggests some sort of awareness that sex, pregnancy, and birth are harmful for young girls. Child marriage still occurs in many regions of the world, and we need not look hard to find tragic cases demonstrating the suffering wrought by such practices. Frier points to the death of Phulmani Dasi, a girl from Calcutta, as one famous example. She died at age eleven from hemorrhage after she was raped by her forty year-old husband on their wedding night, a case which led to public outcry and contributed to the passage of an amendment to the Indian Penal Code in 1891, raising the minimum age of girls at marriage from ten to twelve, effectively aligning it with the Roman legal minimum.[109] Indeed, child marriage remains a problem globally, and in the contemporary United States, 200,000 minors were legally married between 2000 and 2015, the overwhelming majority of which were underage girls wed to older men. Some of these girls were not even teenagers at the time.[110] And although most states set the minimum age of sexual consent between sixteen and eighteen, individuals may evade punishment for statutory rape through legal marriage.[111]

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[109] Ibid., 661.

[110] See, for example, the widely read opinion piece by Kristof 2017 on child marriage, which focused on the forced – and legally contracted – marriage of a pregnant eleven year-old girl to her twenty year-old rapist in Florida.

[111] Tsui 2017a; 2017b. The legal marriage age is set at the state level in the United States. Despite some changes (in 2017, for example, Texas governor Greg Abbott signed a bill that effectively bans marriage for individuals under age eighteen), many state legislatures have resisted change. This is exemplified by the failed bill banning marriage before eighteen in the New Hampshire state legislature, effectively preserving a 1907 law that allows legal marriage for girls as young as thirteen and boys as young as fourteen, with the consent of a parent and judge (Tsui 2017a). Also see tahirih.org and their recent report (http://www.tahirih.org/wp-content/uploads/2017/08/TahirihChildMarriageReport-1.pdf).

In the *Gynecology*, Soranus warns that girls should stay virgins *at least* until they reach menarche around age fourteen, the "natural (φυσικόν) time… for defloration."[112] Textual sources from medieval Europe also suggest that the onset of menstruation was traditionally understood to come between twelve and fifteen, at least among elites.[113] Evidence from the Roman empire, troublingly, does raise the possibility that some child marriages were consummated. Marriage was contracted as a procreative union, after all – *causa liberorum procreandorum* (for the sake of producing children).[114] Although families may have waited until their daughters were twelve, as was legally required, many girls probably had not yet reached menarche by that age, and most definitely had not completed puberty. In essence, a legal marriage age of twelve would still have sanctioned the marriage of pre-pubescent girls.

Age at menarche is tied to nutrition and health, and in the last century, Europe and the United States have seen a dramatic decrease in the average age at which girls begin menstruating (fig. 1.4). This is part of a larger global trend.[115] Good nutrition lowers the age at menarche, malnutrition delays its onset. Over the last several decades, childhood obesity and endocrine disruption have been recognized as factors that also contribute to the trend. There can be wide variations in the age at menarche: studies of rural communities show girls menstruating as late as sixteen on average in 1989 (Gambia), with a lower average around 13 in 1996 (Bangladesh).[116] Globally, the average has now

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[112] τοῦτο τοίνυν ὄντως ἐστὶ φυσικὸν καὶ τὸν τῆς διακορήσεως ἐμφαῖνον χρόνον. Sor., *Gyn*. 1.10.24-51 = Ilb. 1.33.4–7. Adapted from Temkin, trans., 1991.
[113] Amundsen and Diers 1973.
[114] See chapter three for a further discussion of this phrase in relation to medical views of the female body.
[115] Euling *et al*. 2008; Buttke, Sircar and Martin 2012.
[116] Prentice *et al*. 2010; Rah *et al*. 2009.

dipped under thirteen, a historically unprecedented development.[117] Soranus' suggestion of fourteen as the age of menarche, especially for girls without nutritional deficits, fits rather well within global patterns.

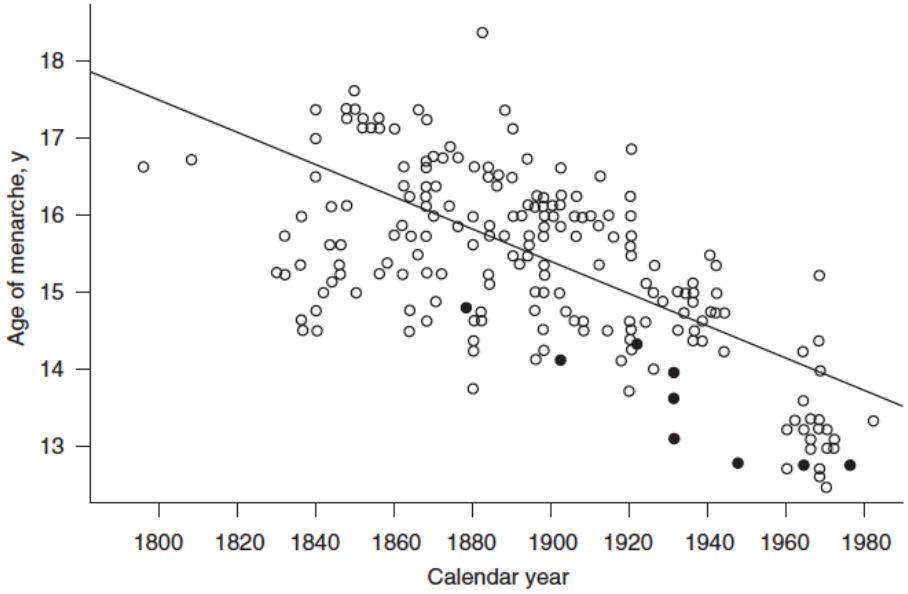

Figure 1.4: "Mean or median age of menarche in Europe and the United States as a function of calendar year from 1790 to 1980…" Euling *et al*. 2008, 168, fig. 1.

While elites and non-elites likely had similar life expectancies in classical antiquity, it is possible that there was an age differential in the onset of menstruation. A stable diet and absence of hard labor may have led to slightly earlier maturation among daughters of the elites in relation to their poorer, less well nourished counterparts. By no means do I suggest this possibility to provide an explanation for the low marriage age among elite girls, but rather to point out how access to resources may have affected the overall contours of a Roman girl's transition to sexual maturity.

[117] Euling *et al*. 2008; Buttke, Sircar, and Martin 2012.

Soranus notes that early childbearing can be harmful to a young girl and her offspring, as her body is not mature enough to provide adequate nourishment for the fetus, and danger (κίνδυνος) may arise during birth since the mouth of her womb and the surrounding parts are "still narrow and imperfect."[118] This is an interesting alternative to the model we find in the Hippocratic *Diseases of Young Girls*, which emphasizes how detrimental a young girl's sustained virginity can be to her health. The Hippocratic author recommends that girls be married at the time they begin menstruating to avoid the treatise's eponymous disease, the result of menstrual fluid trapped in the womb. The fluid must be released through intercourse and, best of all, pregnancy. Indeed, pregnancy is touted as the key to health.[119]

Soranus offers a very different perspective on girls' pubescence, at the heart of which is an interesting contradiction: while he calls fourteen the "natural" time to begin having sex after the onset of menstruation, he also cautions against premature childbearing, quite the opposite of the Hippocratic recommendation. Soranus' advice suggests that the "natural" time to commence sexual activity – at menarche – may not actually be *healthy* for a girl; in fact, it may be quite *dangerous*, especially if she should get pregnant. The relationship between the natural and the healthy in Soranus' *Gynecology* will be examined in detail in chapter three, but it is important to note here that his discussion of sex, pregnancy, and their impact on a young girl's health is not as straightforward as it may seem. While Soranus clearly defines what is 'natural' – initiating sexual activity soon after menarche – he also cautions his readers against

[118] Sor., *Gyn*. 1.10.33–34 = Ilb. 1.33.5. Medieval sources report the age of menarche between twelve and fifteen years (Amundsen and Diers 1973).
[119] *Virg*. = Li 8.466–471. See Flemming and Hanson 1998.

always *doing* what is 'natural', though he stops short of any sort of commentary on the social practice of early marriage. He does, however, appear to be gesturing towards the incompatibility of early marriage and female (and fetal) wellbeing.

Outside literary and medical evidence, some funerary epigraphy gives us a glimpse of the reproductive pressures on young girls, coupled with the high toll of infant mortality. Veturia's sarcophagus, discussed above, provides one obvious example. Occasionally we find evidence in the epigraphic record that more explicitly suggests the dangers of early childbearing, offering tantalizing clues about the lives of girls, largely absent from the literary record. One inscription from Latium (first/second century CE) gives us a snapshot of Rhanis Sulpicia, a teenage freedwoman who died in childbirth.[120] We know nothing of her background except that she had been a slave of a man named Trio. But there is no obvious clue as to who commemorated her death.[121] It is also important to observe that the tombstone makes no mention of a husband or marriage.

In elegiac couplets, Rhanis is celebrated as a *delicium*, a "darling" or "pet" (line 2).[122] She had never before experienced childbirth (*partu subiecta nec ante*, line 3) "and was snatched from life, snatched by childbirth" (*et rapta est vitae, rapta puerperio*, line 6) at the age of fifteen, "for she had not yet completed twice eight years" (*namque bis*

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[120] *CIL* XIV, 2737 = *CLE* 1297.

[121] Line 7 of the inscription contains a misspelling, *praentis tumulus*, which has confused scholars since its original publication. The word *praentis* (besides not being a word in Latin) must be corrected to a three syllable word for the hexameter to work. The *CLE* prints *parentis*, the most likely reading, as it only involves flipping two letters. Rhanis may then have been laid to rest in a "parental tomb," perhaps by her own kin? We can only conjecture.

[122] See Laes 2010a for a discussion of the range of meaning attached to '*delicia*-children': he argues "that the term *delicium* is wide-ranging: from pampered pet as an object of lust to a substitute child cherished as if it were a natural son" (269). On Roman slavery and sexual and procreative pressures, see Huemoeller 2016, 67–124 ("Reproductive Labor"), 124–93 ("Concubines, Wives, and Mistresses").

octonos nondum compleverat annos, line 5). Rhanis and her offspring were cremated and buried together (line 8). Depending on how literally one takes the ambiguous phrasing of the inscription, it may suggest that she died during labor, the fetus still inside her body: *… tumulus duo funera corpore in uno… habet* ("the tomb holds two burials in one body," line 7–8). The line plays on the notion that Rhanis' body was singular yet double at her death, just as there is one tomb containing two bodies. It is a rare and oblique commentary on the dynamics of pregnancy and birth – the interplay of singleness and doubleness, of one body yielding another.

Rhanis' tombstone brings us to the broader issue of maternal mortality in the Roman world. Prior to parish records in early modern Europe, we have no empirically sound way to measure maternal mortality. The ancient historian has no choice but to use comparative evidence, which always has pitfalls, but can still give us a general sense of the *kind* of numbers we might expect. Using English parish records (and comparing them with records from France, Switzerland, and Sweden), Schofield has shown that in the late sixteenth century, the maternal mortality ratio was just shy of ten maternal deaths per 1000 live births, and just over ten in the beginning of the seventeenth century. The ratio then jumps to just under sixteen maternal deaths per 1000 births later in the seventeenth century, a spike perhaps due to a general rise in mortality from infectious disease, including tuberculosis, smallpox, and influenza.[123] By 1750, the maternal mortality ratio had fallen to eight per 1000 births, dipping to five or six by the nineteenth century – figure which remained relatively stable until the 1930s. In fact, Loudon points out that maternal mortality rates in Britain remained essentially unchanged from the ascendance

[123] Schofield 1986, 250, 254.

of Queen Victoria until the 1930s.[124] Only in the last eighty or so years have maternal mortality rates dropped significantly in Europe and the United States.

Historically, maternal mortality has been higher in urban environments – as high as twenty-two deaths per 1000 in late seventeenth century London, which is 50% higher than in the rural parishes at the time. While there is certainly not one simple explanation for why this is the case, pregnancy-associated immune deficiency syndrome (PAIDS) may have something to do with it. Infectious disease spreads more quickly in urban environments, and pregnant women can be especially vulnerable because of their suppressed immune response.[125] Essentially, where overall mortality is higher because of infectious disease, maternal mortality will also be higher.

It was in urban environments that puerperal sepsis flourished in the early modern period, especially lying-in hospitals, for which there is no analogous institution in the Roman context. Epidemics of puerperal sepsis are well-documented in Europe and the United States during the eighteenth and nineteenth centuries, contributing to shockingly high maternal mortality rates during acute outbreaks. A woman who gave birth at the Boston Lying-In Hospital in 1883, during an outbreak of the infection, for instance, had a 75% chance of contracting the disease and a one in five chance of dying from it. The disease was spread by practitioners who did not wash their hands after vaginal exams and/or autopsies.[126] The common stereotype of birth as highly dangerous before the twentieth century may well be attributable to the memory of these outbreaks.

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[124] Loudon 2000, 241. For a general survey of maternal mortality (1800–1950), see Loudon 1992, especially pp. 43–148 on causes of maternal mortality.
[125] Schofield 1986, 254.
[126] Cassidy 2006, 56. Until the 1940s, when antibiotics became widely available, the illness was responsible for around 40% of maternal fatalities in hospitals (ibid., 61).

Along with the urban/rural divide and diverse disease ecologies, the type of medical intervention women receive during birth also affects maternal mortality. While the analogy should not be pushed too far (because of differences in medical technology, industrialization, and urbanization), nineteenth century rates of maternal mortality in the UK from the 1830s to 1930s were noticeably higher among elites than non-elites (unlike infant mortality), a differential attributed to medical interventions, such as the widespread use of forceps and chloroform. These interventions were undertaken by male physicians, who more frequently attended the births of upper class women, as opposed to the non-interventionist home births overseen by midwives that predominated among working class populations and those living in rural areas.[127] The vast majority of women who gave birth throughout the Greco-Roman world, of course, did *not* experience medical intervention from a physicians and likely gave birth in female spaces among other women, but it is worth emphasizing that particular types of unnecessary medical intervention, most likely in more urbanized environments, can take a toll.

To get a sense of maternal mortality in rural environments, we might compare the English parish data to the diaries of Martha Ballard, the subject of Laurel Thatcher Ulrich's classic *A Midwife's Tale*, a midwife in a rural community in Maine in the late eighteenth century. She kept meticulous records of her activities over the course of her career (1785–1812), performing an average of thirty-three births per year. Her ratio of maternal deaths to births is five per 1000 births, which is on the low end of our British parish data.[128] Her ratio is comparable to what is found in other records from the period

[127] Loudon 2000, 242–44.
[128] Ulrich 1990, 171, Table IV.

and was probably unexceptional for relatively stable, rural communities.[129] To put this in perspective, maternal mortality among Ballard's patients was *lower* than the infant mortality rate in the United States in 2016. (That year, the ratio of infant deaths to live births was 5.8 to 1000.)[130] High levels of maternal mortality in urban centers throughout early modern Europe and America, therefore, should not deceive us into believing that childbirth was killing women by scores in the Roman empire, as some might imagine.[131]

It is hard to envisage a scenario in which historians will ever have detailed, definitive, empirical evidence for maternal mortality rates in the Roman world. For the sake of providing a general range, however, the aforementioned data suggest that on the low end we might see a maternal mortality rate of around 0.5%, or about five maternal deaths per 1000 live births, and on the high end about 2%, twenty per 1000. In urban environments, such as the city of Rome, the rates may well have been in the higher range, perhaps exceeding 2% during particularly acute outbreaks of infectious disease. It is important to remember that the vast number of births took place in rural communities, however, where outcomes seem to have been better overall.

The maternal mortality rate also fluctuated seasonally, both because of overall seasonal mortality patterns and as a result of the seasonal birthing cycle.[132] In Rome, mortality hit its high in the summer months, beginning in July, peaking in September, and then tapering off. In southern Italy, the mortality peak was slightly later, August to

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[129] Ibid., 170ff.
[130] "The CIA World Factbook: Infant Mortality Rate, 2016," https://www.cia.gov/library/publications/the-world-factbook/rankorder/2091rank.html.
[131] Cf. Schofield 1986, 232.
[132] On seasonal mortality and birthing, respectively, see Shaw 1996; 2001.

October, and in northern Italy, October to December.[133] In Rome, births peaked in December and January, and for communities outside Rome, February and March.[134] This pattern of seasonal birthing would likewise suggest a seasonal pattern for neonatal deaths. All this is to say that the year was punctuated by peaks and troughs in fertility and mortality, forming part of the rhythm of gain and loss in the life cycle of a household.

In a discussion of age-specific maternal mortality in pre-industrial England, Schofield argues that its toll would have been most visible among women twenty-five to thirty-four, the period of highest fertility.[135] Based on his calculations, there would have been nearly three maternal deaths for every 1000 women in that age bracket; across the whole group of women of reproductive age (fifteen to forty-nine), 1.3 per 1000. In a hypothetical village of 1000 inhabitants, then, 250 of whom were women of reproductive age, one villager would have died in childbirth about every three years.[136] This may not seem like much, but we must think about how deeply the death of a woman in childbirth affected her family. Such a death might alter how her female kin and friends think about birth – how frightening they consider it to be. The death of a woman in childbirth can shake a family and a community to its core, as we observe in Cicero's grief-riven response to his daughter Tullia's death soon after she gave birth to a son.[137]

While such episodes might heighten anxiety about birth within a family and community, we must imagine a world in which this plausible range of maternal morality rates (c. 0.5%–2%) was imbedded in an overall high mortality regime. Loudon has

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[133] Shaw 1996.
[134] Ibid.; Shaw 2001 (see especially figs. 6–7, pp. 107–8).
[135] Schofield 1986, 258. He bases this on marital fertility rates, and uses the population breakdown of the British 1851 census.
[136] Ibid., 258–59.
[137] See, e.g., *Att*. 12.14.3, 12.23, 12.28, *Fam*. 4.6.1–3.

emphasized that in the case of pre-industrial England, "*the risk of dying in childbirth was perceived within the context of total mortality*."[138] In the age group most likely to give birth (ages 25–34), maternal mortality on average accounted for one out of every five deaths.[139] In 1890, throughout England and Wales, death in childbirth accounted for 8.8% of *all deaths* for women ages fifteen to forty-four, while deaths from tuberculosis accounted for nearly 32%.[140] In essence, there were many other reasons for early death that women could have feared *more* than difficult birth.

From a bare demographic perspective, Loudon is certainly correct, but his argument seems to me to under-emphasize the unique dynamics of childbirth and its risks, which is precisely what this dissertation seeks to understand. In the Roman context, I wonder if we might be better served by thinking about the risk of death in childbirth as perceived *in addition* to "the context of total mortality." Death in childbirth has its own particular associations that distinguish it from death by disease and make it the focus of so much anxiety and anticipation cross-culturally: birth carries the prospect of new life, of health and increase. It is the only process occurring within a healthy human body – and only in female bodies – that can cause death. In this sense, the creation of new life is intimately tied to the risk of loss. For most women in the empire, bearing legitimate children was also their *telos*, an idea which was reinforced in countless ways, from imperial iconography to marriage contracts. Ultimately, then, I see Loudon's intervention as salutary yet somewhat misleading, insofar as childbearing, cross-culturally, cross-temporally, is a fundamental aspect of women's lives quite apart from disease. Particular

[138] Loudon 1992, 162 (his italics).
[139] Schofield 1986, 258, table 9.7; cf. Loudon 1992, 162.
[140] Loudon 1992, 162–63.

diseases come and go, or are subject to more or less concern in a given time or context, but childbirth is always a presence and always carries risks.

Conclusion: Reflecting on Birth Risk, Daily Life, and Demography

People most definitely did not think in terms of maternal mortality rates in pre-industrial England, nor did they in the Roman empire. Statistics can help us understand the set of dynamics that shaped population structure and, to a certain extent, the frequency with which people experienced particular life events. Schofield and Loudon have given us a much better sense of how often individuals might have encountered a death in childbirth – that it was by no means a quotidian event. Infant morality was clearly much more common, an occurrence that individuals must have encountered numerous times over the life course. But the frequency of infant death should not lead us to believe that babies were not valued and mourned – the death of an infant could still be deeply troubling, as attested in both literary and epigraphic sources. Indeed, while infants are underrepresented in the epigraphic record, they are by no means absent.[141]

No matter the angle we take – whether micro, macro, cultural-historical, or demographic – human generation was entangled with an almost endless set of factors, from the social to the environmental. There is a very long list of reasons for neonatal and infant mortality, and practices ranging from cord-cutting to breast-feeding could have a profound effect on an infant's chances at life in the Roman world. So could disease ecologies. Procreative cycles and fluctuations of fortune shaped family life – they dominated the adulthood of the vast majority of women under the empire. What we

[141] Laes 2014; King 2000.

consider to be high levels of mortality and fertility were simply a normal part of life in antiquity. This cycle of birth and death was understood as profoundly human and natural, in all its joy and heartbreak.

The ways people explained, understood, articulated, and tried to protect themselves against loss cut to the very core of Romans' perceptions of their place in the world and their relationship with elements and forces, from their immediate surroundings to the cosmos. Birth risk constituted a powerful threat to the human effort to survive and master the non-human environment. It was a threat to the stability of three nesting and inter-dependent structures: family, community, and empire. Indeed, the risks associated with conception, pregnancy, and birth get to the very heart of the symbiotic but contentious relationship between the non-human environment and the perpetuation of human culture.

Chapter Two

Bodyscapes

Our sources seldom describe birth and its risks in explicit terms, so we must examine the more oblique ways in which these topics are broached. Indeed, when procreation is an object of discussion – in genres ranging from the scientific to the epistolary – its treatment is often laden with analogies, metaphors, and euphemisms. Sometimes, this is for the sake of politesse, but more often, it is a means to elucidate, visualize, and explain physiological processes that take place beyond the reach of human sight. Careful study of procreative metaphors and analogies can help us get at perceptions of birth and its risks, and how those risks were implicated in and understood through broader conceptualizations of chance, luck, and danger. In this latter regard, the deity Fortuna is key. Her identity and iconography reveal how anxieties about the fragility of human generation are implicated in a broader set of anxieties about the stability of communities and the state. Fortuna exemplifies the relationship between risk, gain, and loss, a notion which continued to evolve long after the period under consideration here. We might look, for example, to the powerful medieval imagery of the *rota Fortunae*, evoked so vividly in the poem "O Fortuna" in the *Carmina Burana*.[1]

This chapter focuses primarily on figurative and comparative language and imagery that relate women's bodies to the environment. In particular, it investigates metaphors and analogies that explain or describe aspects of human generation, especially

[1] Its accompanying illustration, which occupies the first page of the *Burana Codex* (Bavarian State Library Clm 4660, f. 1r), is also a testament to the power of this imagery, focusing on the rise and fall of kings, climbing up and ultimately crushed beneath Fortuna's wheel (each stage is explained: *Regnabo, Regno, Regnavi, Sum sine regno*).

childbirth, through the language of 'landscape' and 'waterscape' – that is, portraying functions of the female body through images drawn from the vegetal and aquatic spheres. These two categories allows us to pursue an environmental history of the body. The aim is to understand how perceptions of external risks affected – and to a certain extent, reflected – views of female anatomy, physiology, generation, gestation, and birth.[2]

In a range of genres, Greek and Roman authors portray human procreation as governed by forces that reflect and embodied the order of the non-human environment. At the same time, procreation was a – if not *the* – key tactic for perpetuating stability and social continuity, a notion that emerges throughout Roman history, from Catonian to Augustan pro-natalism.[3] Harnessing, understanding, and encouraging family fertility was a means to participate in the mastery of a natural order while also reflecting that order. For these reasons, fertility and procreation played a central role in Roman imperial ideology, bolstering efforts to influence and regulate the Mediterranean world and the diverse peoples living in it. The metaphorical and analogical figurations examined in this chapter ultimately tie the domestic into the political.

The analysis presented here is indebted to the understanding of metaphor developed in the last several decades by cognitive linguists, in particular the approach pioneered by Lakoff and Johnson and developed by researchers such as Kövecses. As I discussed in the introduction, these theorists argue that "Our ordinary conceptual system,

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[2] An expanded version of this study will address this connection with the arrow going in the other direction: namely, how human bodies affected understandings of the environment (for example, how views of the female body or female sexuality influenced farming practices – or descriptions thereof – in agricultural and botanical texts, such as Columella's *De Re Rustica*). This is a topic broached in the chapter (especially the discussion of Artemidorus' *Oneirocritica* below), but a full explanation must wait.

[3] The ideological importance of family fertility in the Roman world emerges in numerous studies, e.g., Hug 2014; Severy 2003; Treggiari 1991; Dixon 1988.

in terms of which we both think and act, is fundamentally metaphorical in nature."[4] Metaphor shapes human embodied experience, and the "'embodiment' of meaning is perhaps the central idea of the cognitive linguistic view of metaphor and, indeed, of the cognitive linguistic view of meaning."[5]

The basic idea that our conceptual systems operate through metaphor is valuable to the historian who wishes to gain a deeper understanding of anxieties about a process that is often treated euphemistically or in contexts where we must read between the lines. Shaw's work on reaping has shown how an historian might do this kind of history. He is concerned with "how a strongly recurrent human action in common labour… produces categories and extensions of thinking" that we can study through close attention to the uses of metaphor; the present study adopts this approach to address labor in a rather different sense.[6] Paying close attention to analogy serves a similar, related purpose. Because analogies are usually more explicit in their relational framework, they highlight different aspects of likeness and help draw out systematic parallelisms.

Key generative processes and related female anatomical structures exist beyond the reach of human sight, and thus, to a great extent, remained mysterious in the period under investigation – as in many others eras, prior and subsequent. But they were not

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[4] Lakoff and Johnson 1980, 3. As discussed in the introduction (pp. 23–24), I refer to the now classic Lakoff and Johnson 1980 and the subsequent development of their ideas in Kövecses 2002; 2005.

[5] Kövecses 2002, 18. He notes that the human body is, itself, an "ideal source domain" for metaphor.

[6] Shaw 2013, 225–26. He goes on to caution, "Our problem is that there is, as yet, no systematic cataloguing of dominant metaphors in the patterns of thinking in the Latin-speaking societies of the western Roman empire. Even disregarding this huge deficit, big problems remain within the ancient field of the metaphor. The mapping of reaping onto death is everywhere manifest, but this hardly begins to encompass the extensions and entailments of the idea that enabled other important work to be done with it" (226).

entirely shrouded in mystery for Greeks and Romans – rather, their nature and structure were constantly up for debate. By the dawn of the Roman imperial period, the Hellenistic anatomist Herophilus had long ago dissected human bodies and wrote about their internal anatomy – including the anatomy of the female reproductive system.[7] He observed the fallopian tubes and female 'testicles' (what we would call ovaries), but mistakenly concluded that the former terminated in the bladder. Significantly, he found that the human uterus is anchored in place with ligaments, casting some doubt among learned physicians on the concept of the 'wandering womb', the notion that the uterus was able to move around the female body, pressing on other organs, and causing health problems (a pivotal notion in Hippocratic gynecology). Yet the idea of the 'wandering womb' remained entrenched in many cultures throughout the Mediterranean long after the fall of the Roman empire. To a great extent, the concept's cultural importance overshadowed the anatomical knowledge that could cast doubt on its existence.

Not long after Herophilus, however, anatomists reverted to dissecting animals, a practice that continued both to illuminate and complicate physicians' understanding of human generation and anatomy. Galen later corrected some of Herophilus' errors, yet even for this most distinguished theorist and anatomist, many questions and matters of confusion remained regarding female anatomy, especially the anatomy of the uterus.[8] Because so much knowledge of human anatomy depended on animal dissection, a great deal of imagining and metaphorical/analogical thinking went into visualizing the interior of women's bodies and the processes of conception, gestation, and birth.

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[7] See von Staden 1989 on Herophilus; on Greco-Roman knowledge of female reproductive anatomy in the *longue durée*, see Dean-Jones 1994b. More generally, on classical Greek medicine, see Dean-Jones 1994a; Flemming 2000 on the Roman world.
[8] The topic of dissection is vital to the argument I make in chapter three.

In what follows, I first provide an overview of the cultural and political context for the chapter. The period of Roman history examined here is necessarily bounded, focusing on the first one hundred and fifty years or so of the Roman imperial era, with particular (but by no means exclusive) attention to Augustan Rome. Marriage and fertility were central preoccupations in Augustan policy and propaganda, which makes the early empire an excellent place to begin. Amidst heightened attention to fertility, Romans drew on a wide variety of images, objects, and practices to understand and work to control childbearing in all its aspects.

Against this background, I offer two studies (sections I and II) of metaphors and analogies through which Romans understood and imagined the dynamics of procreative risk within and around the female body. Together, these two studies emphasize what I call the fluid economy of generation, gestation, and birth, a topic to which I return at length in chapter four. Section I ("Landscapes") centers on images associated with vegetal growth and nourishment, while section II ("Waterscapes") treats maritime activity and marine life. These two categories constitute 'conceptual metaphors', to borrow a term from cognitive linguistics: respectively, *the female body is a landscape*, and *the female body is a waterscape*.[9] These conceptual metaphors, never articulated as such, are expressed through 'metaphorical linguistic expressions' which take many forms and develop in countless directions.[10] In the case of landscape, the conceptual metaphor is often expressed through analogy (particularly in medical contexts), drawing explicit attention to certain relational aspects and similarities. For waterscapes, metaphors

[9] In technical terminology, landscape and waterscape are 'source domains' and the female generative body is the 'target domain' in the conceptual metaphors.
[10] For a clear, basic articulation of the distinction between conceptual metaphors and metaphorical linguistic expressions, see Kövecses 2002, 4–10.

predominate, but analogy is likewise vital. My aim is to show how these metaphors and analogies figured in a system of ideas that both explained the generative process and its risks, and offered strategies to diminish those risks.

The chapter concludes with a discussion of the goddess Fortuna (section III), whose identity was linked to – and embodied – the categories examined in sections I and II. Fortuna, who was pictured with a cornucopia and a rudder in imperial iconography (especially coinage) from an early date, personified power over the land and sea (*terra marique*), prosperity, and fertility. Yet she could also embody their potential subversion. Fortuna was a kingmaker, a goddess who guaranteed the success of the Roman imperial project through her continued favor, but she might also signal the very impermanence of this success and the possibility of loss. In this sense, she could represent *risk*.

The metaphors and analogies examined in sections I and II were vital to conceptualizations of generation and therapeutics, but they were by no means the *only* types employed to understand (aspects of) these processes.[11] They are, rather, two primary categories of figurative thought that clearly compare the human body with the non-human environment, as well as the human effort to control that environment. Vegetal growth was materially, metaphorically, and analogically associated with human attempts to exploit the earth's fertility for survival and gain. Waterscape metaphors register the sea's close connection with danger and the pursuit of enrichment. Tides were linked to

[11] In the Hippocratic corpus, for example, a somewhat different range of metaphors is examined in Hanson 1995; Hong 2012. These include conception as cheese-making, gestation as baking, and birth as war. While these metaphors are important and revealing in the Hippocratic context, the present study specifically focuses on the relationship between the human body and the non-human environment, rather than analogies with particular human activities, as in the culinary and martial examples.

concepts of time, while sea creatures were linked to the body's interiority.[12] Across discourses, images such as these were mapped *into* the female body, influencing practices associated with the pursuit of fertility and health.[13] Histories of pregnancy and birth reveal how resources in the environment were harnessed to promote fertility, and how the configuration of body and environment was shaped by and figured in imperial ideology.

Birth, Risk, and Imperial Ideology

In his epic poem *The Civil War*, the poet Lucan offers a highly stylized account of the struggle between Caesar and Pompey that had marked the violent collapse of the Roman Republic a century earlier. At the beginning of the poem, Caesar famously crosses the Rubicon in 49 BCE, initiating civil war. As Caesar's army approaches Rome, Lucan describes terrible portents, which are signs of the violence and upheaval to come: comets fly across the sky, the moon disappears, the sea churns up blood, animals start talking like people, and, Lucan adds, "women gave birth to creatures monstrous in the size and number of their limbs, and mothers were appalled by the infants they bore" (1.561–3).[14]

Lucan was drawing on a trope with deep roots in Greco-Roman culture: when something is rotten in the polity, the gods register their displeasure through disturbing

[12] On the relationship to tides, time, and generation, see chapter five.
[13] Metaphorists usually employ the phrase 'map *onto*' to describe the process whereby a target domain enters into a relationship with a source domain. Here, I want to indicate that landscape and waterscape were mapped *into* the body, insofar as they constituted important ways to imagine, describe, and characterize women's bodily *interiority*. In short, an exterior environment was mapped *into* the body.
[14] Plutarch, too, reports that Caesar had a dream that he had sex with his mother the night before the fateful crossing (*Caes*. 732.6: ἐδόκει γὰρ αὐτὸς τῇ ἑαυτοῦ μητρὶ μίγνυσθαι τὴν ἄρρητον μῖξιν).

signs. Among these signs, in Lucan's account and in others, we find portents (*prodigia*) related to birth. *Prodigia* are reported in Tacitus' *Annals* after the murder of Agrippina on the orders of her son Nero. These are capped by her famous plea to the assassins to strike her womb: "*ventrem feri*," she cries out. Other portents include a woman who was said to have given birth to a snake (*anguem enixa mulier*), and another was struck and killed by lightening while having sex with her husband (*alia in concubitu mariti fulmine exanimata*).[15] The chaos of Nero's reign affected the efforts of the polity to reproduce itself. There is a close relationship between bad politics, bad rulers, and bad births.[16]

There is also a positive corollary to these connections: when all is well in the state, under a *good* emperor, women are fertile. Or to put it another way, women's fertility was seen as a *sign* that the state was in order. This notion was clearly articulated in imperial iconography, and the connection between fertility and the state, between the polity and women's bodies, gained new significance under the new imperial order, most obviously exemplified by Augustus' marriage legislation first introduced in 18–17 BCE. While drawing heavily and deliberately on republican precedents, Augustus integrated pronatalism into his agenda by creating a new legal infrastructure to encourage marriage among elites.

Marriage and childbearing were prioritized in state policy and propaganda in new ways under Augustus. The Augustan package of legislation included the *lex Iulia de maritandis ordinibus* ("Julian law on marriage in the orders") and the *lex Iulia de*

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[15] Tac. *Ann*. 14.8 (Agrippina's death), 14.12 (*prodigia*). The assassination/matricide episode is discussed further in chapter five.

[16] This is a version of the much older trope we find in Greek literature about the relationship between fertility and the *polis*, especially in Hesiod; see Slatkin 2004. Also see Cole 2004, 154: "The signs of a successful city are … successful agriculture, successful animal husbandry, and successful childbirth."

adulteriis coercendis ("Julian law on suppressing adultery"), with subsequent revisions in the *lex Papia Poppaea* (9 CE). Among their many components, these marriage laws penalized citizens who did not marry and have children, rewarded families in which wives had three or more children (four for freedwomen), and punished adulterers.[17] Together, these laws gave the state unprecedented access to people's sexual lives. And while it is probably unwise to say that this legislation raised birth rates, we can be quite certain that Augustan policies had lasting cultural effects on the valorization of family fertility, what Romans called *fecunditas*. Augustus was participating in the systematic establishment of a state-sponsored "*fecunditas* project."[18] The laws should thus be seen as more a means to instill and project ideals about family life, than as a description of what was actually happening in Roman households.

The juristic comment on the *lex Julia et lex Papia* spanned centuries and grew to be extremely complex. At a basic level, the legislation instituted penalties for intermarriage among the orders (as its original title suggests), penalized the childless and those who refused to (re)marry, and rewarded the prolific. Specifically, it prohibited intermarriage among senators and children of ex-slaves, actors, and actor's children.[19] Certain rewards were also granted to freedpersons should they produce at least two children.[20] The law conferred political advantages on men in fertile marriages by dropping the minimum age necessary to stand for office by one year per child; it also

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[17] There is debate about whether these children were living or ever-born, discussed by Parkin 1992, 116ff. For an overview of the various components of the laws, see the detailed evidence laid out in Treggiari 1991, 60–80.
[18] Hug 2014.
[19] Severy 2003, 52; Treggiari 1991, 61ff. The class aspect of the law is the focus of Culham 1997.
[20] Severy 2003, 52, *Dig*. 38.1.37 pr.

rewarded the consul with more children by granting him seniority over his colleague regardless of their ages.[21] Both men and women were penalized for remaining unmarried, especially if they were already childless, with restrictions on their ability to make a will and receive legacies.[22]

At the heart of the law, the penalties and rewards were political and economic in nature, especially in relation to testamentary agency, thereby underscoring the legislation's intended audience: members of the *propertied elite*. There was perhaps some hope that lower orders would follow the example.[23] The so-called *ius trium liberorum* ("right of three children") was awarded to a woman with three or more legitimate children (four for a freedwoman), which exempted her from *tutela* (a form of guardianship) and lifted the restrictions of the *lex Voconia*, limiting women's ability to inherit. The honor also had benefits for men, who gained priority in their ascent of the *cursus honorum* should their wives reach the three-child goal.[24] These advantages, however, might also be acquired through exemptions, conferred by the emperor, as in the case of the younger Pliny. Still, the ideological ferment surrounding childrearing as an act of patriotism probably made elites – and especially elite women – more anxious about family fertility, as the *lex Julia de adulteriis coercendis* made people more anxious about (perceived) sexual purity. By rewarding and punishing women in these ways, the laws

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[21] Ibid., Gell., *NA* 2.15.
[22] Dixon 1988, 85.
[23] Cf. Plin., *Pan*. 26.5 (discussed below).
[24] Dixon 1988, 85, 89. On the release from *tutela*, see Gai., *Inst*. 1.194, Cass. Dio 56.10.2. Dixon also observes that the restrictions surrounding the *ius* for freedwomen (they needed to have four children after manumission to achieve the honor) were so constraining that few would have been able to avail themselves of its advantages.

"legally and ideologically recognized women as patriots and protectors of Rome," with motherhood now understood as a "public role."[25]

The reach of the laws, pertaining to marriage and childbearing, stretched well beyond the city of Rome. Their legacy is discernable in municipal legislation, for example, the *lex Malacitana*, *Irnitana*, and *Salpensana* from Spain, which all seem to be based on a single, late first-century *lex Flavia municipalis*.[26] A section from the *lex Malacitana* (col. 1, ch. 56), which can help reconstruct lost parts of the *lex Irnitana* and *Salpensana*, explains the political privileges awarded to men in accordance with marital and procreative status, an aspect of the law based on the *lex Julia de maritandis ordinibus*.[27] Here, the law explains how men standing for municipal office benefit from having families in the event of a tie between two candidates:

> *…Qua{m} in curia totidem suffragia duo pluresve habuerint, maritum quive maritorum numero erit caelibi liberos non habenti, qui maritorum numero non erit; habentem liberos non habenti; plures liberos habentem pau[c]iores habenti praeferto prioremque <re>nuntiato ita, ut bini liberi post nomen inpositum aut singuli puberes amissi v[i]rive potentes amissae pro singulis sospitibus numerentur.*
>
> In any *curia* in which two or more have the same number of votes, he is to place ahead and announce before the others a man who is married or who counts as married, over a man who is not married, without children, who does not count as married; a man who has children over a man who does not; a man who has more children over a man who has fewer, provided that two children lost after the giving of the name or one male child over puberty lost or one female child over puberty lost are to count as one surviving child.[28]

[25] Severy 2003, 53.
[26] Galsterer 1988.
[27] González and Crawford 1986, 210.
[28] Adapted from González and Crawford, trans., 1986.

In certain circumstances, the political rewards for men with many children would logically suggest pressure on their wives to bear children.[29] These provisions are also characterized by a stark quantification of the value of a child's life – an aspect already suggested by the *ius trium liberorum*, but more bluntly and explicitly expressed in the municipal law. A child lost before the naming day, the *dies lustricus* (eight days after birth for girls and nine for boys), does not appear to count in any way by this standard. A child lost between the naming day and puberty only counts for half a pubescent child.[30] While one can only make inferences based on this kind of evidence, it is hard to imagine the laws *not* impacting the procreative experience of many women, particularly those in the upper social echelons.[31] A woman might go through the discomforts of pregnancy and the pain of birth only to lose a newborn, with laws like this offering little or no recognition of that experience. To put this into perspective: a law such as the *lex Malacitana* could effectively marginalize at least half a woman's births, if roughly half died before age five, meaning half her children did not live to puberty.[32] From another perspective, under hypothetical conditions of a stable population ($e_0 = 25$), women who lived to forty-five would have to give birth four to six times simply to achieve replacement, meaning one surviving male and female child per couple.[33]

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[29] Also consider Augustus' speech encouraging men to become fathers in Cass. Dio 56.1–10.

[30] The *dies lustricus* is discussed in detail in chapter five.

[31] There is little doubt that the laws "had considerable impact on the marital experience" of elites (at the very least), which makes it hard to imagine that the procreative experience was not impacted as well. Treggiari 1991, 60.

[32] As I explained in chapter one, this number may be too high, but it is not implausible.

[33] Hin 2013, 172–73; also see the discussion of fertility in chapter one. See n. 17 above on the *ius trium liberorum* and the issue of whether the children had to be alive or ever-born. The evidence is truly unclear, but the latter case seems more plausible.

In a revealing passage, Gellius explains that in ancient times (*antiquitus aetati*), seniority was the most important claim to social and civic authority, a tradition borrowed from the Spartans. Later, however, it became clear to Romans that "offspring were necessary for the state (*suboles civitati necessaria*) and there was an opportunity to increase people's progeny with rewards and inducements (*praemiis atque invitamentis usus fuit*)."[34] After that, deference was given to men with wives and children, a priority enshrined in the seventh chapter of the Julian law (referring to the *lex Julia de maritandis ordinibus*).[35] Gellius naturalizes this aspect of the Julian laws as part of empire-formation, closely tying the latter to Augustus' landmark legislation. His description of this radical break in custom – that progeny was only recognized as *civitati necessaria* in the early empire – papers over a much more complicated story. Gellius, ultimately, seems to be pointing to a transformation in the conceptualization of matrimony and childbearing as intertwined features of Roman imperial ideology.

Although the Augustan marriage laws were largely aimed at elites, over time the behavior of an emperor was also linked to broader attitudes about what we would call family planning. The younger Pliny makes this clear in the *Panegyricus*, written for the emperor Trajan in 100 CE. Alluding to the provision of the marriage laws, he explains, "huge rewards – and equally huge punishments – compel the wealthy to raise children; for the poor, there is only one reason: a good *princeps*. Unless he favors, supports, and embraces with generous hand the children born through trust in him, he hastens the death of *imperium*, the death of the *res publica*."[36] Here, a good ruler is linked with fertility, as

[34] Gell., *NA* 2.15.2.
[35] Gell., *NA* 2.15.4.
[36] Plin., *Pan*. 26.5–6.

well as the overall health of the Roman imperial enterprise. Fertility is a sign of stability, and stability is supported by fertility in a positive feedback loop. Instantiations of these ideas are to be found in the paternalistic iconography of the arch of Beneventum and, relatedly, in policies such as the *alimenta* schemes, so popular in the high empire.[37]

With a single imperial family now at the center of Roman empire, anxiety about fertility also made a new kind of sense. Along with a loyal ruling elite to shore up its power, the imperial family needed to ensure stable succession. This proved enormously difficult for generations of rulers, many of whom resorted to adoption, a more reliable strategy for ensuring stability (though not without its own risks). The emperor Marcus Aurelius famously reflected on the fragility of early childhood in the *Meditations*:

> "Καταφιλοῦντα τὸ παιδίον δεῖν," ἔλεγεν ὁ Ἐπίκτητος, "ἔνδον ἐπιφθέγγεσθαι· Αὔριον ἴσως ἀποθανῇ." δύσφημα ταῦτα· "Οὐδὲν δύσφημον," ἔφη, "ἀλλὰ φυσικοῦ τινος ἔργου σημαντικόν. ἢ καὶ τὸ τοὺς στάχυας θερισθῆναι δύσφημον." (*Med*. 11.34)
>
> 'While kissing a child', Epictetus said, 'one should utter deep within, "perhaps tomorrow you will die."' What inauspicious words! 'Nothing is inauspicious', he said, 'that illustrates a natural process. Or it is also inauspicious to speak of crops being reaped.'

The passage draws on the powerful metaphor of reaping as death (and its corollary, sowing as birth), a conceptual pairing of vital importance in Greco-Roman antiquity, deeply entangled with the set of ideas examined in section I.[38] Here, reaping is as 'natural' a part of life as the death of a child.

The imperial family itself was subject to the same harsh demographic realities as other elites and the population as a whole. Marcus Aurelius and his wife Faustina had

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[37] Cf. Woolf 1990; Rawson 2001.
[38] This is an articulation of the conceptual metaphor, reaping = death, at the center of Shaw 2013 (articulated in the plainest terms at ibid., 165).

thirteen children, and at least four died before reaching age one, and two more died before turning five – an example reinforcing the difficulties I outlined above.[39] These numbers should be no surprise after the discussion of infant mortality in the first chapter. In fact, the fate of these children provides a close fit for the patterns discussed there, with nearly half perishing by age five. This problem could – and was often – mitigated by adoption.[40] Indeed, the very frequency of adoption in imperial families highlights just how important hereditary ties ('biological' or not) were for legitimate succession. With a single family at the center of the empire, birth – and birth-right – gained new political importance – and the risks of birth became a very public concern.[41]

Early in the imperial period, we can discern the ruling family's efforts to establish a compelling iconographic vocabulary to project the power of their *domus* and prosperity of the empire through a visual discourse of fertility. It was a discourse that emphasized a triumph over forces that threaten fecundity and abundance, and the Ara Pacis Augustae (figs. 2.1a–b) is a case in point. The altar, commissioned by the Senate in 13 BCE to celebrate Augustus' return form Spain and Gaul, and dedicated in 9 BCE, offers a valuable visual guide to the relationship between human generation and the environment.

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[39] There is some controversy about the precise number of children they had and the birthdates of several. See Birley 2012, 28–52, 232–48.

[40] See Hekster 2015 on imperial succession, and Scheidel 1999, focusing on mean life expectancy and marital fertility of emperors (Augustus to Heraclius), compared with other groups of Roman elites (senators, city council members). Scheidel concludes, "Life expectancy at birth among the elite was of the order of twenty to thirty years; on average, the attested marital fertility of Roman emperors is consistent with the predictions of simulations derived from model life tables" (280). These issues are discussed in chapter one.

[41] Living imperial women, furthermore, were frequently celebrated for their fertility (or as symbols of fertility), and among the Antonines and Severans, portrayed as bearers of *prospective* lineage, particularly in provincial contexts. See Hekster 2015, 158ff., who traces the shift from the Julio-Claudians (more focus on *retrospective* lineage) to later dynasties in central and provincial media, especially coins.



Figure 2.1a: "Tellus" Panel, East Wall of Ara Pacis Augustae.



Figure 2.1b: Detail of Vegetal Motif, Ara Pacis Augustae.

The *Res Gestae* links the establishment of the Ara Pacis Augustae to closing the gates of Janus, which, the text reports, occurred three times during Augustus' rule, but only two other times in Roman history "before I [Augustus] was born" (*pr[iusquam]*

nascerer).[42] This action, of course, was the ultimate expression of peace, *pax*. Epochal demarcation hinges, significantly, on Augustus' date of *birth*. The very concept of *pax*, in fact, was linked in interesting ways to Augustus' birth(day). In an influential study, Buchner argued that the horologium Augusti, nearby the Ara Pacis in the Campus Martius, was a giant sundial, designed so that the gnomon (obelisk) pointed directly into the Ara Pacis as the sun set on the fall equinox, Augustus' birthday. This is an attractive idea, supporting the notion that Augustus' birth inaugurated a new age of peace. Without going into detail, Buchner's idea has met serious challenge (for starters, the horologium is likely a solar meridian, not a sundial).[43] The connection between *pax* and Augustus' birth(day), however, evoked by the phrase *priusquam nascerer* in the *Res Gestae*, can be found in a range of other sources. The notion is articulated in plain language, for example, in an edict published in 9 BCE (the same year as the altar's dedication) by the governor of Asia, Paulus Fabius Maximus.[44] The edict instituted a new calendar in Asia honoring Augustus, in which his birthday (September 23) was to be the beginning of the new year, "which we might rightly consider to be the beginning of all things (τηι τών πάντων ἀρχῆι ἴσην), if not exactly by nature (τῆι φύσει), but by what is useful (τῶι γε

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[42] *RGDA* 13: *…cum, pr[iusquam] nascerer, [a condita] u[rb]e bis omnino clausum [f]uisse prodatur m[emori]ae, ter me princi[pe senat]us claudendum esse censui[t]*. See the commentary of Cooley 2009, 158–59, on Augustus' birth(date) and the new age.
[43] The horologium/birthday idea originated in Buchner 1976, whose argument was effectively undermined first by Schütz 1990. Barton 1995, 44–47, gives a survey of the controversy, as well as the debates around Augustus' use of the astrological sign of Capricorn. A useful summary of the issues surrounding the horologium Augusti and Ara Pacis Augustae may also be found at http://penelope.uchicago.edu/~grout/encyclopaedia_romana/romanurbs/horologium.html.
[44] *OGIS* 458 = *RDGE* 65, also published in Laffi 1967, whose numbering is reproduced in Sherk 1984, 124–27, no. 101. I too use Laffi's numbering and text. The fragments of this edict are assembled from Priene, Apamea Kibotos, Dorylaion, Maionia, and Eumeneia, divided by Laffi into numbered sections in Latin (I–II) and Greek (III–VII).

χρησίμωι)."[45] The edict continues, "He has given a different appearance to the whole world, which would have most readily accepted destruction, if Caesar had not been born as the common good fortune of everyone (εἰ μὴ τὸ κοινὸν πάντων εὐτύχημα ἐπεγεννήθη Καῖσαρ)."[46] Augustus created harmony out of chaos, surmounting threats and dangers, initiating a new golden age. This notion was enacted by shifting the year's rebirth, as it were, to the date of Augustus' birth, stated explicitly in the edict itself.

The Ara Pacis Augustae expresses a related vision of peace, in which fertility and procreation play a major role. It is not my intention to weigh in on the myriad debates about the altar's iconography; rather, I want to flag a few important ways it expresses a vision of imperial fertility and stability insofar as they relate to birth. One key aspect is the remarkable, highly geometric vegetal pattern adorning the lower half of the altar (fig. 2.1b).[47] Here, acanthus calyxes grow upward, transforming into all kinds of flora – some based on real plants, some fanciful.[48] Stepping back, however, it becomes clear the flowers, vines, and tendrils are part of a tightly regulated, geometric pattern.[49] The altar's striking combination of plants also suggests the empire's reach and the diversity of life

[45] Laffi VI, 50–54 (Augustus' precise date of birth); IV, 5–6 ("beginning of all things").
[46] Laffi IV 7–9.
[47] Vegetal motifs were very popular in Augustan art, but the Ara Pacis Augustae's particular patterns are unique in certain ways. Koortbojian 1997, reviewing Castriota 1995, points out the difficulties in pinning down the precedents for and influences stemming from the vegetal reliefs of the altar; cf. Zanker 1988, 179–83.
[48] Some botanists and ecologists have become interested in deploying their knowledge to explore the symbolic meaning undergirding depictions of vegetal life on the Ara Pacis Augustae; see, for example Caneva, Savo and Kumbaric 2014.
[49] Castriota 1995 offers a comprehensive treatment of these themes, dealing specifically with the "imagery of abundance" in Roman art and Greek precedents. He argues that the vegetation serves a metonymic function (with reference to particular deities), and the altar, overall, was meant to evoke a new golden age, "ultimately, the themes of Peace and cyclic renewal reflect directly on Augustus and what he had achieved for the Roman people" (169).

within it. The geometric pattern, Zanker observes, projects a sense of "perfect order," and perhaps "reflects on the aesthetic level the almost fanatical preoccupation of the Augustan Age with law and order," obviating the risks of chaos and strife.[50] Whether or not we pursue the point this far, the motif projects an idealized, almost militant order that seems to grow out of an abounding vegetal world.

Family fertility is promoted alongside this striking vegetal pattern in a number of ways. The eastern exterior wall of the monument features the (so-called) 'Tellus' panel (fig. 2.1a), where a female figure holds two chubby infants in her arms. The one on the left reaches towards her breasts while the other grabs fruits in her lap, holding one piece upwards. The twinned infants project both mythical and Julio-Claudian dynastic allusions: they evoke Romulus and Remus (featured on the altar's west wall), as well as the much-celebrated Gaius and Lucius, the sons of Agrippa and Augustus' daughter Julia. These references are also echoed by the two male gods in a small temple on the upper left of the sacrifice scene, paired with the Romulus and Remus relief, on the other side of the west wall.[51] Drawing on classical Greek imagery, the 'Tellus' figure is surrounded by two personified breezes, *aurae*, female figures naked from the waist up with billowing drapery projecting over their heads.[52] On the left, the *aura* of the land rides a goose above a stream thick with reeds, "symbols of life-giving moisture."[53] The *aura* of the sea, to the right of the central female figure, sits on a tame-looking sea monster (though it does have

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[50] Ibid., 180–81.
[51] These parallels are discussed by Flower 2017, 324ff, in relation to the (potential) presence of *lares praestites* on the altar.
[52] Interestingly enough, winds themselves were sometimes viewed as impregnating: Verg., *G*. 3.274–75 (*exceptantque leuis auras, et saepe sine ullis / coniugiis uento grauidae…*), *Geoponica* 9.3.
[53] Zanker 1988, 175.

sharp, menacing teeth) who hovers above rippling waves. Here we find, in a sense, benign imagery of landscape and waterscape, in the midst of a fertility scene.



Figure 2.2a–b: Aureus of Augustus (obverse) with Capricorn (reverse) and cornucopia, globe, and rudder (*RIC* 1.50, no. 127), 18–16 BCE.

The pairing of the *aurae* is reminiscent of the emphasis in the *Res Gestae* on *pax Augusta* "by land and sea," *terra marique*, a phrase with deep roots in Greek political discourse.[54] This same pairing is also evoked on coins, as in fig. 2.2, featuring Augustus' profile on the obverse (fig. 2.2a) and the astrological sign of Capricorn on the reverse (fig. 2.2b), a reference to Augustus' horoscope – and thus his birth(day) – which he vigorously promoted and even published in 11 CE, a symbol of the new golden age.[55] The

[54] The phrase *terra marique* and variants appear in *RGDA* 3, 4, 13, 26. Cooley 2009, 117, observes the connection between the phrase on altar's winds. Momigliano 1942 shows that the phrase κατὰ γῆν καὶ κατὰ θάλασσαν was used in Greek treaties and peace alliances, later adopted as a formula in the Hellenistic world (relating specifically to the sovereign's power), through which it came into the language of Roman treaties and later imperial propaganda (N.B., the closing of the temple of Janus, *terra marique parta (victoriis) pax*). Momigliano concludes, "Rule over Sea had been the condition of Athenian liberty; Ruler over Land and Sea had been the Hellenistic definition of a sovereign; Peace of Land and Sea was now the justification of Roman Rule" (ibid., 64).
[55] Cass. Dio 56.25.5. Capricorn is not obviously Augustus' birth sign, though he seems to have adopted it as such (some argue it was the sign at his conception, others that the moon was in the phase of Capricorn at his birth). Barton 1995 tackles the political/cultural significance and scholarly debates around Augustus' deployment of the

Capricorn appears with a cornucopia and rudder, adopting the symbolic accouterments of Fortuna, discussed below.[56]

The thematic affinity between Horace's *Carmen Saeculare* and the Ara Pacis Augustae has been explored by many and so need not be retraced here. One passage from the hymn, however, is worth quoting in full, which describes the *aurea aetas* marked by an increase in human fertility, while women are protected from the risks of childbirth by a birth goddess, in Greek nomenclature, Ilithyia (Eileithyia), or in Latin, Lucina or Genitalis. This goddess also promotes Augustan moral legislation, discussed above:[57]

> *Rite maturos aperire partus*
> *lenis, Ilithyia, tuere matres,*
> *sive tu Lucina probas vocari*
> *seu Genitalis:*
> *diva, producas subolem patrumque*
> *prosperes decreta super iugandis*
> *feminis prolisque novae feraci*
> *lege marita…* (13–20)
>
> At the proper time, you who open the way for birth
> gently, Ilithyia, protect our mothers,
> or Lucina, if you prefer to be called by that name,
> or Genitalis:
> Goddess, may you produce young and bring success
> to the decrees of the fathers about yoking
> women and to the marriage law
> for abundant new progeny.

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symbol. Cf. Matthews 2011, 185ff., who also connects the sign to *fortuna* and rebirth/renewal. Flower 2017, 336–45, offers a fresh perspective on Augustus' formulation of the "new age"

[56] Barton 1995, 69, points out this pairing and comments on the significance of Capricorn appearing with Fortuna's globe, rudder, and cornucopia, "…reminding us of the role of the Lot of Fortune in the horoscope…. Capricorn itself was a half terrestrial, half marine being, and read with the globe can easily be referred to Augustus' power over land and sea. These coins appeared first in the East, and from 20 B.C. in the West. For Hölscher, the frequent association with the cornucopia and peace makes Capricorn the guarantor of the *aurea aetas*. Abry points out that Capricorn was the house of Saturn in astrological doctrine, and Saturn presided over the Golden Age…."

[57] On (Juno) Lucina, see chapter four. Also see the commentary in Thomas 2011, 66–70.

This passage explicitly links Augustan legislation, fertility, and divine protection from birth risks in the new *saeculum*, in which citizen women are encouraged to marry and procreate under the new laws.[58] If we read this imagery of the Ara Pacis Augustae as evoking a new golden age of marriage and fertility, then we might also detect a vision of an ordered nature where messiness, danger, and harsh forces are subdued and eliminated.

From one angle, then, the orderly vegetal motif, the female figure with two infants, and the *aurae* can be seen to evoke a world where harmony with the non-human environment guarantees fertility without the dangerous forces that can threaten its success. Playful yet profound, the *aurae* suggest a perhaps less stable image, especially the marine *aura* who sits atop the sea monster, submissive yet bearing its sharp teeth in a grin that borders on sinister (fig. 2.1a). Like the images of Fortuna with her cornucopia and rudder examined in section III, the twinned *aurae* of land and sea – and the overall symmetry of the altar's imagery – project a vision of stability that contains within it the hints of its own destabilization.

I. Landscapes

The garden and agricultural field were vital to survival in the Greco-Roman world.[59] They were also powerful metaphors. Gardens, in particular, provided a contained vantage to observe the seasonal cycles of generation, growth, decay, and death, a rhythm that was inseparable from people's understanding of the cyclicity of life, observed and

[58] Cf. Severy 2003, 108; Lamp 2009, 16–17.
[59] A valuable discussion on the 'Mediterranean' garden vis-à-vis subsistence risk is found in Horden and Purcell 2000, 220–24. Treatments of the garden as a conceptual space in elite culture can be found in Pagan 2013; Spencer 2010; Gowers 2000.

experienced on a grand scale through agricultural production. In this regard, "scenes of ploughing and reaping," Shaw explains, commenting on a range of iconography, "were understood to be signs of a larger sequence of birth, growth, and death in the annual agricultural cycle and of the greater zodiacal cycle of the cosmos."[60] In contrast with monoculture, the diversification and fragmentation of the garden was a strategy for (and case study in) risk-avoidance, as some crops flourish, others do not.[61] The garden, where a range of edible plants were cultivated throughout the year, was a site of quotidian generative success and failure.

A garden could be a microcosm for the polity in its orderliness and hierarchy or an embodiment of the diversity and vastness of empire. Self-contained vegetable patches or immense pleasure parks might express a great deal about their owners and their values. For many authors, artists, and thinkers, gardens and vegetal life could also be potent symbols for (re)birth and the human relationship with the non-human environment.[62] In other contexts, sowing, tending, nourishment, and vegetal growth provided analogies for philosophers and medical writers wishing to understand the unseen processes of human generation and gestation. Related metaphorical language is also not hard to find: for instance, the Greek and Latin words for 'garden', κῆπος, *hortus*/*hortulus*, and related terms were sometimes used as euphemisms for female genitalia.[63] Cycles of vegetal growth offer a medium to think through aspects of birth death, fragility, violence, and

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[60] Shaw 2013, 165–66. On the topic of the zodiac, I should note that an expanded version of this project will address approaches to birth risk through astrology.
[61] Horden and Purcell 2000, 221.
[62] Cf. Shaw 2013, 162–65, on the *Tomba della Meititura* in Ostia, featuring the Alcestis myth and scenes of the agricultural process symbolizing the life cycle. Ploughing/seeding symbolize "birth of life" (165).
[63] Adams 1982, 82–85.

empire, as well as to visualize the most mysterious and hidden aspects of generation and *why things can go wrong*. This complex of ideas finds instantiations both in metaphorical language/imagery and analogical reasoning.

Another version of the connection between vegetal and human fecundity appears in art celebrating and reinforcing the success of the *res publica restituta* under Augustus and his successors. As discussed above, this vision involved imposing a utopian order on the non-human environment, captured so effectively in the geometric vegetal motif of the Ara Pacis Augustae. This was a vision under threat from the inherently risky and unpredictable nature of generation and the inexorable, yet unpredictable life cycle.

Underlying the garden's value as a conceptual source is the notion that fertility and biological continuity were cultivated and maintained for political and social stability. Unruliness and unpredictability, however, are inherent to generation and birth (and gardening, for that matter). The vegetal world provided one means of thinking about human fertility and precarity. In essence, the polyvalent associations of the garden and the process of vegetal growth provoke a consideration of the interlocking relationships of generative female bodies, environment, and empire, and a guide for understanding the destabilizing forces that connect them.

Analogizing a woman's body with the earth entails a versatile range of metaphorical relationships – sowing with sexual intercourse, generation, and birth; reaping with death; vegetal seed with human 'seed'; seedlings with fetuses; and water with blood. This last analogy – water to blood – connects vegetal analogies with the conceptual terrain of another set of important, but less stable, metaphors, comparing the female body to a waterscape and fetuses to ships, cargo, or mariners, examined in the

following section. While vegetal metaphors emphasize the slow process of growth and nourishment, book-ended by sowing and harvesting, maritime language, discussed in the next section, points to a rather more swift, acute, and sudden type of risk.

A little-studied treatise in Plutarch's *Moralia*, known as "On Affection for Offspring" provides a valuable starting point.[64] The stated purpose of the work is to argue that it is the *natural state* of humans to have a special love for their offspring (*philostorgia*).[65] In fact, humans, he argues, even exceed other animals in their love for their progeny, because they must make a much longer-term investment in their young, given how slowly we are to mature (*Mor*. 496e). In an extended analogy, Plutarch describes some aspects of the generative process to emphasize how well designed the female body is for the nurturance of new life – how *philostorgia* is implicated in bodily teleology. The passage is introduced with classically teleological language, emphasizing nature's foresight (πρόνοια) and care (ἐπιμέλεια) in such a design.[66] For modesty's sake, however, Plutarch says that he does not want to talk about the procreative process too explicitly, so he instead employs figurative language – the language of irrigation and gardens.

The passage draws abundantly on medical theory in its description of the generative fluid economy, examined further in chapter four. In Plutarch's extended analogy, the female body is like a garden, and Nature (*physis*) is a gardener. In this context, *physis* makes the whole process of fetal growth and nourishment function properly. Plutarch begins by explaining the production of nourishing blood for the fetus:

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[64] Plut., *Mor*. 495d–495f.
[65] This term (and related) appear again in his letter to his wife upon the death of their two year-old daughter (*Consol. ad Uxorem* 609e).
[66] Plut., *Mor*. 495d.

> τοῦ γὰρ αἵματος ὅσον περίττωμα τῆς χρείας ἐν ταῖς γυναιξὶ δι’ἀμβλύτητα καὶ μικρότητα τοῦ πνεύματος ἐπιπολάζον ἐμπλανᾶται καὶ βαρύνει, τὸν μὲν ἄλλον χρόνον εἴθισται καὶ μεμελέτηκεν ἐμμήνοις ἡμερῶν περιόδοις ὀχετοὺς καὶ πόρους αὐτῷ τῆς φύσεως ἀναστομούσης ἀποχεόμενον τὸ μὲν ἄλλο σῶμα κουφίζειν καὶ καθαίρειν, τὴν δ’ ὑστέραν οἷον ἀρότῳ καὶ σπόρῳ γῆν [ἐν φυτοῖς] ὀργῶσαν ἐν καιρῷ παρέχειν. (Plut., *Mor*. 495d–e)
>
> For in a woman, the amount of blood exceeds the use for it because of the sluggishness and paucity of breath (*pneuma*) and, coming to the surface, wanders at large and burdens them; at other times it is Nature’s custom and care to discharge the blood at monthly periods by opening canals (*ochetous*) and channels (*porous*) for it, to lighten and cleanse the rest of the body and in season to render the womb fertile ground for ploughing, as it were, and sowing.[67]

In this passage, Plutarch is using the language of horticultural irrigation to imagine gestational nourishment. An *ochetos* is quite literally a water pipe or irrigation channel and has a long history in medical and scientific discourse. Aristotle uses the term to describe the flow of blood through the umbilicus of certain animals, and Galen uses water analogies to illustrate the flux of blood in bodies, describing veins as *ochetoi*.[68]

To summarize the medical theory behind this description, women were thought to have excess blood in their bodies. This excess blood – and the process of its evacuation – explains why women menstruate: menstruation is the mechanism by which the female body frees itself of this excess. When women become pregnant, this blood is used to feed the fetus, which is why women do not menstruate during pregnancy. After childbirth, the excess blood is sent up to the breasts and concocted into milk, which is why women do not menstruate while breast-feeding (lactational amenorrhea). Blood is *key* to the Greco-

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[67] Adapted from Helmbold, trans., 1939.

[68] Ὀχετός is defined at *Suda* O 1036 with the terms, σωλήν, ἀφωγός, ῥύαξ. Aristotle on the umbilical *ochetos*, see *Gen. An*. 746A16–18, which embeds the term in a longer garden analogy. Cf. Hankinson 1991, 224ff. Galen uses *ochetoi* at e.g., *PHP* VI, 572 = *CMG* 5.4.1.2, 414.29). His more commonly used metaphor is of branches of a tree from the trunk (he is trying to show how important an understanding of the *archē* is).

Roman understanding of generation, female physiology, and sexual difference, just as moisture was understood to be key to vegetal growth.[69]

Plutarch then turns to the process of lactation in a long passage I shall quote in full, as it displays the range of metaphors addressed in this chapter:

> ὅταν δὲ τὴν γονὴν ἀναλάβῃ προσπεσοῦσαν ἡ ὑστέρα καὶ περιστείλῃ ῥιζώσεως γενομένης (‘ὁ γὰρ ὀμφαλὸς πρῶτον ἐν μήτρῃσιν’ ὥς φησι Δημόκριτος ‘ἀγκυρηβόλιον σάλου καὶ πλάνης ἐμφύεται, πεῖσμα καὶ κλῆμα’ τῷ γεννωμένῳ καρπῷ καὶ μέλλοντι), τοὺς μὲν ἐμμήνους καὶ καθαρσίους ἔκλεισεν ὀχετοὺς ἡ φύσις, τοῦ δ’ αἵματος ἀντιλαμβανομένη φερομένου τροφῇ χρῆται καὶ κατάρδει τὸ βρέφος ἤδη συνιστάμενον καὶ διαπλαττόμενον, ἄχρι οὗ τοὺς προσήκοντας ἀριθμοὺς τῇ ἐντὸς αὐξήσει κυηθὲν ἑτέρας ἀνατροφῆς καὶ χώρας δέηται. τότ’ οὖν τὸ αἷμα παντὸς ἐμμελέστερον φυτουργοῦ καὶ ὀχετηγοῦ πρὸς ἑτέραν ἀφ’ἑτέρας ἐκτρέπουσα καὶ μεταλαμβάνουσα χρείαν ἔχει παρεσκευασμένας οἷον † ἐννέας ἤ τινας κρήνας νάματος ἐπιρρέοντος… ἐκροαὶ δὲ τοῦ γάλακτος οὐκ εἰσὶν οὐδὲ κρουνοὶ μεθιέντες ἀθρόως, εἰς δὲ σάρκα πιδακώδη καὶ πόροις ἀτρέμα λεπτοῖς διηθοῦσαν ἀπολήγων εὐμενὲς τῷ τοῦ νηπίου στόματι καὶ προσφιλὲς ψαῦσαι καὶ περιλαβεῖν ἐνδίδωσι ταμεῖον. (Plut., *Mor.* 495e–496a)
>
> But when the womb receives the seed as it encounters it and enfolds it and it has taken root there (“for the umbilical cord grows at first in the womb,” as Democritus says, “as an anchorage against the swell and drift, a cable and vine” for the fruit now conceived that is to be), Nature shuts the monthly canals of purification and, taking the drifting blood, uses it for nourishment and irrigates the embryo, which already is beginning to be formed and shaped, until, having been carried the number of months proper to its growth within the womb, it needs other nourishment and abiding-place. At that time, then, Nature, more carefully than any gardener or irrigator, turns and changes the blood from one use to another and has in readiness subterranean springs, as it were, of a fresh-flowing stream… Yet there are no outflowing streams of milk nor spouts which discharge it all at once, but the breast terminates in flesh that is full of springs and can filter the milk gently through minute passage-ways; and it thus gives a store of food that is comfortable for the infant’s mouth and pleasant for it to touch and to grasp.[70]

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[69] The centrality of blood to views of female physiology is emphasized by King, especially her work on menstruation, such as King 1983; menstruation/blood is also a central theme in King 1998 (e.g., chapter four, “Blood and the Goddess,” 75–98).
[70] Trans., Helmbold, 1939.

Quoting Democritus, Plutarch blends two sets of metaphors. The umbilicus is both root or vine, connecting the seedling to its earth-mother, as well as a cord tethering a ship in place on drifting waters. We thus encounter a direct juxtaposition of the landscape and waterscape (embodied by the pairing of "cable and vine," πεῖσμα καὶ κλῆμα), drawn together through the notion of the female body's fluid economy. Nature, he goes on, "irrigates" the embryo (κατάρδει), then after birth, transforms the blood into breast milk, outperforming the best "gardener or irrigator" (… παντὸς ἐμμελέστερον φυτουργοῦ καὶ ὀχετηγοῦ…). Here, the male role in generation is conspicuously absent, focusing on the traffic in fluids overseen by a provident *physis*. In this passage, the female body is cultivated and tamed like an ideal garden, displaying none of the wildness of uncultivated, though fertile land.

Plutarch imagines female flesh as a garden beneath which natural springs flow, nourishing and irrigating vegetal life. Nature has designed a kind of unsurpassable, generative hydraulic system. His juxtaposition of landscape and waterscape suggests the importance of fluids for understanding the dynamics of fetal growth.

There is nothing fundamentally *new* about this picture of the female body. Furthermore, this is a notion not exclusive to women, as water and irrigation metaphors can be used to describe the movement of fluid in both male and female bodies.[71] The key point is this: because of the close identification, and even *continuity*, of the female body with the earth itself, these metaphors tighten the ontological gap between signifier and signified, between earth and a fertile female body. In this regard, the female body is uniquely positioned, indeed, almost collapsing into the earth with which it is compared.

[71] On irrigation metaphors for the human circulatory system, see Webster 2014.

Plutarch is drawing on ideas from a highly-developed Greek medical tradition that permeated elite Roman culture in the early imperial period. We can trace similar notions from the gynecological and embryological texts of the Hippocratic corpus, ideas which were transmitted, elaborated, and revised over the course of the next millenium of medical thought. These treatises, dating to the fifth century BCE, set a precedent for how later authors deployed vegetal analogies in the context of generation, gestation, and birth.[72] In archaic and classical Greek culture, earth-woman metaphors have been examined for their importance in understanding the construction of womanhood and women's embeddedness in the life of the polis.[73] Throughout later Greek and Latin literature, these metaphors are also hard to miss – they are ubiquitous, rooted in sexual vocabulary, visual culture, and woven into the language and imagery of fertility. They provide a rich cultural background for the vegetal analogies found in medical treatises.

In Hippocratic texts, a woman's body is a "miniature landscape" – its interior essentially imagined as a fertile environment.[74] As Cole explains, "The mother is simultaneously earth and vessel filled with blood that flows like a river."[75] The treatises known as *On the Seed* and *On the Nature of the Child* (probably by the same author) draw heavily on vegetal analogies to explicate and visualize the process of gestation. The comparison is most extensively realized in the so-called 'botanical excursus' in *On the Nature of the Child*, where the author asserts, "in fact, if you review what I have said, you

[72] E.g., Hesiod's *Theogony*: after Chaos comes Γαῖ' εὐρύστερνος, "broad-breasted Gaia." Cf. Bergmann 2008 on a range of childbearing metaphors in Near Eastern cultures.
[73] duBois 1988; Cole 2004.
[74] Cole 2004, 170.
[75] Ibid., 165.

will find that from beginning to end the process of growth in plants and in humans is exactly the same."[76]

There is a great deal one could say about the botanical excursus and related passages in the Hippocratic embryological texts. I will confine myself to highlighting the aspects of these accounts most relevant to the discussion at hand, in particular, generative *risks*. Holmes has pointed to the ontological stakes of the excursus, which served a pivotal role in the development of embryological discourse in Greco-Roman culture, notably in the embryological texts of Galen, *On Semen* and *On the Formation of the Fetus*.[77] Galen himself was an avowed disciple of Hippocrates and a very creative, dedicated reader of Hippocratic texts. In Hippocratic and Galenic embryology, the plant both helps to visualize – externally – the hidden, internal process of gestation, while also embodying the obscure power (or 'nature') that animates fetal growth.[78]

Plants illustrate the way a fetus draws nourishment proper to itself, the moisture of its mother's body. This idea is at the heart of the vegetal analogy's potency. And while the author of *On the Nature of the Child* does not focus on the conditions of generative failure, looking to the treatise *Diseases IV*, we can see how (im)proper nourishment can serve as a reason for particular outcomes, and how differential outcomes were related to environmental conditions. The author of *Diseases IV* describes the process whereby a plant draw moisture (ἰκμάς) proper to itself from the earth, each in different measures, according

[76] *Nat. Puer*. 27.1 = Li 7.528; Lonie 1981 examines the extended vegetal analogy in detail, as does Holmes 2017b, putting the Hippocratic sources in conversation with Galenic embryology. Cf. King 1990, who points out that we should see these vegetal analogies in the Hippocratics in the context of the long tradition of earth-woman metaphors, as elaborated in duBois 1988.
[77] The Hippocratic treatise, *Περὶ Γονῆς*, is known as *On the Seed* (or *On Generation*), not to be confused with Galen's *On Semen*, *Περὶ Σπέρματος*.
[78] Holmes 2017b.

to its nature.[79] Some plants can only grow in certain conditions, the author explains, such as (the now extinct) silphium, which flourished in Libya but cannot thrive in the Peloponnese or Ionia. The reason is that "in neither Ionia nor the Peloponnese is there suitable moisture to nourish it"; soil has varying quantities and qualities of moisture in different places.[80] This is also why wine in one place might taste sweeter than in neighboring regions, the author explains.[81] If we take this type of reasoning and use if to think about the conditions of generative failure and success, we arrive at the notion that the maternal body must be developed in such a way as to ensure it provides the moisture proper to a growing fetus, otherwise the fetus will perish like silphium planted in the Peloponnese. One might also conclude, rather more pessimistically, that some soil, and therefore some women's bodies, are simply not suitable *at all* for the nurturance of fetal life.[82]

The female body both *is* an environment and also is *in* an environment. There is a tight relationship between bodily constitution, uterine environment, and local environment. Environmental influence on procreative outcomes was a long-lived notion, which persisted in myriad forms.[83] It is articulated by imperial authors such as Celsus, who provides

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[79] *Morb*. IV, 34.1–5 = 85.25–87.18 Joly = Li 7.544–48.
[80] *Morb*. IV, 34.3 = 86.18–20 Joly = Li 7.546.
[81] Lonie points out that the author of *Diseases* IV presents this notion in an illogical way – essentially as an anacolouthon. Lonie explains, "It is as if the author had intended to say 'and the fact that there are many other instances of the same kind (as silphium) supports my conclusion about fluids in the soil. A further piece of evidence is the different quality of grapes grown in neighboring soils" (274).
[82] Cf. Flemming 2013 on infertility in classical Greece.
[83] The impact of environment on health and bodily constitution in the Hippocratic corpus is most extensively and famously examined in the treatise *Airs, Waters, Places*. For the fetal/plant-land/mother comparison, see, e.g., *Nat. Puer*. 27, 34, = Li 7.528, 7.544. Cole 2004, 164–65: "The Hippocratic author describes how the child is therefore directly related to the local land and water system. He has transformed an idea, previously passed down as local myth, about the fertilizing power of the local water supply into a scientific claim."

detailed information about potential risks. He warns, for example, that should "south winds and rain have prevailed during winter, and the spring is cold and dry, pregnant women near their confinement are in danger of miscarrying (*abortu periclitantur*); those indeed who reach term, give birth only to weaklings hardly alive (*inbecillos vixque vitales*)."[84] Related ideas apply among animals, as when Aelian describes easier births in warm, southern regions (because southerly winds relax the body for birth). In the north, birth may be more difficult, he explains, using waterscape language: "the embryo is congealed and is not easily moved, and is not rocked as it were by a wave (ὑπὸ κλύδωνος), but as though it were in a waveless calm (ἅτε δὲ ἄκλυστον καὶ ἐν γαλήνῃ), remains firm and taut and endures until the time ordained by nature for its birth (διαρκεῖ πρὸς τὸν κατὰ φύσιν χρόνον τῆς ζωογονίας)."[85]

The environment is not only comprised of conditions such as climate, winds, and so forth – the category also includes the configuration of space. As the author of *On the Seed* (tautologically) articulates, the shape of the physical space provided for a plant to grow will affect its ultimate shape, and the same goes for a fetus: "if all the children are born weak [to a particular woman], the womb is the reason, being narrower than necessary. For if the fetus does not have open space in which to grow, it must be that the fetus becomes thin, because it does not have the open space for growth."[86] This view provides a way to think about particular problems that might arise in utero – why some children are weak and others robust and well-formed. By way of example, the author offers an analogy with the cucumber, which, when transplanted between containers, grows to fill the space provided,

[84] Celsus, *Med*. 2.1.14; trans., Spencer 1935.
[85] Ael., *NA* 12.17.
[86] *Genit*. 9.2 = 50.22–26 Joly = Li 7.482.

"for it strives in its growth [to fill] the volume of the jar... and so it is with children too…."[87] Particular parts of the fetal body might also be weakened because of the narrowness of particular parts of the uterus, "just like a tree in the earth, which does not have open space, but is cut off by a stone or something else, and grows up crooked or becomes thick in one part and thin in another."[88] The process of branching and rooting fits snugly within the imaginary of fetal articulation (limbs, branches, and roots growing upwards and downwards), later developed by Galen as a strategy for describing the branching of fetal veins and arteries. In the Hippocratic treatise, the analogy offers a stark way to understand the reasons behind particular (negative) physical traits in a child.

The shift in the mode of nourishment that comprises the transition from fetus to newborn has important stakes. This transition would seem to rupture a central likeness guiding the vegetal-fetal analogies, cementing a real ontological difference between plant and fetus in terms of its means of self-preservation and growth. In *On the Nature of the Child,* birth is the result of the fetus' depletion of nourishment, and it initiates birth in pursuit of food. In this context, the fetus is analogized with a chick moving violently to hatch, rather than a plant being harvested (or some similar, passive analogy).[89] And while there is no precise notion of the *scala naturae* articulated in the work – the ascending order of plant, animal, and human, as in Aristotelian embryology, and later implied in Galenic embryology – it is important to note that birth appears to mark the transition from a plant-like to animal-like state in terms of the fetus' ability to exercise self-movement in pursuit of

[87] *Genit*. 9.3 = 51.8–12 Joly = Li 7.482.
[88] *Genit*. 10 = 51.22–25 Joly = Li 7.484.
[89] *Nat. Puer*. 30.8-9 = 81.5–20 Joly = Li 7.536.

nutrition.[90] The kind of radical break implied there might be considered in light of other philosophical commitments to birth as the moment of ensoulment, so important in later embryological theory. In Stoic embryology, for example, the infant's first breath brings about its acquisition of vital *pneuma*, essentially a soul.[91]

Galen pushes the limits of these analogies, although his precise application of them shifted throughout his career. In his adaptation of Platonic and Hippocratic theory, Galen developed a physiology around the concept of a tripartite soul (rational, spirited, appetitive), associated with three internal organs (respectively, brain, heart, liver), the *archai*. Between writing *On Semen* and *On the Formation of the Fetus*, he altered his view of the order in which the *archai* developed in utero: in *On Semen*, he suggests they emerge around the same time in the fetus, giving none primacy. Later, however, in *On the Formation of the Fetus*, the liver takes precedence. The liver was associated with the nutritive soul or 'nature', which also governs the growth of plants. The formation of the fetus and later growth into a child involves the gradual development of these natures, culminating, long after birth, in the acquisition of reason.[92] Galen explains, "…the strongest functions in infants are those of the nutritive soul, and second after then those of the heart; while the brain functions are quite feeble, to the extent that they are unable not only to walk, but even to stand, still less to make judgments as to what is in their own interest…."[93] In this model, a newborn has undergone a major shift at birth in the manner of nourishment

[90] Holmes 2017b, 370. She notes that the egg is compared to a growing fetus at various other stages of development; what is important is that the use of the chick analogy hinges on self-movement.
[91] Rocca 2012, 635, citing *SVF* 2.806.
[92] On the 'gradualist' view of fetal development, see Hanson 2008.
[93] Gal., *Foet. Form.* 3.29 = *CMG* 5.3.3, 76.26–68.4 = 4.673K. Trans., Singer 2001.

– eating with its mouth, like an animal, rather than through a root, like a plant – while moving along a continuum towards the acquisition of reason.

Holmes has suggested seeing Galen's use of the vegetal analogy as part of a continuum of likeness among different forms of life: "Instead of seeing these analogical and ontological uses of the plant as opposed, it may seem to make more sense to see them as different points on a continuum of increasing likeness between human beings and plants: similarities at the level of morphology become similarities in the processes producing these shared forms, which in turn become similarities in the very power responsible for these processes."[94] Galen is careful not to say precisely that the fetus *is* a seed or plant – rather, the fetus is *governed* like a plant, particularly, as to nutrition and growth. But the boundaries blur a bit on consideration of the very natures that guide these processes in his accounts.

The earth-woman, vegetal-fetal relationships are not just theoretical – they play out in therapeutic practice, discernable in the Hippocratic corpus and its reception. The importance of so-called *Drekapoteke* in treating gynecologcial problems, the use of animal excrement, has been observed by many. The relationship between feces, fertility, and fertilizer is manifest: just as excrement fertilizes a garden or field, so too should it enhance the fertility of the female body.[95] The notion that the fertility of the female body and of the earth are enhanced by the same substance points to a closer-than-analogical connection

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[94] Holmes 2017b, 376.

[95] Jones 1957, 462: "The loathsome character of a few [ingredients], such as dung and urine, may originally have been due to an effort to drive out a disease demon, or perhaps to the conviction that life-essence was in them in a concentrated form, but some are included in the *materia medica* of Celsus, and even of the later books of the Hippocratic Corpus. It is just possible that the use in medicine was partly due to the obvious value of manure as a fertilizer." Hanson 1998, 89–90, expands upon this idea; cf. Hanson 1992.

between the two. This kind of linkage brings the earth and the female body even closer together inside and outside medical thought, pushing the connection beyond the range of figurative signification.

Drekapoteke was adapted and integrated into the works of Hippocratic authors, and elaborated in other medical and pharmacological texts, well into the imperial era.[96] Excrement came to be viewed as having properties of "heating and drying, moistening and softening, strengthening and smoothing," and was eventually used for ailments in men as well as women.[97] Galen, in fact, also recommends animal dung as a treatment for baldness, perhaps, on some level, a prescription rooted in the idea that fertilizing the scalp will promote hair growth like vegetation in a garden or field.[98] We also continue to find an association between the medicinal use of excrement and gynecological/obstetrical matters in later authors. Dioscorides, for example, recommends mountain goat feces, drunk with wine and spices, as an emmenagogue, which can also effect the expulsion of fetuses (*Mat. Med.* 2.80).

"Matter, as a matrix of meaning," von Staden writes, "can be as intransigent as an abstract idea."[99] He aruges that in Greek culture, the use of *Drekapoteke* was related to ancient and deeply held views about pollution and strategies for its obviation. This kind of protection was necessary in order to shield the community and polis from the wrath of the gods. Drawing on a central tenet in Mary Douglas' classic *Purity and Danger* – that filth may require filth for purification (the more powerful the former, the more powerful the

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[96] von Staden 1992; Cole 2004, 169–70; Hanson 1998 emphasizes the later rationalizing explanations for these therapies.
[97] Hanson 1998, 89.
[98] Ibid., 89, n. 73, citing Gal., *Comp. Med. Loc.,* 10. 1 = 12.402–4, 407–9, 416–19K.
[99] von Staden 1992, 16.

latter) – von Staden argues that excrement actually had cleansing properties. Because of the polluting nature of female fluids associated with menstruation, sexual intercourse, and (most polluting of all) childbirth, an equally potent response was required. This is where *Drekapoteke* enters the picture. In essence, a like-cures-like scenario (homeopathy), rather than the opposites-cure-opposites (allopathy) is indicated. Thus excrement, a polluting substance, may in fact have served a purifying purpose, which explains its prevalence in gynecological prescriptions.

A number of Greek sacred laws – with no obvious known Roman equivalent – include prohibitions against women entering temple precincts after birth or miscarriage, indicating just how defiling these processes were thought to be.[100] (Indeed, it remains an intriguing question why Romans did not perceive birth as polluting to nearly the same degree as Greeks.) Interestingly enough, *pregnant* women were not seen as polluting, but rather as especially *at risk* of pollution.[101] Many of these Greek prohibitions also applied to those who had been in contact (or under the same roof) with the parturient, a notion that seems to characterize our earliest evidence for such regulations, the Cyrene cathartic law (late fourth century BCE).[102] Considering this phenomenon in Greek culture, we see that "the female in childbirth, at the moment of her greatest contribution to the community, was

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[100] Ibid., 24–25, nn. 56–57; on birth pollution in Greek culture/religion, see Parker 1996, 32–73, esp. 48–52. On the Roman side, see Lennon 2014, 58–61. Cf. Köves-Zulauf 1990, 221. While we must remember the mantra 'absence of evidence is not evidence of absence', there is precious little evidence suggesting Romans were nearly so concerned with birth pollution as Greeks. Our best evidence for any such concern is comprised by the rituals of the *dies lustricus* ("the day of purification"), a celebration eight days after birth for girls and nine for boys, discussed in detail in chapter five.

[101] Parker 1996, 49.

[102] Ibid., 49–50; appendix 3, 352–53. Parker argues that birth pollution affected a more localized group of people than death, for example, it was not polluting for kin to visit the house of a woman who had just given birth, which "reflects the fact that deaths (and marriages) pull together the social group more insistently than births" (ibid., 50).

defined in ritual terms as farthest from the divine. She was farthest from the divine precisely because at that moment she was the most like the earth."[103]

As with certain 'folk' remedies, we can discern efforts among later authors to explain away such impurity prohibitions. The third-century CE Roman author Censorinus argues that Greek interdictions against entering a temple for forty days after childbirth (and the related Greek celebration forty days after birth called the *tesserakostē*) can be attributed to the weakness of women up until this point. By and large, they were seen to be unwell and still bleeding (*nec sanguinem interdum continent*). Newborns are likewise feeble (*infirmi… morbidi*), unsmiling (*sine risu*), and "not without danger" (*nec sine periculo sunt*) during this time.[104] Censorinus uses this Greek practice to make a universalizing, numerological claim about the risks of the perinatal period.

The dual issues of community well-being and generative fragility brings us to Soranus' *Gynecology*, a late first/early second century CE medical text that makes striking use of vegetal metaphors. Soranus draws on the analogical tradition, articulated above, to illustrate various risks that arise during pregnancy. In books one and two of the treatise, there are nine instances in which Soranus uses earth-woman/vegetal-fetal analogies to justify his reasoning and universalize his approach to managing risks. He draws on wisdom about soil quality, water quality, seasonality, crop rotation, transplanting, and grafting. A fetus is always a marginal being, on the cusp of perishing or surviving, threatened both by its environment and, most of all, the failure of those to suitably manage and modify it. As I

[103] Cole 2004, 171.
[104] Censorinus, *DN* 11.8. Cf. Fontanella 1992, 138, n. 18. Celsus (*Med*. 2.1.20) calls attention to the forty day marks especially dangerous; in Pliny, the first six weeks are said to be dangerous (*HN* 7.40). Pliny also notes that infants do not smile until the fortieth day (*HN* 7.2).

shall argue in the next chapter, this failure is tantamount to undermining the very fabric of human society, the stability of which is guaranteed by *diadochē*, "succession."

Soranus takes us into the garden, orchard, and field to think through all the ways the combination of poor planning and an ever-changing environment – inside and outside a woman's body – threaten the birth of healthy children. In a way, Soranus' careful use of regimen for pregnant women speaks precisely to the need for constant adaptation to an environment in flux. His multi-pronged approach to conditioning the body – through a shifting schedule of exercise, meals, and massage – might be seen as a strategy of diversification in treatment, calibrated through a variety of means. His treatise provides the practitioner with a whole spectrum of approaches to conditioning the female body for successful childbirth and the creation of the best possible offspring.

Soranus, who lived and practiced in Rome, is most interested in providing advice for the custodian of female bodies and their offspring.[105] He offers advice on picking the best midwife, wet nurse, and most crucial of all, wife, suggesting one of the treatise's target readers was the aspiring or established *paterfamilias*, hoping to ensure the fertility of his marriage. Wives, Soranus argues, should be chosen based on their potential fecundity, rather than on wealth or social distinction.[106] In this circumstance, the potential husband becomes a prospective landowner who ought to make sure that the land he buys will yield fruit: "For just as no poor land brings seeds and plants to perfection, but through its own defectiveness even destroys the virtues of the plants and seeds (σπέρματα καὶ φυτά), so the female bodies which are in an abnormal state do not lay hold of the seed injected into

[105] On what we know of Soranus' career, see chapter three.
[106] Sor., *Gyn*. 1.11.3–9 = Ilb. 1.34.1; see pp. 196–97 for further discussion of this passage. All translations of the treatise are drawn from Temkin 1991 unless noted otherwise.

them, but by their own defectiveness compel the latter also to sicken or even to perish (ἀλλὰ τῇ παρ' ἑαυτῶν κακίᾳ συννοσεῖν ἢ καὶ ἀπόλλυσθαι ταῦτα ἀναγκάζει)."[107]

In the *Gynecology*, the husband also becomes a farmer or gardener, who must learn the best time and manner in which to sow his seed, as well as how to irrigate his land with good water (i.e., fetal nutriment and breast milk) and preserve the soil for future productivity through crop rotation (i.e., relieving mothers from breast-feeding to rest their bodies in order to promote future childbearing).[108] Analogies from gardens and fields are helpful because they are based on observable, quotidian phenomena, a quality which would have commended such explanations to adherents of Soranus' medical sect, the Methodists, who eschewed the explanatory value of hidden causes.[109] The hiddenness of the interior of the female body is translated into a visible, familiar, and fertile botanical environment.

Most of all, Soranus draws on the universalizing quality of these analogies to explain particular types of procreative failure. Infants who fail to thrive soon after birth, for instance, are compared to slips, which, "when still attached to big trees also share the advantage of their rigidity, bear fruit and withstand the onrush of winds, but when separated and planted to subsist on their own are easily harmed by a light breeze."[110] Here, grafting and replanting provide an analogy that helps to explain neonatal

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[107] Sor., *Gyn.* 1.11.57–64 = Ilb. 1.35.6. Adapted from Temkin, trans., 1991.
[108] A husband is explicitly compared to farmer in a passage encouraging sobriety during conception (*Gyn.* 1.12.115–20 = Ilb. 1.39.3): "Indeed, it is utterly absurd that the farmer takes care not to throw seed upon very moist and flooded land, and that on the other hand mankind assumes nature to achieve a good result in generation when seed is deposited in bodies which are very moist and inundated by satiety." On the proper time for conception, Soranus explains: "Just as every season is not propitious for sowing extraneous seed upon the land for the purpose of bringing forth fruit, so in humans too not every time is suitable for conception of the seed discharged during intercourse" (*Gyn.* 1.12.3–7 = Ilb. 1.36.1). Cf. *Gyn.* 1.12.154–59 = Ilb. 1.41.2, on seasonality.
[109] See pp. 177–78 below on this issue.
[110] Sor., *Gyn.* 2.10.104–112 = Ilb. 2.27.1–2.

mortality.[111] Transplanting provides a way to think about the solution to a mother's inability to nurse her own child: "For as vegetables are sown by gardeners into one soil to sprout and are transplanted into different soil for quick development, lest one soil suffer both, in the same way the newborn, too, is apt to become more vigorous if borne by one woman but fed by another, in case the mother, by some affliction, is hindered from supplying the food."[112]

One primary aim of regimen for health was to order consumption, physical activity, and sleep, so as to produce bodily harmony. The right thing must be done at the right time. As Soranus explains, no right-thinking person would sow seeds in winter, knowing how poorly the plants would grow.[113] Pregnant women are always at risk of eating, drinking, or behaving in a way that may harm the fragile fetus – of creating disorder within the body that produces nutriment ill-suited for fetal growth. Regimen, in a sense, is one way to regulate and bring order to a process that is always on the brink of disorder. The hiddenness of fetal life no doubt contributed to this preoccupation among husbands and male doctors – access to the fetus is always mediated by a woman's body, with the result of their efforts only visible after birth.

Vegetal growth offered a variety of ways to understand procreative failure and success – a strategy which, in part, derived its explanatory power from the more-than-figurative continuity between the earth and the female body. From the interior of the pregnant body to the vegetal motif of the Ara Pacis Augustae (the emperor's garden, as it

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[111] Grafting and slips are central to the generative metaphors in Porphyry's embryological treatise, *Ad Gaurum*. They are used, most of all, to discuss the inheritance of traits and the process of nourishment.
[112] Sor., *Gyn*. 2.9.103–110 = Ilb. 2.18.6.
[113] Sor., *Gyn*. 1.12.154–59 = Ilb. 1.41.2.

were), careful cultivation, order, and regulation achieve the best outcomes. In essence, these strategies diminish risk. This idea takes on special significance in the early empire, when the marriage laws begin to create hierarchies based on procreative success, and the imperial family positioned itself as a microcosm for the empire as a whole. The *princeps* himself, *pater patriae*, was located at the center of it all, as caretaker for his *familia* or *domus* – cultivator of his garden – and those subject to Roman *imperium*.[114] Put another way, one might think of the *princeps* as the *ur*-landowner/*-paterfamilias* Soranus figuratively invokes in his discussions of prenatal regimen, conditioning the female body in the interest of hereditary succession, continuity, and stability.

II. Waterscapes

The Greek and Roman literary traditions suffer no shortage of episodes exploring the perils of sea voyages – as dangerous in themselves and as metaphors for dangers more generally – from the *Odyssey* to Greek novels to Latin historiography and elegiac poetry. When a woman's pregnancy has gone terribly wrong, Theodorus Priscianus, a fourth-century medical writer, recommends abortion as soon as possible, prioritizing the mother's life over the life of the fetus: "…just as for trees, it is healthy to undertake the pruning of withered branches, and ships, weighed down with cargo, have but one remedy against destruction when they are tossed by a terrible storm" (… *sicut arboribus arescentium ramorum accommodatur salutaris abscisio et naves pressae onere cum gravi tempestate iactantur solum habent ex damno remedium*; *Gynaecia* 3.6). Priscianus is recommending disposing of the cargo in order to save the ship – as one would prune

[114] Cf. Edmondson 2014, 577.

withered branches to preserve the health of the rest of the tree. The comparison, in essence, unites the two types of metaphor/analogy examined in this chapter.

There are many ways the female body was imagined as a waterscape that can readily lend it to an understanding of risk. Sometimes, the uterus was likened to a ship, with sails and passengers. Pregnancy and gestation became journeys, and birth the arrival, safely or not, on the shore. Kövesces explains, "Birth is conceived as arrival, whereas death is viewed as departure."[115] In this regard, Roman thinking is similar to our own. Sometimes the uterus' interiority was imagined as a waterscape unto itself; other times, it might contain or become a creature dwelling in the aquatic environment of the body. Boundaries – shores or banks, demarcating the wet from the dry – are vital to this aquatic imaginary, especially in the context of birth, when the infant is brought from interior to exterior. Indeed, the first-century CE anatomist Rufus of Ephesus, in his treatise *On the Names of Parts of the Body* (112), explains that one word for the labia is κρημνός, which means "bank" or "cliff," that is, like the banks of a stream or river. Boundaries – their demarcation, maintenance, and transgression – are of vital importance. And as Corbin observes in *The Lure of the Sea*, the shoreline, as a liminal "boundary zone," is a fraught space, where "activities of deities, human beings, and animals, living in confused, dangerous proximity, threaten to interfere with one another."[116] The shore combines the safety of arrival with a new set of threats.

The botanical and agricultural metaphors and analogies discussed in the previous section offer a rather more straightforward and consistent set of coordinates to think about fetal growth, the female body, and risk, while those discussed here are more

[115] Kövesces 2002, 24.
[116] Corbin 1994, 14.

loosely connected and convey a kind of unruliness, multifacetedness, and at times, more sinister hiddenness (think of the tame, yet sharp-toothed sea monster in the Tellus frieze).[117] Sea travel embodied danger, putting humans at the mercy of winds, waves, and unpredictable weather, but it was also associated with the pursuit of gain. In this regard, maritime activity provided a unique lens through which to think about risk – the potential of gain and loss, as well as the human effort to contend with environmental forces beyond our control. We might recall Petronius' satirical rendition of Trimalchio's shipping career, who weathered the loss of all his ships and cargo at sea – "In one day, Neptune devoured thirty million!" – only to recover soon after from a much-needed cash infusion, with which he again bought ships and thus made his fortune.[118]

The Mediterranean sea, along with a tangle of snaking rivers, lakes, and wetlands, was enmeshed in the unique connectivity and diversity of the Roman empire.[119] For Romans, the Mediterranean, with all its dangers and opportunities, was at the center of empire – the *oecoumenē* or *orbis terrarum*. As their control expanded, Romans began to

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[117] Metaphors may be disjointed and incoherent, despite their conceptual and descriptive power. Lakoff and Johnson 1980, 41–45, offer a discussion of "Challenges to Metaphorical Coherence" that I find useful, a compelling take on "incoherences in everyday metaphorical expressions."

[118] Petron., *Sat*. 76 ("*…omnes naves naufragarunt. Factum, non fabula. Uno die Neptunus trecenties sestertium devoravit*."). Casson 1991, 198–212.

[119] Ibid., 184–212. The two most heavily trafficked routes during the empire were "Rome's trade in the Indian Ocean, and the Alexandria-Rome grain service" (ibid., 202). Horden and Purcell 2000, 11, comment on the networked Mediterranean: "Despite the obvious dangers, sea transport so far surpassed land communications in ease as to make the Mediterranean a milieu of interlocking routes onto which the coastlands and harbours faced. In a continuum of experience through which the thought of the Levantine and Greek worlds mingled, the practice of navigation brought into existence another representation of the unity of these waters – an alternative geography, less imaginative and more pragmatic than that of the philosophers..."

see the Mediterranean as a *Roman* body of water, *mare nostrum*.[120] Control over and access to waterways, especially rivers and river valley routes, were also vital to the acquisition of wealth, urbanization, and maintenance of imperial power; their subversion was a constant source of anxiety for Roman elites: "The Roman claim to mastery of the elements and dominion over rivers was susceptible to reversal of fortune."[121] This notion should hover in the background as we delve into a fine-grained discussion of how waterscapes might be projected *into* the female body and connect to anxieties about childbearing.

Tension between the shore's safety and danger emerge in a well-known passage from Lucretius' *De Rerum Natura*, when a newborn child is compared to a shipwrecked sailor:

> *tum porro puer, ut saevis proiectus ab undis*
> *navita, nudus humi iacet infans, indigus omni*
> *vitali auxilio, cum primum in luminis oras*
> *nixibus ex alvo matris natura profudit,*
> *vagituque locum lugubri complet, ut aequumst*
> *cui tantum in vita restet transire malorum*. (Lucr. 5.222–27):
>
> Then the child, like a sailor tossed to shore by the cruel waves,
> lies naked upon the ground, unable to speak (*infans*),
> lacking all aids to life, when first into the realm of light
> nature has tossed him from his mother's womb with labor pains.
> He fills the place with his heartrending cry (*vagitus*); and rightly, too,
> since life holds in store for him so much hardship.

[120] Campbell 2012, 386: "Rome's empire was based on control of the land adjacent to the Mediterranean sea, whose place in the Roman domain was effectively expressed as *mare nostrum*. But the empire's structure was also linked to major rivers and river valley routes… In one sense, rivers held the empire together, since as great markers and connectors they provided one of the ethnographic and geographic reference points of the empire." Cf. Horden and Purcell 2000, 11–12.
[121] Campbell 2012, 383–84.

Birth is an arrival at the shore, a transition from the wet to the dry, from dark to light, accompanied by labor pains (*nixibus*).[122] Many authors, both ancient and modern, have echoed this passage to reflect on the fragility of human life and the violence of birth.[123] Lucretius' verses associate the danger of seafaring with the danger of birth, and the shoreline is not a safe haven, but rather the site of a new set of challenges. The child is "poured forth" (*profudit*) – a verb that carries associations with fluids – from its mother's womb (*ex alvo*), which, in the analogy, lines up with the sea. The imagery is highly reminiscent of the popular 'boat motif' in Near Eastern literary sources and medico-magic, "in which the mother and/or the child are portrayed as traveling across a dangerous mass of water, hoping to bring the boat to shore safely."[124] Lucretius' memorable passage underscores the perception of birth as a passage from a dark, wet interior onto dry land, and the arrival is characterized by the child's profound vulnerability. Coming into being is a dangerous journey, and the danger by no means abates with arrival on the "shores of light."

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[122] On birth as "coming into the light," see chapter five. Birth as a transition from darkness to light is a motif also found in Near Eastern traditions (Bergmann 2008, 44–45). See Campbell 2003, 45–46, on the passage from Lucretius, who notes that the poet is fond of the phrase, *in luminis oras*, which is used at 1.22, 1.70, 1.179, 2.577, 2.617, 5.224, 5.781, 5.1389, 5.1455, "especially when speaking of the zoogonic forces of the Magna Mater (2.617), Natura (5.224), and (this and a similar phrase) of Venus, 1.22–3 and 1.227–8." He notes it is related to the Empedoclean phrase, "shores of life," used to describe the space where creatures are separated limb from limb at their death and await a new union, leading to rebirth (DK31 B20, B57, B59, and B61). Empedocles uses the word ᾠηγμίν for "shore," a term found in Homer (e.g., *Il*. 20.229 related to the verb ᾠήγνυμι, thus meaning, 'where the sea breaks on the shore').

[123] See, e.g., Plin., *HN* 7.1; Lactant., *De Opificio Dei* 3.1 *(… imbecillum, fragilem, nudum tamquam ex naufragio …*; Wordsworth echoes the Lucretian passage in "To —, Upon the Birth of her First-Born Child": "Like a shipwrecked Sailor tost / By rough waves on a perilous coast, / Lies the Babe, in helplessness / And in tenderest nakedness, / Flung by labouring Nature forth / Upon the mercies of the earth."

[124] Bergmann 2008, 48, 52–54. Her discussion emphasizes the labile nature of these metaphors.

The notion of a fetus as a sailor or cargo on a ship (i.e., the uterus) emerges in subtle ways throughout a range of sources. Soranus notes that menstrual fluid, which nourishes the fetus, is called *katamēnion*, because it occurs monthly (*mēn*, 'month', and *mēnē*, 'moon'), or *epimēnion*, "because it becomes food for the embryo, just as we call the food prepared for seafarers *epimēnia*."[125] The latter term, *epimēnion*, most likely came into use to suggest the monthly cycle of menstruation, the prefix *epi-* indicating duration (while *kata-* indicates its recurring nature).[126] Here, however, Soranus offers a rather different meaning for *epimēnion*, to underscore the source of nourishment in utero, and pegs *katamēnion* as the term that evokes menstruation's "monthly" nature. What is important to note is that Soranus *chooses* to explain *epimēnion* in this way, comparing the menstrual fluid nurturing a fetus to the monthly ration for a seafarer.[127]

This type of comparison may be related to a more colloquial way of alluding to pregnancy, as we learn in Macrobius, reporting on witticisms of Augustus' daughter Julia, reputed for her sexual appetite:

> *Cumque conscii flagitiorum mirarentur quo modo similes Agrippae filios pareret, quae tam vulgo potestatem corporis sui faceret, ait, "numquam enim nisi navi plena tollo vectorem."* (*Sat*., 2.5.9)
>
> When people aware of her outrageous behavior expressed surprise that her sons looked just like Agrippa [her husband], though she had been so free

[125] Sor., *Gyn*. 1.9.2–5 = Ilb. 1.19.1. Lunar influences receive an extensive discussion in chapter five.
[126] Burguière, Gourevitch, and Malinas 1988, 77: "…ce n'est pas, en fait, le notion de 'nourriture' qui importe dans la comparaison d'emplois, mais essentiellement celle de *durée* mensuelle ou de *retour* mensuel, d'ailleurs soulignées respectivement pare les prefixes ἐν- ou ἐπι (durée) et κατα- (retour)."
[127] The comparison is echoed later in the treatise, in a discussion of how to deal with a newborn just after feeding, who vomits like a person unused to being at sea (*Gyn*. 2.13.126–29 = Ilb. 2.40.1).

> in letting others enjoy her charms, she said, "I take on a passenger only when the ship's hold is full."[128]

Instead of being a sailor, here, a fetus is likened to cargo, the womb to a ship. Julia, who risks bearing an illegitimate child, obviates this possibility by filling her womb first with her husband's 'cargo', as it were. By comparing her womb to a ship, Julia's witticism also subtly draws on another set of associations between childbearing and (potential) economic gain or loss. The relationship between a fetus and cargo is reversed in the *Oneircritica* of the second-century CE dream-interpreter Artemidorus (discussed in more detail below), who states that should a ship owner or merchant dream that he is giving birth at term, it is a good sign, meaning he will sell his cargo.[129] The notion of giving birth at term indicates overcoming the perils of the life at sea. Again, we observe a parallelism between fetuses and cargo, pregnancy and a (mercantile) journey.

This set of ideas manifests itself in the language used to describe female anatomy. We might compare these passages to a description of the uterus in *Causes and Symptoms of Acute Diseases*, by the first-century CE physician Aretaeus. The membranes, he explains, that usually hold the uterus in place, "are given to distention and contraction, like the sails of a ship (ξυνδιδοῖ δὲ τὰ ὑμένια ἐς ἀπόστασιν καὶ ξυναγωγὴν, ὅκως νηὸς λαίφεα)."[130] In short, because of the membranes' capacity for distention, the uterus

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[128] Trans., Kaster 2011.
[129] Artem. 1.14.
[130] Aretaeus, *De Causis et Signis Acutorum Morborum*, 2.10. Ἡ ὑστέρη τῇσι γυναιξὶ ὑμένων ἀποτάσιας ἔνθα καὶ ἔνθα κατὰ λαγόνας ἴσχει, ἀτὰρ ἠδὲ ζῴου πάθη ἐν ὀσφρήσι: ἴεται γὰρ ἐπὶ τοῖσι εὐώδεσι πρὸς ἡδονὴν, καὶ τὰ κάκοσμα καὶ ἀτερπέα ὑπὸ ἀχθηδόνος φεύγει.

may move around within the body, leading to an affliction known as 'suffocation of the womb', usually called *hysterikē pnix*.[131]

In Aretaeus' *Causes and Symptoms of Chronic Diseases,* the ship/sails analogy reemerges in a discussion of uterine prolapse (ἔκπτωσις), characterized by the organ's displacement, not unlike suffocation of the womb, but with a rather different set of problems and causes. In the case of prolapse, the uterus can protrude outside the body, making it painfully visible:

> … οἱ δὲ κατ᾽ αὐχένα ἔνθα καὶ ἔνθα πρὸς τοὺς λαγόνας: οἱ δὲ μάλιστα νευρώδεες, πλατέες ὅκως νεὼς λαίφεα. πάντες οὖν ξυνδίδουσι οἵδε, ἢν ἔξω ἡ ὑστέρη ἀΐσσῃ. κτείνει μὲν οὖν τὰ πολλὰ ἔκπτωσις ἥδε. γίγνεται γὰρ ἐπὶ ἀμβλωσμῷ, καὶ σεισμοῖσι μεγάλοισι, καὶ βιαίῳ τόκῳ… (*Causes and Symptoms of Chronic Diseases* 2.11)
>
> …[the membranes] at the neck [of the womb] on either side of the flanks, are especially sinewy and broad, like the sails of a ship. All of these give way, if the uterus moves outside [the body]. In this case, the prolapse usually turns fatal. For it happens because of abortion, great agitations, and violent birth[132]…

The movement of the uterus inside the body can lend itself to comparison (or assimilation) with an animal (discussed further below). Uterine mobility, in the case of prolapse, can also contribute to an association between the womb and a ship, which makes a certain amount of sense if we think about the organ 'traveling' outside the body. The analogy thus speaks to perceptions of the womb's hollowness (that can be filled), while its flexibility is embodied by sails, and the organ's mobility by a ship's capacity for

[131] Much has been written on this disease. See, for example, King 1993; Dasen and Ducaté-Paarmann 2006; Mattern 2014. Also see Flemming 2000, 211ff. on Aretaeus and the womb.

[132] The adjective βίαιος (βιαίῳ τόκῳ) carries the implication that the birth occurred in a forcible way, perhaps suggesting that the infant or placenta was pulled out in a fashion that led to prolapse.

travel. (Interestingly enough, Soranus lists storms at sea – because of their violence and the toll they take on the nerves – as one cause of uterine prolapse.[133])

We can extend the idea of gestation as travel to include the maternal experience of pregnancy. In Soranus' *Gynecology*, the nausea associated with pregnancy is likened to seasickness (*nautia*), aligning pregnancy with sea travel. To alleviate an upset stomach during pregnancy, Soranus suggests pregnant women modify their diet as if they were about to embark on a voyage:

> ἡ γὰρ οὐκ ἐπιτηδείως τῷ σώματι διδομένη τροφὴ φθείρεται, καὶ οὐ μόνον οὐ τρέφει, ἀλλὰ προσκακοῖ καθάπερ τὰ τέλεια τῶν σωμάτων οὕτως καὶ τὰ νεοπαγῆ σπέρματα· διόπερ ἀνατάσει χρηστέον. καὶ γὰρ οἱ πλέοντες, συστολῇ χρησάμενοι πρὸ μιᾶς ἡμέρας, τὴν ναυτίαν οὐχ ὑπομένουσιν, ἢ οὐκ ἐπὶ τοσοῦτον. (*Gyn*. 1.17.39–41 = Ilb. 1.49.2–3.)
>
> For food which is not suitably given to the body decomposes and not only does not nourish but, in addition, harms the recently congealed seed just as it does the adult body. One must, therefore, fast. For people on sea journeys, too, if they fast the day before, do not suffer from seasickness, or not to such an extent.[134]

A regimen to mitigate the nausea of a passenger on a ship is here applied to a pregnant woman, perhaps tapping into another set of metaphors that aligned sickness, more generally, with (aspects of) travel, a notion found in ancient literary sources and persisting in later traditions. For instance, we are instructed in Plutarch's treatise, *Advice About Keeping Well*, that if one is about to attend an extravagant feast, it is advisable to be especially moderate in eating and drinking beforehand, "and thus we should, as it were, in fair weather make our body trim and buoyant against the oncoming wind and

[133] *Gyn*. 2.1.133–35 = Ilb. 2.6.3; 4.6 = Ilb. 4.35.
[134] Adapted from Temkin, trans., 1991.

wave," that is, against illness brought on by excess.[135] The tenth-century Muslim physician Razi, Horden points out, also compares illness to travel: "The patient's strength is like a traveller's provisions," he writes. "Disease is the highway, and the culmination of the disease his destination."[136]

Artemidorus treats the relationship between birth and travel in a careful and multifaceted way in the *Oneirocritica*, an exhaustive handbook on dream interpretation.[137] To appreciate the work and its relevance, however, some basic information on the text and its author is necessary. Artemidorus' interpretative strategy blends analogical reasoning with contextual and empirical knowledge. There are two main types of predictive dreams (*oneiroi*), in his view, *theorēmatikoi* and *allēgorikoi*, "directly perceived" and "allegorical."[138] The former refers to dreams that directly present an impending event ("For example, someone who was sailing imagined that his ship was wrecked, and it occurred just as it was presented in sleep," 1.2)[139]; allegorical dreams, alternatively, are based on metaphorical relationships between unlike things, so one must use reasoning (*logismos*) to figure out what they predict.[140] There are certain signs that have particular, recognizable meanings, but precise significance is affected by aspects of the dreamer's biography and context (e.g., is the dreamer a slave, traveler, merchant,

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[135] Plut., *Mor*. 123e; trans., Babbit 1928.
[136] Horden 2006, 182–83, citing Iskandar 1967, 4.
[137] Artemidorus was probably a contemporary of Athenaeus (Bowersock 2004, 57). On dreams more generally, see Harris 2009.
[138] 1.2: Ἔτι τῶν ὀνείρων οἱ μέν εἰσι θεωρηματικοὶ οἱ δὲ ἀλληγορικοί. Harris-McCoy 2012; also see Harris-McCoy 2009, 85.
[139] All translation are drawn from Harris-McCoy 2012, unless noted otherwise.
[140] Artem. 2.25: "For in fact the interpretation of dreams is nothing other than the juxtaposition of similarities (ὁμοίου παράθεσις)." Metaphor theorists have pointed out the extent to which dreams draw on conceptual metaphors from everyday life. See, e.g., Kövecses 2002, 66–67.

pregnant, rich, poor?).[141] Furthermore, Artemidorus' interpretive strategy rests on a firm belief in the power of an empirical, textual tradition, for the interpreter to compare dreams about which he hears with those recorded and successfully interpreted by other trustworthy practitioners (from whom, with the benefit of hindsight, he might learn what a certain dream in fact predicted).[142] Artemidorus' combination of empiricism and analogical reasoning makes his text especially well-suited to the study at hand.

Artemidorus identified himself closely with his hometown in Asia Minor, Daldis, rather than the more cosmopolitan Ephesus. His local identity was clearly important to him – he emphasizes that Daldis provided him with nurture, θρεπτήρια, a term that might be used of nursing.[143] He does not appear to have been partial to overarching Roman power. Bowersock, among others, has argued that in the context of the Second Sophistic, Artemidorus viewed his contemporaries' pursuit of advancement through the Roman political system (in the form of equestrian or senatorial careers) "as fundamentally destructive to Greek identity."[144] This does not mean that Artemidorus eschewed travel, however, nor access to different parts of the empire where he might hone his skill and collect dreams. In the preface to book five, he describes traveling throughout the Roman empire, "For, in fact, by steadfastly collecting as many dreams as I was able [having found them] in the festivals in Greece and Asia and also Italy, I have

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[141] Artem. 1.9.
[142] In this last regard, Artemidorus' methods can be fruitfully compared to the medical sect known as the Empiricists. See Harris-McCoy 2012, 36ff.
[143] Artem. 3.99.
[144] Bowersock 2004, 58, cf. Harris-McCoy 2009, 102, who compares Artemidorus with Pausanias: "Both authors' esteem for local places and their antipathy toward or failure to acknowledge the overarching structure of Roman empire have been described as reflecting anti-imperial sentiment."

created this book for you," he writes to his son.[145] And while the dreams in the *Oneirocritica* are usually (but not always) reported without information on the ethnic background of the individual in question, he filters and analyzes dreams from a broad cross-section of society from across the empire's Mediterranean reach – male, female, rich, poor, slave, free. His views on travel point to a kind of cosmopolitanism that would not have been atypical in educated milieux during his lifetime, but are blended, in a unique way, with the strong emphasis he places on the local, on the place of birth.[146]

Harris-McCoy has highlighted the unique ways Artemidorus discusses travel, which seems to have special meaning for the author and carries a great deal of complex, symbolic weight.[147] If one reads carefully, however, Artemidorus' discussions of travel frequently turn to birth and, more generally, procreative and genealogical imagery.[148] The same is also true for birth dreams, which, in particular circumstances, are indicative of imminent home-coming. Take, for example, a dream discussed briefly in book five, which links birth, travel homeward (the means are unspecified), and financial gain:

> Ἔδοξέ τις ὑπὸ τῆς ἑαυτοῦ μητρὸς πάλιν τίκτεσθαι. ἀπὸ ξένης ἀνακομισθεὶς εἰς τὴν ἑαυτοῦ κατέλαβε τὴν μητέρα νοσοῦσαν καὶ ἐκληρονόμησε. τοῦτο ἦν τὸ ὑπ' αὐτῆς γεννᾶσθαι, τὸ ἐκ πενίας εἰς εὐπορίαν καταστῆναι ὑπὸ τῆς μητρός· καὶ γὰρ ἔτυχεν ἐν πολλῇ ἐνδείᾳ καὶ πενίᾳ ὤν. (5.46)
>
> A certain man dreamt that he had been given birth to once again by his own mother. Returning from a foreign country to his own land, he discovered that this mother was ill and was made her heir. His being born from her meant that he would depart from poverty into a state of wealth

[145] Artem. 5.praef.
[146] See Artem. 1.8, in which he discusses "common customs" (τὰ κοινὰ ἔθη, shared by all peoples, e.g., eating, drinking, being ruled, worshipping gods) and "ethnic customs" (τὰ δὲ ἴδια καὶ ἐθνικά, unique to particular groups, e.g., Syrians worship Astarte, Italians do not kill vultures).
[147] Harris-McCoy 2009.
[148] Cf. ibid.

through his mother. For in fact he happened to be in great need and poverty.[149]

Based on Artemidorus' exposition on birth dreams in book one, we learn that should someone traveling in a foreign land have a dream about his own birth (Εἴ τις δόξειε γεννᾶσθαι ὑπὸ γυναικὸς ἡστινοσοῦν), it "signifies a return home, so that he comes to his origin, just like a baby being born (ἵνα ἐπ' ἀρχὴν ἔλθῃ, ὡς καὶ τὸ γεννώμενον). <Or>, differently put, it signifies that he will come to his 'land', that is, his fatherland. For the earth is the common fatherland of all alike (κοινὴ γὰρ ἅπασιν ἐπίσης ἐστὶν ἡ γῆ πατρίς)" (1.13).[150] Birth and birth-related imagery are thus linked, in a sense, to the concept of homecoming, *nostos*.[151] The land is associated with one's parentage, just as one's navel, which once bound us to our mothers, can signify one's place of birth.[152]

Sea travel without an endpoint signifies loss – the lack of a safe harbor. Take this striking example from book five of the *Oneirocritica*, which centers on infant mortality:

> Ἔδοξε γυνὴ τέκνων γλιχομένη δίφρους ὁρᾶν λοχείους [οἷς πρὸς τὸ τεκεῖν χρῶνται αἱ γυναῖκες] ἑπτὰ τῇ θαλάσσῃ ἐπιπλέοντας. κυεῖν μὲν αὐτῇ συνέβη, μήτηρ δὲ οὐκ ἐγένετο, ἀλλ' οἱ ἑπτὰ οὓς ἔτεκε παῖδες ἀπέθανον πρὸ ὥρας ἔτι ἐν σπαργάνοις. (5.73)
>
> A woman who longed for children dreamt that she saw seven birthing stools [which women use in childbirth] sailing about on the sea. The result was that she conceived but did not become a mother. Rather, the seven children that she bore died before their time, still in their swaddling clothes.[153]

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[149] Adapted from Harris-McCoy, trans., 2012.
[150] For an individual at home, planning to depart on a trip, this same dream signifies that s/he will be hindered from travel (Artem. 1.13)
[151] Cf. Artem. 4.20: "Any dreams that signify the birth of children or marriage also bring back children who are travelling abroad and an estranged wife [and children]. A certain man imagined that he ploughed and sowed wheat, and <his> children returned to him as did his wife, who was dwelling apart from him."
[152] This notion is articulated explicitly at Artem. 1.43.
[153] Adapted from Harris-McCoy, trans., 2012.

Each stool has become a ship of sorts, symbolizing a birth or particular infant. They all "sail about" (ἐπιπλέοντας) on the sea. What appears to be significant is that none of the birthing stools return to shore, they are simply seen moving about on the water. In essence, the children never really made it onto dry land, which, in turn, symbolizes safety, unlike the sea and maritime travel, which often point to danger because of their unpredictability.[154]

Birth and children are also associated with financial gain and loss in Artemidorus' dreamworld, as was implied in the dream about the man who returned home to his mother's inheritance. For parents, alternatively, dreams about children and the birth of children can signify financial loss – especially girls, because they will require a dowry: "And I know of a certain person who imagined that a baby daughter was born to him," Artemidorus recalls, "and he went into debt" (1.15). The financial toll of having children is a persistent theme, they are like little debtors, since they take so long to mature, need constant nurture, and may die young without repayment, as it were. In this context, one might say that children are a *risky investment*.

Artemidorus explicitly articulates the connection between children and debt in a passage on etymological and riddling dreams (4.80). A man from Alexandria, who wished to have children, dreamt that he encountered a debtor whom he released from debt. Alexandrian dream interpreters (presumably the dreamer in this story was Alexandrian) were stumped by the dream, so the man prayed to Serapis to reveal its significance. The god soon visited him a dream and explained the meaning, simply reporting, "You will not have any children." Artemidorus explains the logic of Serapis'

[154] Cf. Harris-McCoy 2009, 91.

interpretation of the debt dream: "For, after granting a quittance [on the debt], one does not receive any 'interest' (*tokos*), and a child, when born, is called a *tokos* (τόκος δὲ καλεῖται ὁ γεννώμενος παῖς)."[155] In short, the dreamer will not have any children, just as he no longer will receive interest on the debt in the dream. Aulus Gellius, quoting Varro, draws attention to a similar etymology in Latin, noting that the Latin word for interest is *faenus*, derived from *fetus* (offspring) and from *fetura* (birth), that is, "from money giving birth and increasing" (*pecuniae parientis atque increscentis*).[156] The Latin *faenus-fetus* relationship is a bit more obscure than its Greek analog, perhaps pointing to the former's status as more of a dead metaphor.

Artemidorus also associates the sea with unruliness, as well as deceit. It is auspicious for a traveler to dream of walking *near* the sea, "for the dream foretells stalwart protection against danger" (πολλὴν γὰρ ἀσφάλειαν προαγορεύει τὸ ὄναρ; 3.16), since the individual is not actually traveling *by sea*.[157] This dream is auspicious for slaves and men about to marry, "For the former will rule over his master and the latter his wife. For in fact the sea is like a master due to its power (διὰ τὸ δυνατὸν) and like a wife due to its wetness (γυναικὶ διὰ τὸ ὑγρόν)." Furthermore, for a young man, the dream signifies his future lust for courtesans (*hetairai*), and for a woman, that she will "live the life of a courtesan." The sea is like a *hetaira* because it may initially seem gentle

[155] This wordplay also appears in Aristoph., *Thesm*. 840ff.
[156] Gell. 16.7–8. This set of associations is also evoked by the Latin word *repraesentare*, which can be used in the sense of "bring on conceptions in women" (*conceptus mulieribus repraesentat*, Plin., *HN* 31.10), that is, "to give immediate effect to" (Ker 2007, 347–48, parsing the use of *repraesentari* at Cic., *Phil*. 2.118). The term can also be used to mean "to pay (a sum) in ready money," again suggesting metaphorical proximity of yielding up a child at birth – as something hidden suddenly made manifest – and payment (ibid.).
[157] He articulates elsewhere that the sea is dangerous, and the traveler is safer on land; e.g., Artem. 2.38.

but is in fact callous. The sea also lacks discipline (ἀταξία), Artemidorus explains, like a crowd, to be mastered by a politician or demagogue. As a symbol, the sea seems to combine a set of qualities that, to a certain extent, codes female: its wetness and duplicity are associated with two different types of women, whores and wives, as well as the unruliness of a crowd (ὄχλος).[158] It has the kind of coercive power possessed by a slave master, whose authority a slave might seek to subvert. In essence, it represents a set of dangerous, oppressive, and unpredictable forces.

The comparison of a woman with the sea is a very old one. In a famous misogynistic poem, the Greek archaic poet Semonides describes many types of women (poem 7). At one point, he dwells on "the woman of the sea" who is changeable and unpredictable. One day she is docile and loving, and the next, wild and unapproachable, just as "the sea sometimes stands motionless and harmless, a delight to those who sail in summertime, but sometimes rages wild with thunderous swell rampaging to and fro."[159] We might detect echoes of this kind of characterization in Artemidorus' discussion of sea dreams, or at least, of a persistent cultural trope that linked the unpredictability of women to the perils of sea travel.

We can contrast this negative characterization of the sea with the more positive valuation of dreams regarding rivers, marshes, and water nymphs, who are, among other things, "good for the creation of children (ἀγαθοὶ πρὸς παίδων γονήν)."[160] Wells, too, as long as they do not overflow, portend domestic stability, in particular, a wife and surviving children (2.27). Seneca reports (but critiques) the notion that the waters of the

[158] Pomeroy 1995 would emphasize the typology here (whores and wives).
[159] Trans., West 1999.
[160] Artem. 2.38.

Nile can cure a woman of sterility (*Q. Nat.* 3.25.11), a notion that likely hinged on the fertilizing power of the Nile's yearly flooding for vegetal growth.

What we know about the mythology surround the water nymph Egeria accords with this picture. Festus reports that she was the object of worship by pregnant Roman woman who sacrificed to her (*sacrificabant praegnantes*) "because they thought that she gently led (*egere*) offspring from the womb" (67L); indeed, she was not only associated with springs, but with the sanctuary of Diana of Aricia at lake Nemi.[161] The notion that fresh, clean water is beneficial for pregnancy and birth makes sense considering its association with suitable nutriment for the growth of vegetal life, as discussed in the previous section. Plutarch describes milk flowing from women's breasts as a spring (κρουνός) and Soranus compares fetal nutriment and breast milk to water flowing from the earth, cautioning his readers to monitor and regulate the regimen of pregnant women and wet nurses, "just as water which flows through worthless soil is itself rendered worthless, spoiled by the qualities of its basin."[162]

We get hints in some medical sources that the womb itself could be imagined as a waterscape. In *On the Usefulness of Parts*, Galen mocks (an unspecified group of) people who believe that fetuses are made lighter for their mothers to carry during pregnancy because they are floating in liquid, just as we feel lighter when swimming or suspended in water. Galen scoffs that they think the fetus "swims" inside the uterus. "Those people are totally ridiculous who say that the fetus becomes lighter (κουφότερόν) for the

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[161] *Egeria nymphae: sacrificabant praegnantes, quod eam putabant facile conceptum alvo egere*. Egeria was a water nymph, worshipped with Diana of Aricia outside Rome (Verg., *Aen.* 7.763–4, Ov., *Fast.* 3.261, Strabo 5.3.12; *EAH* s.v. Egeria). She was also supposedly worshipped with the Camenae outside the Porta Capena in Rome (Juv., *Sat.* 3.17). See Green 2007, 230–31.

[162] Plut., *Mor.* 496a; Sor., *Gyn.* 2.8.21–25 = Ilb. 2.19.4.

pregnant woman because it swims (τὸ ἔμβρυον ἐννῆχον) in the fluid inside the *amnion*, not realizing that the fluid itself is also carried by that woman."[163] Rather than making the load lighter, in short, the pregnant woman must also carry the liquid in which the fetus is suspended. This moisture, Galen explains, exists ultimately to lubricate and ease the passage of the child through birth canal once the surrounding membranes have been broken.[164]

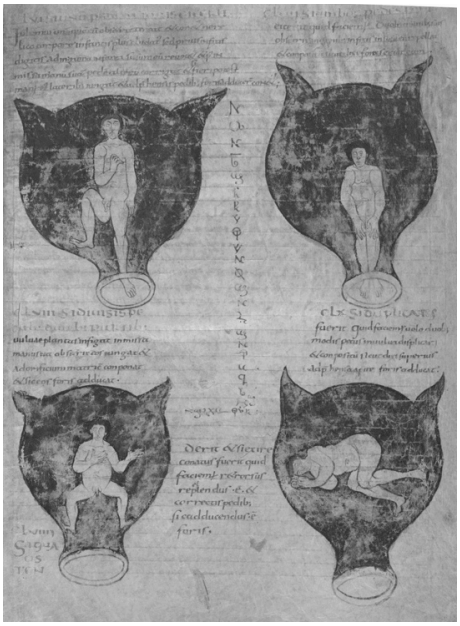

Figure 2.3: Fetuses in utero, manuscript of Mustio's *Gynaecia*, c. 900 CE.

While Galen might mock individuals who believe this fetal swimming hypothesis, we must remember that he is recording the views of his adversaries. There were people

[163] Gal., *UP* 15.5 = 2.354.10–14 Helmreich = 4.234K: ὅσοι δ' αὐτῇ τῇ κυούσῃ κουφότερόν φασι γίγνεσθαι τὸ ἔμβρυον ἐννῆχον τῷ κατὰ τὸν ἀμνεῖον ὑγρῷ γελοῖοι παντάπασιν ὑπάρχουσιν, οὐκ ἐννοοῦντες, ὅτι καὶ αὐτὸ τὸ ὑγρὸν ὑπ' ἐκείνης βαστάζεται.

[164] Gal., *UP* 15.5 = 2.354.10–14 Helmreich = 4.234K: προσέρχεται δὲ καὶ ἄλλη τις χρεία τοῖς ὑγροῖς τοῖσδε κοινὴ κατὰ τὴν ἀποκύησιν τοῦ ζῴου γιγνομένη, <τὸ> ῥᾷον ἐκπίπτειν τοῦ τῆς μήτρας αὐχένος τὸ κυούμενον ὑγρότητι πολλῇ τεγγόμενον ῥηγνυμένων ἐξ ἀνάγκης τηνικαῦτα τῶν ὑμένων.

for whom this idea was probably convincing, otherwise it is perhaps unlikely that he would make the effort of recapitulation. There is no doubt that we have much to gain from examining notions *rejected* in medical sources, given our knowledge of the intensely competitive marketplace of ideas in which authors such as Galen and Soranus circulated.

Looking to illustrated manuscripts of later Latin gynecological texts, depictions of fetal life – in particular, malpresentation at birth – are deeply evocative of the idea of a fetus 'floating' or 'swimming' in the uterus.[165] The images in fig. 2.3 come from a ninth-century manuscript of Muscio's *Gynaecia*, a Latin text, heavily dependent on Soranus' *Gynecology*, that was quite popular in the medieval period.[166] In the illustration, we see four possible positions leading to difficult birth. In the schematic images, the fetuses are depicted as tiny adult-like male figures, with a full head of hair, suspended (or perhaps in motion, seeking an exit) within large, vase-like wombs. Fig. 2.3 is from the earliest such manuscript, so it is difficult to say how long this type of illustration appeared in medical treatises of this sort or if similar images might have appeared in copies of Soranus' *Gynecology* as it circulated in antiquity. Likewise, the precise strategy used for creating these diagrams is up for debate.[167] Is it certain, however, that by the second century CE, illustrated herbals were published with illustrations on papyri, and it is quite possible that monochromatic diagrams appeared in manuscripts with far more frequency than has been

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[165] On the topic of Soranian adaptations, see below, p. 175.
[166] Hanson and Green 1994.
[167] Cf. Bolton 2015, 67ff.; Green 2015; Weitzmann 1970. The topic of diagrams in texts from the Greco-Roman world is understudied (for the obvious reason that we possess very few manuscripts/papyri from classical antiquity). It is possible the womb-space was drawn first and the fetuses filled in later, perhaps accounting for the 'floating' appearance that is so intriguing. I am indebted to Ann Hanson and Colin Webster for their insight on these matters.

generally believed.[168] To return to the matter at hand, images such as those in fig. 2.3 offer a visualization of fetal life well suited to the notion that a fetus 'swims' or 'floats' in a fluid-filled cavity. The schematic illustrations abstract the woman carrying the fetus – she disappears, her body becoming more of a cavity than defined human form.

The *Oneirocritica* portrays the uterus as a fluid-filled cavity, where a creature might swim or float. This imagery emerges from a dream in which a woman imagines giving birth to a fish:

> καὶ ἢν γυνὴ ἐν γαστρὶ ἔχουσα ἰχθὺν ὑπολάβῃ τεκεῖν, ὡς μὲν οἱ παλαιοὶ λέγουσιν, ἄφωνον γεννήσει, ὡς δὲ ἐγὼ ἐτήρησα, ὀλιγοχρόνιον. πολλαὶ δὲ καὶ νεκρὰ ἔτεκον· ἔξω γὰρ τοῦ περιέχοντος γενόμενος πᾶς ἰχθὺς ἀποθνήσκει. (2.18)
>
> And should a woman suppose that she has a fish in her womb and gives birth to a fish, as the old-timers say, she will give birth to a mute child; but, as I have often observed, to one who will live for just a short period of time. And many women have also given birth to stillborn babies. For every fish dies when it departs from that which encompasses it.

The child will be mute, like fish who make no sound with their mouths, and will die quickly, as it has been removed from the only environment in which it can thrive. The womb is imagined as a hidden, aquatic environment in this dream, an unseen watery recess. Here, the uterus, as an aquatic environment, invokes a particular set of risks – first, the possibility of giving birth to a child lacking the particular human quality of speech, and second, that it will not be able to thrive outside its mother's body, a fish out of water.

The notion of a woman giving birth to a fish brings us to a final set of associations that link the uterus with waterscapes. There is a great deal of evidence that aspects of uterine anatomy and gestation were understood through one sea creature in particular –

[168] Hanson and Green 1994, 1024.

the octopus. As we saw in Aretaeus, the uterus could be imagined as animal-like. There is a long history, going back to Plato's *Timaeus*, of describing the uterus *as* or *like* an animal living inside the female body – raising all sorts of interesting question about anatomy and sexual difference. This is related to the concept of the "wandering womb," a popular, though controversial, concept throughout antiquity and beyond. This is the idea that the uterus is not tethered in place, but can move around the body. The octopus' changeability evokes the womb in childbirth, its capacity to expand and contract. The animal's aquatic habitat is evoked by the fluids that are a big part childbirth: amniotic fluid, blood, lochia.

The octopus features in medical descriptions of conception. In Galen's treatise *On Semen*, he describes the process: after semen enters the uterus, the uterus contracts around it, seizing it. As the semen begins to grow, the uterus grabs onto it, using what are called *cotyledons* (κοτυληδόνες). These are special suckers that many doctors thought were on the surface of the uterus (an idea that probably came from observing animal uteri). The Greek word cotyledon, used for these uterine structures, was also used to describe the suckers on an octopus' tentacles. Galen compares these two types of cotyledons:

> ἔχει μὲν γὰρ ἐπιθυμίαν ἅπαντα αὐτῆς τὰ μόρια περιπτύσσεσθαι τῷ σπέρματι, δύναται δ' οὐδέπω τοῦτο ποιεῖν ἀπέχοντα πλέον ἢ ὡς ψαύειν αὐτοῦ. ἀλλὰ καὶ ἐν πολλαῖς ἡμέραις, ἅμα μὲν αὐξανομένου τοῦ σπέρματος, ἅμα δὲ καὶ τῆς μήτρας ἀεὶ καὶ μᾶλλον ἑαυτὴν περιστελλούσης, ἄλλοτε ἄλλο μόριον αὐτῆς ἐπιδράσσεται τοῦ σπέρματος. ἅτε δὲ ὄντος ἔτι μαλακοῦ τοῦ περιέχοντος ὑμένος αὐτὸ καὶ τῶν ἀγγείων ἀνεστομωμένων ἀντιλαμβάνεται δι' αὐτῶν ἡ μήτρα τοῦ ὑμένος, ὥσπερ οἱ πολύποδες, ὧν ἂν ψαύσωσι ταῖς κοτυληδόσι. οὕτω γάρ ἐστι τὰ στόματα τῶν ἀγγείων ὅμοια ταῖς τῶν πολυπόδων κοτυληδόσιν, ὥστε οὐδὲ ὀνομάζουσιν ἄλλως αὐτά.

> For all the parts of the uterus have a desire to wrap themselves around the semen, but they are not yet able to do this, as they are too far removed to touch it. But within not many days, as the semen grows and at the same time the uterus ever more contracts, now one, now another part of it lays hold of the semen. And since the membrane enclosing it is still soft and the vessels are open-mouthed, through them the uterus seizes the membrane, as an octopus seizes what it touches with its suckers (*kotylēdones*). For the mouths of the vessels [on the uterus] are so similar to the suckers of the octopus that they do not differ even in name. (Gal., *On Semen* 1.7.8–12 = *CMG* 5.3.1, p. 88.3–11 = 4.537K; trans., De Lacy 1992)

The octopus and the uterus are *so similar* that the analogy almost collapses.

The form and function of uterine cotyledons were part of a broader confusion about uterine anatomy and fetal nourishment, in which various other ambiguous anatomical terms are implicated, including uterine *plektanai* (tentacles) and *keraiai* (horns, antennae), which again connect the uterus to the octopus and to sea creatures more generally.[169] First, there was debate about the location and shape of the cotyledons, whether they are on the inside or outside of the uterus. Second, their role in fetal nourishment differs across sources. Various medical writers (and philosophers) were at odds over the means by which fetuses are nourished. Some seem to have thought fetuses suckled nipple-like appendages in utero, either for nourishment or to practice nursing in preparation for life after birth. The more dominant view insisted they receive nourishment some other way (e.g., through the umbilical cord). The cotyledons are central in these debates, particularly regarding the passage of vital substances from mother to fetus.

The idea that the uterus was not stationary in a woman's body, that it 'wandered,' also made the octopus good for comparative purposes. The popularity of the "mobile

[169] E.g., Aristotle uses *keraiai* for the antennae of crustaceans, as in *Hist. An.* 526a6.

womb" concept makes uterine prolapse an especially interesting case. Women who give birth multiple times are more prone to prolapse, which occurs when the pelvic floor is weakened and the ligaments loosen that hold the uterus in place – so the organ actually *moves* in a way that can be visible externally. In a way, it is the only known medical condition in which the womb actually *wanders*.[170] Soranus remarks that a prolapsed uterus is recognizable by its similarity to the "head of an octopus."[171]



Figure 2.4a–b: Hematite amulet (CBd-758), third century CE.



Figure 2.5a–b: Red jasper amulet (CBd-759), third century CE.

The octopus was also linked to menstruation and fertility in Greek medicine. Octopus (and squid) were provided as offerings that were consumed during the Greek festival called the Amphidromia, a ceremony and celebration just after the birth of a child, analogous to the Roman *dies lustricus*.[172] The animal generated a lot of interest in Greco-Roman culture, appearing in a wide range of iconographic contexts; when we look

[170] Cf. King 1998, 33–35. She suggests the connection between prolapse and the "wandering womb" – also noting that uteri of farm animals are very prone to prolapse.
[171] …γνωρίζεται δὲ ἐκ τοῦ τρυφεροῦ προπῖπτον τὸ σύγκριμα ὅμοιον κεφαλῇ πολύποδος, ὡς Ἡρόφιλος ἔλεγεν, πόρον ἔχον ὡς παραδέξασθαι διπύρηνον… ("It is recognized by the softness, the prolapsing body being similar to the head of an octopus, as Herophilus said, and having a duct which will admit a probe…" *Gyn*. 4.6.39–42 = IIb. 4.36). Also see *Gyn*. 1.4.67–72 = IIb. 1.10.3: he compares the cervix of virgins and women who have given birth: the former is spongy, the latter, calloused "like the head of an octopus (ὡς κεφαλὴ πολύποδος)."
[172] Hamilton 1984. Also see Dasen 2005, 576.

to iconographic depictions of the animal, however, it is never a nurturing figure. The creature is often rendered as a menacing, powerful force in its habitat, with strong, grasping tentacles.

In the most explicit, physical terms, a small set of amulets suggests that the octopus and the uterus are two sides of the same coin. Two amulets (figs. 2.4–5) feature images of women in labor on the obverse (figs. 2.4a, 2.5a) and octopus-like symbols on the reverse (fig. 2.4b, 2.5b).[173] These amulets are classed with a large group known as 'uterine' amulets, which were popular throughout the Hellenistic and Roman periods.[174] As their name implies, they feature images of a uterus, often pictured as an upside-down pot or jar, usually with a key, symbolizing the 'unlocking' of the womb, probably for regulation of the flow of liquid (especially menstrual blood) as well as opening and closing of it for childbirth.[175] Figure 2.4a features one such depiction of the uterus, beneath a squatting woman. A seven-bitted key, so typical of these amulets, is pictured beneath the discoid uterus. The amulets were meant to protect and/or heal the female body – they are essentially risk-management devices – and are the closest we can get to an intimate form of self-care. Women probably wore them on their persons, carried them in pouches, or sewed them into their clothing.[176] If this is indeed true, women were carrying a disembodied image of an internal organ on the exterior of their bodies,

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[173] These amulets are examined by Dasen 2015, 72–77. On the squatting pose on amulets, see ibid., 87–108. Both depictions show the women sitting on birthing chairs, which is precisely what we would expect based on descriptions of the birth process (e.g., Sor., *Gyn*. 2.1.18–59 = Ilb. 2.3). Another well-known image of a birthing chair is to be found on Scribonia's tomb (fig. 1.2), discussed in chapter one.

[174] Unfortunately, the vast majority of these amulets are unprovenanced, including the two discussed here. For a more general discussion of uterine amulets, see chapter four.

[175] Hanson 2004; 1995b. Also see Dasen 2015, 68–72. Keys were provided as thanks offerings for easy delivery (Bettini 2013, 263).

[176] Hanson 1995b, 287–90.

collapsing precisely the boundaries that separate inside from outside.

The octopus or octopus-like uterus (figs. 2.4b, 2.5b) was first identified as such by Bonner, and with some contestation, remains the most widely accepted interpretation, most recently elaborated by Dasen.[177] I have identified sixteen amulets with this feature (although one may be a forgery).[178] The two amulets pictured here show a number of typical features: the Ouroboros, typical *voces magicae* related to womb-protection, an invocation of Orōriouth (god of the womb) and Aphrodite (Arōriphrasis, fig. 2.5a; probably in reference to sex and fertility), and vowel series. The letters *KKK* (the 'colic formula') and scarab (fig. 2.5b) likely refer to the stomach, which is often elided with the uterus.[179] On a number of amulets, this octopus-like symbol appears along with the Egyptian god Khnoum, the 'fashioner of children.'[180] Indeed, the vast majority of amulets

[177] Bonner 1950, 90–93. He connects the octopus-like uterus to the Byzantine symbol of the Medusa head, of course, surrounded by snakes, and traces the whole complex of ideas to the concept of the animal-like womb (cf. Dasen 2015, 77–81, connecting it to the gorgon). Also see Michel, who calls these gems "Uterus in Oktopusform" (Michel 2001b, 264, no. 387), Marino 2010, 152–58, and Dasen 2015, 72–77, contra Barb 1952, 202, who interprets the octopus symbol as a solar sign.

[178] Beside the extensive study by Dasen 2015, 26–108, Marino's dissertation is the most in-depth study on uterine amulets (specifically) to date. Building on these studies, fifteen amulets with the octopus motif can be firmly identified: Bonner 1950, 84, 275, no. 140, pl. VI; CBd-225; CBd-747; CBd-748; CBd-758; CBd-759; CBd-1054; CBd-1347; CBd-2213; CBd-2295; Delatte 1914, 80; Delatte and Derchain 1964, 256, no. 360, no. 361; Michel 2004, 357, pl. 71.2; Wright 1964, pl. XLII. An additional possibility is Michel 2001a, 75, no. 77, pl. 13, but it may be a forgery, so I have excluded it out of caution.

[179] The Ouroboros is an Egyptian symbol that depicts a snake swallowing its own tail; it often appears on uterine amulets as a border surrounding the uterine symbol. It probably signifies protection from hostile forces (Ritner 1984, 219–20). On 'colic characters,' see Michel 2001b, 246–250, no. 398–394 ("Krämpfe und Kolik"). On the conflation of stomach and uterus, see King 1998, 24–29; Dasen 2015, 50–51. The octopus may be identified with the abdominal pain associated with labor, an argument advanced by Marino 2010, 157.

[180] On Khnoum in gems and temple reliefs, see Dasen 2015, 64–65, fig. 2.6, 2.7; 130, fig. 4.9. Also see Aubert 1989, 442, n. 42.

bearing this octopus-like symbol are linked with birth and generation in some way.[181]

Turning to the larger sample of amulets with this octopus-like feature, several details demand attention. The interpretation of the symbol as an octopus should make us attentive to the number of 'legs' depicted on the amulet. In figs. 2.4b and 2.5b, respectively, one displays a six-legged creature and the other a seven-legged version. From a semantic perspective, the Greek term *polypous* refers to a "*many* legged" creature rather than one with specifically eight. This view is borne out by literary accounts that foreground the animal's ability to grasp prey with many supple tentacles (as discussed above), and in visual culture it is not difficult to find iconographic depictions – from archaic Greece through late antiquity – in which the octopus has a variable number of tentacles.[182] Perhaps the variable number of tentacles suggests a perception of the animal's (and organ's) polymorphy.

Let us turn to the symbol's connection with more traditional vessel-like depictions of the uterus and key (as seen in fig. 2.4a) – depictions that provide some of our most

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[181] Of the fifteen amulets with the octopus motif, twelve (80%) possess other features that are linked with procreation in some way (cf. Marino 2010, 157–58). We should be cautious about these numbers, though, first, because of the small sample size, and second, because other amulets with the octopus motif may well be undocumented in private collections.

[182] From a representative sample, a number of depictions feature non-eight-legged octopuses. E.g., a Roman era opus tesserata mosaic from North Africa (Musée du Louvre, 3Pe.010) showing Neptune and Amphitrite riding in a quadriga above a marine scene, a small three-legged octopus floats among fish and nude fishermen at the bottom of the image. The octopus is popular on coinage, and the obverse of a silver coin from Tarentum (500–400 BCE) features a dolphin-rider holding a six-legged octopus (London, British Museum 1846,0910.53). A mosaic floor from the Isthmian baths (c. mid-second century CE; see Packard 1980, 344) contains a marine scene with a seven-legged octopus (ibid., pl. 99). For the traditionally eight-legged octopus, one may point to depictions on coins, mosaics, painted pottery, and in wall paintings. A range of Syracusan coins picture an eight-legged octopus on the reverse (e.g., London, British Museum 1866,1201.594 and 1949,0411.181, c. 345–317 BCE). Aristotle observes this uniformity (*Hist. An.* 523b27–28).

concrete and intriguing visual evidence for popular views of the womb in antiquity. Of the eleven amulets with the octopus motif that I can analyze with certainty, nine also feature a traditional uterine vessel with a key, which always appears on the opposite side of the gem.[183] Out of these nine, four have uterine keys with the same number of bits as octopus legs. In Figure 2.4a, the uterus symbol with the key combines to look like a disc with projecting lines out of it, and the bits of the key almost look as if they were projecting out of the uterus itself, which is quite common in uterine amulets. Essentially, there is a parallel between the number of bits on the key and legs on the octopus, tightening their symbolic relationship. Furthermore, the uterine key often has seven bits, and from our sample, this is also true of the octopus' 'legs' (six of the nine amulets have a seven-legged octopus symbol).[184] It appears that the two symbols are connected, suggesting different functions of the uterus or female body.

The association of the octopus symbol and the more traditional uterine key is especially suggestive, as the key symbolizes unlocking the womb for birth or the release of menstrual blood, as well as closing it tight to hold onto semen or a growing fetus. It participates in the regulation of the flow of vital fluids, marking but also blurring the boundary between interior and exterior of the body. These very fluids – amniotic fluid, blood, lochia – likewise evoke the octopus' aquatic habitat. Childbirth, moreover, is the

[183] CBd-225; CBd-747; CBd-748; CBd-758; CBd-1054; CBd-1347; CBd-2295; Bonner 1950, 84, 275, #140, pl. VI; Michel 2004, 357, pl. 71.2. I limit myself to these nine because some amulets suffer from damage (Wright 1964, pl. XLII), are poorly photographed (Delatte and Derchain 1964, 256, #360–1), or a photograph is currently unavailable (Delatte 1914, 80).

[184] Dasen 2015, 72 also observes this parallel. Two amulets have an eight-legged octopus symbol, only one of which is accompanied by the traditional picture of the uterine vessel: CBd-2295 has both uterine vessel with seven-bitted key and the eight-legged octopus symbol on the reverse; CBd-2213 has no traditional uterine symbol, only the octopus.

moment when a crucial boundary is crossed. A child emerges from the body's interior, and its condition reveals information about its uterine environment. The octopus is an archetypal boundary-crosser, and in the context of this amuletic iconography, it is associated with the boundary separating the unseen and seen, interior and exterior, a notion dramatized by the amulet itself, which bears an isolated image of an organ to be worn on the body's exterior.

The notion of the octopus' changeability evokes the womb in childbirth, the very process depicted on these two amulets – the organ's tremendous capacity to expand and contract. No other part of the body is capable of the sort of temporary shape-shifting the uterus undergoes during pregnancy and birth, especially one that is so visible externally. Finally, embryological development is also a process of transformation, and transformation is a hallmark of the octopus' identity. Analogizing the octopus to the uterus, as suggested on these amulets, was one way of pinning down – and visually evoking – the instability of the organ.

Perhaps part of the power of these amulets to protect or heal the female body – before, during, or after birth – stemmed from the amulets' evocation of this instability, which both generates life and puts it at risk. The protection provided by these amulets is, in a sense, based in allopathic reasoning (not unlike the logic behind *Drekapoteke*). The dangerous qualities of the birth process – and the uterus in particular – are diminished by an image of the organ itself. By shrinking down the image to a size smaller than a pencil eraser, the organ and process became easier to manage. It is no surprise that women wanted protection during childbirth, and these amulets provided one intimate way they could protect their bodies and their offspring during a precarious time. The direct

juxtaposition of childbirth and the octopus-like symbol speaks to a set of assumptions about birth and the uterus' potentially nefarious, uncontrollable, shape-shifting qualities; the amulets evoke the unruliness of the organ and probably birth itself. It is precisely these aspects the amulet is meant to control.

From female anatomy to dream interpretation to uterine amulets, the aquatic world plays an important role in conceptualizations of the generative process. The female body was lined with springs, pools, rivers, and seas, each with their own set of dynamics. The uterus was sometimes imagined as a waterscape unto itself, other times, the body became a waterscape, and the uterus a creature dwelling within it. As I have shown, women's bodies were both more like a *landscape* (in their capacity for generation) and more like a *waterscape* (in their unruliness and wetness) than male bodies. These characterizations are complementary and contradictory but, I would suggest, makes a certain amount of sense given the diversity, fragmentation, and variability of Mediterranean ecology.[185] The power of the waterscape, in particular, in large part derives from its conceptual potential as a locus of hiddenness, danger, but also wealth and nurturance. In terms of birth and its risks, the octopus was valuable to 'think with' in part because it was a boundary-crossing animal, both fish and not fish, associated with the space where the water meets the shore. The place where water meets the land, the boundary space, is highly evocative as a zone for contemplating birth itself – as a transition from interior to exterior, wet to dry, darkness to light.

[185] Cf. Horden and Purcell 2000, 175ff., with the caveats of Harris 2006, especially 1–36.

III. Fortuna: Cornucopia and Rudder

The foregoing sections have examined a range of discursive strategies for imagining female anatomy, physiology, gestation, and birth, which helped people explain and control perceived threats. The earth-woman analogies and metaphors provide a familiar structure for imagining fetal growth and nourishment, as well as a model for shoring up the procreative capacities of women. A loosely connected set of metaphors tie generation and birth to seafaring imagery, suggesting danger and the unknown, as well as the themes of travel, and relatedly, economic gain and loss. Both the landscape and waterscape metaphors/analogies – and attendant practices – illustrate the generative fluid economy, and they show us two important ways people drew on perceptions of their environment (and the opportunities and dangers it presented) to map the unknown interior of the female body and the processes unfolding within it. In their separate ways, these metaphors provided a *discursive and practical toolkit* for thinking about gain, loss, nurturance, and danger in the fraught context of childbirth.



Figure 2.6a–b: Fortuna Relief from Horti Lamiani, first century CE, Rome.

The interconnection of these metaphorical and analogical figurations – and their linkage with generation – starkly emerges through the figure of Fortuna, a Roman deity who was the personification of fortune, luck, chance.[186] In one of her most common manifestations under the empire, she combines precisely the set of associations addressed in this chapter. In fig. 2.6, pictured on a statue base in high relief, the goddess is holding a cornucopia in one hand – the symbol of fertility, prosperity, and abundance – and a ship's rudder in the other, a sign that she 'steers' events in human life, while also suggesting the precariousness of sea travel and commerce.[187] Fortuna's highly symbolic accessories juxtapose the landscape and waterscape as sources of potential gain and loss.

Fortuna is a goddess of *good* luck, but her identity also suggests the possibility of a reversal of fortunes – or *risk*. She is closely linked to her Greek counterpart, Tyche, who also appears with similar accouterments in the Hellenistic period and was important to Hellenistic kings. Fortuna was first adopted by late Republican dynasts, beginning with Sulla, in particular, then Pompey and Caesar, as a way to celebrate their success and divine favor (especially in military conquest), blending Hellenistic ideas and the notion of a benevolent *Fortuna populi Romani/rei publicae* underwriting Roman imperial power. Sulla's self-fashioning as *felix* was intimately tied to his adoption of *Fortuna*.[188] "From

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[186] A good deal has been written on the god/concept, including Arya 2002; Champeaux 1982; Kajanto 1981; Lichocka 1997; Matthews 2011.

[187] On this statue base, see Lichocka 1997, 141–2 (no. 395). On the lateral sides, two crossed cornucopiae are also pictured between a caduceus, a symbol of *pax*, probably pointing to the relationship between Fortuna's favor and political stability. This is a major theme in Plutarch's treatise *De Fortuna Romanorum*. N.B.: Fortuna with the rudder was especially popular in maritime cities, such as Ostia, and was also associated with the grain supply (Arya 2002, 77; Matthews 2011, 222, also notes that *fortuna* was seen to be involved in protecting Rome's grain supply in our numismatic evidence).

[188] See Thein 2002, 15–16, 23ff., who emphasizes Sulla's focus on *eutychia* and *felicitas*, modeled both on Hellenistic precedents and P. Cornelius Scipio Africanus, as well as

the increasing public association between the late-Republican dynasts and the benevolent quality of *fortuna*," Noreña observes, "it was a short step to the autocratic monopolization of this concept under Augustus."[189]

While Fortuna has many identities and manifestations, highlighting different qualities (both good and bad), she was undoubtedly associated with generation and especially birth.[190] The oldest epigraphic dedication (third century BCE) to her in Italy, from the town of Praeneste, where there was a famous sanctuary to Fortuna Primigenia, features a woman named Orcevia thanking her for a safe birth (*nationu(s) cratia*).[191] Fortuna Primigenia was a kourotrophic goddess, named, Cicero informs us, from "birthing" (*a gignendo*, *Leg*. 2.28). In Champeaux's view, she was "all-powerful in the domain of birth, labor, and the fragile life of the newborn."[192]

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twinned *fortuna* and *virtus*, guiding his military victories. On *fortuna* and Sulla Felix, see Kajanto 1981, 522–24.

[189] Noreña 2011, 138; on Fortuna, see ibid., 136ff.; Arya 2002, 78–79; the obverse of Caesar's *qiunarius*, minted by P. Sepullius Macer (*RRC* 480/25), bears the first image of Fortuna with rudder and cornucopia that emerges in evidence from the Latin west.

[190] See Noreña 2011, 139ff., on the many manifestations of the goddess in literature and iconography. A statue of a seated female deity, veiled, wearing a chiton and bearing a cornucopia in her left arm (the object in her right is now lost, potentially a patera, another common accessory for Fortuna), may also attest to a merging of the identity of Fortuna, Juno, and Eileithyia, a notion suggested by Renard 1953, based on inscription on the statue's base, *IUNONI FORTUN(A) HELITIA* (*CIL* VI, 356, Musei Vaticani, magazzino Corazze, inv. 3003). Renard argues that Helitia is a variant of Eileithyia, the result of an incorrect aspiration and iotacism of the two middle syllables (ibid., 533).

[191] *CIL* I^2 60: *Orcevia Numeri ⟨:uxor⟩/ nationu(s) cratia / Fortuna Diovo(s) fileia (filiae) / Primo((g))enia / donom dedi*. Bronze tablet, 3rd century BCE. On this inscription, birth associations, and the cult of Fortuna Primigenia, see Matthews 2011, 23ff. Also see Schultz 2006, 53, who points out that *natio* could refer to breeding among farm animals as well, but the more likely reading is as "a request or thanks for her own successful parturition." For the most thorough survey of the evidence surrounding Fortuna Primigenia, see Champeaux 1982, 3–148; also see Matthews 2011, 21–29.

[192] Champeaux 1982, 40–55, esp. 51–52: "Courotrophe au sens propre, protectrice, comme la Diane et la Junon Lucina de Catulle, de l'enfant et de sa mère…. Fortuna Primigenia est, d'abord, toute-puissante dans la domaine des naissances, des

More generally, Fortuna's favor was understood to guarantee the success of individuals, cities, and empires, but she was also characterized by many as "blind, wandering, inconstant, uncertain, a changeable patroness (*fautrix*) of unworthy people," to quote the elder Pliny. "To her is debited all that is spent and credited all that is received, she alone fills both pages in the whole of mortals' accounting."[193] The overtones are clearly monetary, reminiscent of the discussion above linking birth with financial gain and loss. Fortuna presides over high-stakes moments in a person's life, including birth. In this sense, she embodies risk.

Elsewhere, her blindness is linked to her gender. In this regard, we might say risk was *gendered*. Using explicitly misogynist terms, Galen explains that Tyche is portrayed in graphic arts "not just as a woman – as if this were not a sufficient sign of inanity (ἀνοίας σύμβολον) – but also with a rudder in her hands, with a spherical support for her feet, without eyes. All this was intended to indicate the instability of Tyche (τὸ τῆς τύχης ἄστατον)."[194] For Galen, this instability is both specifically linked to her femaleness and the unpredictability of the maritime sphere (recalling Semonides' poem). He encourages individuals to cultivate their minds so as to avoid the perils of Tyche, or, as he puts it, "[o]n a ship that is fiercely tossed by a storm and flooded by waves that threaten to sink it, you would be a fool to hand the rudder to a blind helmsman."[195]

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accouchements et de la vie fragile du nouveau-né…." (51). Although Matthews 2011 critiques Champeux's structuralist approach, she also argues convincingly for the kourotrophic associations of Fortuna Primigenia, *pace* Kajanto 1981, 506.

[193] Plin., *HN* 2.22, adapted from Rackham, trans., 1938; *…a plerisque vero et caeca existimata, vaga, inconstans, incerta, varia indignorumque fautrix. huic omnia expensa, huic omnia feruntur accepta, et in tota ratione mortalium sola utramque paginam facit…*

[194] Gal., *Protr*. 2.2 = *CMG* 5.1.1, 116.5–9 = 1.3K.

[195] Gal., *Protr*. 2.3 = *CMG* 5.1.1, 116.10–12 = 1.3K. A bad physician is compared to a bad helmsman (κυβερνήτης) at *VM* 9 = Li 1.590, who appears competent when the sea



Figure 2.7a–b: Sestertius of Vespasian (obverse) and Fortuna Redux (reverse) with rudder, globe, cornucopia (*RIC* 2.1.65, no. 74), 71 CE.

Based on precedents from the late Republic, Fortuna's rudder and cornucopia became her standard iconographic features in the early imperial period, especially on coins.[196] By the Flavian period, she was often pictured with a globe on which her rudder rests, symbolizing Fortuna's positive disposition towards the imperial project. Fig. 2.7b provides an example of this configuration, a bronze *sestertius* of Vespasian with Fortuna Redux on the obverse; in her right hand she holds a rudder, resting on a small globe.[197] This coin and similar, minted in Rome, probably had a rather wide circulation.[198] In fact, *fortuna* types predominantly circulated in base-metal denominations, probably targeting a broad, less affluent segment of the Roman population; Noreña classes *fortuna* (or the

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is calm, but betrays his ignorance during a storm when he does not know what to do. The affinity of the imagery between this passage and Galen's is unmistakable. Also see *VM* 1, 12 = Li 1.570, 1.596, where a distinction is drawn between *technē* and *tychē*. A similar distinction is made by Galen.

[196] Cf. Yarrow 2010. Fortuna coins are treated (among many) in Noreña 2011; they are the exclusive focus of Matthews 2011, 153–258.

[197] *RIC*^{2} 2.1.65, no. 74 (Rome); Arya 2002, 83; also see Matthews 2011, 189–90.

[198] See *RIC*^{2} 2.1.65, no. 73–77, which also feature the same Fortuna iconography. Bronze coins are very common. On material denominations and their frequency, see Noreña 2011, 28–36; also see ibid., 108–11 on frequency of personifications (Fortuna, Victoria, Concordia, etc.), among which Fortuna ranks quite high (ibid., 109, tables 3.1–2).

continued favor of the goddess), then, among "popular" imperial ideals, probably related to the deity's widespread presence in the domestic sphere as well.[199] Globes became a potent symbol for imperial power, "a uniquely Roman political symbol."[200] Like wheels (another common accessory), however, they can roll and rotate – they are inherently precarious. Globes symbolize time, as I shall discuss in chapter five, and they can also point to instability (as Galen suggests), as well as the fixity of the human lifespan and perhaps an empire's too. This confluence of ideas is exemplified by an *aureus* of the empress Domitia (c. 83 CE), depicting her deceased infant son as an infant Jupiter on the reverse, sitting atop a zoned globe surrounded by seven stars.[201] The coin draws together the themes of dynastic succession, human fragility, and imperial power.

Fortuna was also associated with a safe return from travel. In 19 BCE, to thank Fortuna for Augustus' return from the east, an altar was dedicated to Fortuna Redux ('of return') in Rome.[202] We might connect her power in this capacity to her famous wheel, a rich and enduring symbol that signifies the unpredictable ups and downs that the goddess

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[199] Ibid., 145–46. He notes, "In the visual universe of the private sphere, for example, Fortuna was nearly omnipresent, depicted in many different media and contexts" (146). The concept of *fortuna/tychē*, more generally, also appears frequently in proverbs and gnomai (see, respectively, Morgan 2007, 33, 111–13).

[200] Yarrow 2010, 136–37, points to the Romanness of the globe as a symbol of power that emerged in the late republican/early imperial period: "Of course, globes did appear in Hellenistic art; there are multiple images of the muse Urania with a globe as an attribute and there is at least one Hellenistic painting, known from Roman mosaic copies which depicted philosophers gathered around the globe…. Yet these earlier images associate the globe with the sphere of heavens and intellectual achievement, not political power."

[201] Sutherland 1974, 206, no. 346–47 (*BM Coins, Rom. Emp*. 62, pl. 61.6–7).

[202] See Hor., *Carm*. 1.35.

may bring, most discernable in literary descriptions of her. The wheel might also point to the connectivity of the Empire through its roads and the power they signify.[203]

While this is not the place to delve into the many complexities of Isis worship in the Roman empire, especially her development from Hellenistic models and transformation in the Latin west, the goddess' popularity as 'Isis Fortuna' (so-called by scholars) deserves consideration.[204] Isis combined the identities of savior (*soteira*), nurturer of vegetal life (*karpotokos*), and protector of sailors and merchants (*euploia*) – all epithets for the goddess in the Roman empire.[205] Indeed, under the empire, Isis is a divinity who appears most frequently in association with ships.[206] We also get clear indications of her association with birth and generation, which is not surprising given her role as mother to Horus and frequent kourotrophic depictions as Isis Lactans in a range of media, suckling her infant son.[207]

Appearing before the backdrop of the shimmering sea at Cenchreae, Isis presides over the first stage of Lucius' 'rebirth' in Apuleius' *Metamorphoses*.[208] During the

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[203] Noreña 2011, 139. On the wheel as a symbol for transportation, commerce, and trade, see Arya 2002, 332–33. The wheel could also be an iconographic feature of Nemesis (Kajanto 1981, 521).

[204] This name does not appear in Latin sources, but is used by scholars to describe depictions of Isis with the accessories of Fortuna (most often the cornucopia and rudder).

[205] Isis Pelagia is attested in only one Latin inscription (*CIL* VI, 8707 = *SIRIS* 396). Arya 2002, 280: "Many times the Fortuna statuettes appear with the iconographical features of Isis. In both cases, the frequency of these goddesses in the *lararia* signifies the needed soteriological qualities they provided to their worshippers in Campania, especially Pompeii and Herculaneum."

[206] Rougé 1981, 196–98.

[207] For a full, monograph-length treatment of Isis Lactans, see Tran and Labrecque 1973. Also see Vatopoulou-Richardson 1982.

[208] The role of Fortuna/*fortuna* in Apuleius is contextualized by Matthews 2011, 100–52, esp. 134–35. Fortuna constitutes a malevolent force in the novel, while "Isis, as a sighted and benevolent *fortuna*, recalls the composite Isis-τύχη of whom there was a statue in the sanctuary of fortuna at Praeneste, and who, as Isis-*fortuna*, appeared commonly on wall

goddess' festival in celebration of the beginning of the navigation season, she then transforms Lucius from an ass back into a human.[209] In that moment, he is called, quite literally, "reborn," *renatus*.[210] In the novel, this festival features the launch of a ritual boat laden with gifts, followed by vows for the prosperity of "the great *princeps* and senate, and the *equites* and all the Roman people, sailors, and ships, which are governed under the power of our global empire."[211] Lucius' trials as an ass are chalked up to the work of a malevolent "blind" Fortuna, who exposed him to many dangers, but whom he ultimately overcomes with the help of the savior goddess Isis. After his rebirth, he is blessed by a *good* Fortuna, one "who can see."[212]

Isis appears as a savior or patron to women, in particular. In Ovid's *Amores*, for example, she is summoned to save his girlfriend after a botched abortion (*Am*. 2.13.17–26), and in the *Metamorphoses*, she appears in a dream to counsel and comfort the pregnant mother of Iphis, who does not want to abide by her husband's orders to kill a baby daughter (*Met*. 9.684–701). Epigraphic evidence also points to a close association between Isis and childbirth, through dedications to Isis Lochia (literally, 'of childbirth') in Beroia, Thessalonike, and Dion. 'Lochia' is an epithet taken over from Artemis as Isis' popularity grew and, in some places, surpassed that of the Greek goddess in the imperial

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paintings and statues from Pompeii. Isis incorporates *fortuna* and transforms her into Isis-*fortuna*" (135).

[209] Cf. Rougé 1981, 198; Beresford 2012, 40–43.

[210] Apul., *Met*. 11.1ff. (Isis' appears to Lucius); 11.16 (*renatus*). The most detailed, recent commentary is to be found in Keulen et al. 2015. See Moyer 2016 on the significance of Cenchreae as the specific location for Lucius' Isis revelation, rebirth, and conversion.

[211] Apul., *Met*. 11.17: *…fausta vota praefatus principi magno senatuique et equiti totoque Romano populo, nauticis, navibusque, quae sub imperio mundi nostratis reguntur…*

[212] Apul., *Met*. 11.15–16.

period.[213] There is no doubt that she also came to be worshipped as a lunar deity in the Roman empire, which closely aligned her with women's bodies and, more generally, cycles of generation, growth, and decay.[214]



Figure 2.8: Bronze 'Isis Fortuna' statuette, first century CE, Boscoreale, Italy.

Isis Fortuna was embedded in hearth and home. She was quite popular in Pompeii and Herculaneum in the first century CE, if we are to judge by her appearances in *lararia*.[215] In fig. 2.8, a statuette of Isis Fortuna from a first-century *lararium* in Boscoreale, just north of Pompeii, shows the goddess sporting the typical headdress of

[213] *SEG* 12.316 = *SIRIS* 107 (Beroia); *IG* 10, 2.1.97 (Thessalonike); *SEG* 34.322, 34.626, 34.627 (Dion). See Giuman 1999; Pingiatoglou 2010 on the relationship between Isis Locheia and Artemis Locheia/Eileithyia.
[214] Lunar influences on generation are discussed in chapter five; on Isis as a lunar goddess, see Delia 1998.
[215] See Flower 2017 on *lares* and household religion.

Isis, while holding the cornucopia and rudder of Fortuna. The majority of figural representations of Isis from Pompeii are, in fact, in the form of Fortuna – with rudder and cornucopia, as in the Boscoreale statuette. Out of sixty-two figural representations of Isis in Pompeii, forty-one are 'Isis Fortuna' (comprising almost 70% of the total), indicating a preference for this manifestation of the goddess.[216]

Despite her frequent appearance in household shrines, the name 'Isis Fortuna' does not appear in the epigraphic record. The name 'Isityches', clearly a variant of Isis Tyche, however, does appear twice in Italy. In Pompeii, a first-century CE graffito on the wall of a house attests to the deity's salvific function in Greek: Εἰσιτύχη σῴζουσα ("Isityches, protector").[217] An altar from Praeneste (second half of the second century CE), dedicated by a local benefactor, Lucius Sariolenus Naevius Fastus Consularis, attests to his generosity for the bestowal of a statue of Isityches, among others.[218] But despite the attestations of the Greek name, Isis Tyche, 'Isis Fortuna' is not found in the Latin epigraphic record. Beaurin argues that Isis Fortuna's absence from inscriptions points to her essentially domestic function, her association with the hearth, and thus her absence from public inscriptions.[219] This explanation is not implausible, although it does still seem surprising that absolutely no references to Isis Fortuna have thus far emerged from the epigraphic or literary record (or any other textual media, for that matter, to my knowledge). This rather suggests that the statues and other images scholars class under the name 'Isis Fortuna' were simply called by another name. Her Greek-style name may

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[216] Beaurin 2008, 274.
[217] Ibid., 290, no. 33 = *CIL* IV, 4138 = *SIRIS* 492.
[218] *CIL* XIV, 2867 = *ILS* 3687a = *SIRIS* 528 (*CIL* XIV, 2921, also from Praeneste, features the same *cognomen*, Fastus Consularis).
[219] Beaurin 2008, 274–75.

have been more popular (Isityches), or perhaps, in this manifestation, she was simply called 'Isis', as she is often invoked in inscriptions, or 'Fortuna' or 'Tyche'.[220]

It is interesting to note that the symbolism of the rudder and cornucopia, so redolent of Roman imperialism in the first and second centuries CE (especially due to the imagery's popularity on coins), also appears to have been popular in domestic settings. There, the symbols perhaps took on personal significance for the individuals who gazed upon and worshipped the goddess along with other household deities. This manifestation of Fortuna is a reminder of her association with the *genius* ('guardian spirit'), a benign guardian of one's good luck. The *genius* was the tutelary god of an individual providing protection from the moment of birth – and it is to an individual's *genius* that one would sacrifice to celebrate a birthday.[221]

In the highest echelons of society, Fortuna also seems to have played an important domestic role. As a protective and salvific deity, she was portrayed as one of the gods

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[220] Kajanto 1981, 520, suggests that 'Isis Fortuna' statuettes may have depicted 'Tyche', since the latter was associated with Isis in the Greek east by the late third century BCE. Many epigraphic attestations of 'Isis' without an epithet exist from Italy. E.g., *CIL* X, 846 = *SIRIS* 482 (Pompeii); *CIL* X, 3759 = *SIRIS* 501 (Acerrae); *CIL* X, 6445 = *SIRIS* 512 (Privernum); *CIL* XIV, 2589 = *SIRIS* 526 (Tusculum); *CIL* XIV, 3941 = *SIRIS* 531 (Nomentum); *SIRIS* 501 (Ostia). Another possibility is that Isis bearing Fortuna's accouterments was (sometimes?) called Isis Augusta, highlighting her associations with imperial power. She appears not infrequently in the epigraphic record as such, although further research is required to determine if such an identification is possible. For Isis Augusta epigraphy, see, e.g., *CIL* V, 8215 = *SIRIS* 603 (Aquileia); *CIL* VI, 350 = *SIRIS* 503 (Carinola); *SIRIS* 630 = *AE* 1946 137 (Verona); from outside Italy, her presence is also felt: e.g., *CIL* II, 2416 = *SIRIS* 760 (Braga, Hispania citerior); *CIL* II, 4080 = *SIRIS* 765 (Tarragona, Hispania citerior); *AE* 1974, 664 (Syene, Egypt); *CIL* III, 4016 = *SIRIS* 655 (Poetovio, Pannonia superior).

[221] Noreña 2011, 137. He argues that this manifestation of Fortuna (as *genius*) "belongs to the earliest stratus of Roman *fortuna*, uninfluenced by Greek *tychē*." Cf. Kajanto 1981, 522–23. See also Arya 2002, 282ff., on the relationship between Fortuna and the *genius*. No doubt the relationship of Fortuna to the *genius* is linked with the Greek notion of a personal *tychē* (in relation to Tyche, as a poliadic/royal Hellenistic deity).

who presided over dynastic succession, as a "kingmaker."[222] The *Historia Augusta* repeatedly claims that emperors kept a golden statue of Fortuna in their bedrooms (…*quae in cubiculo principum poni solebat*…), including Antoninus Pius, Marcus Aurelius, and Septimius Severus; the statue was bequeathed by each emperor to his successor(s) upon his death.[223] The text describes how Septimius Severus, as his death neared, supposedly ordered the statue to be placed on alternate nights in the bedrooms of his co-ruling successors, Caracalla and Geta, so each would get an equal share of good luck and legitimacy.[224] Whether or not this actually happened, what matters, for our purposes, is that the text attests to Fortuna's close association with dynastic succession. From statuettes in Pompeian *lararia* to the (imagined) imperial bedchamber, we can see that Fortuna was integrated into the visual and ritual culture of everyday life, evoking prosperity, fertility, protection, and succession – as well as their potential subversion.

Imperial births were celebrated with the imagery of the cornucopia, Fortuna's most common accessory. The birth of twin boys to Livilla (wife of Drusus the Younger) in 19 CE was celebrated with a bronze *sestertius* (22–23 CE), featuring the two infants emerging from cornucopiae (fig. 2.9).[225] The two are positioned between a winged caduceus, a symbol of peace, associating dynastic success with political stability. An *aureus* — therefore a coin necessarily having a more limited circulation – with similar iconography was minted to celebrate twins borne to Faustina the Younger, the prolific

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[222] Arya 2002, 216.
[223] *SHA Ant. Pius* 12.5 (…*Fortunamque auream, quae in cubiculo principum poni solebat*…), *Marc*. 7.3. We must pursue utmost caution in our use of the *Historia Augusta* as a historical source.
[224] *SHA Sev*. 23.5–6.
[225] Cf. Hug 2014, 200 (fig. 4.1). Also see Noreña 2011, 28–36 (on circulation). On the coin, the children emerge… as if from a birth canal?

wife of emperor Marcus Aurelius.[226] Indeed, this imagery of the double cornucopia, borrowed from Ptolemaic iconography, was used to celebrate births of imperial offspring from the Julio-Claudians through the Severans.[227]



Figure 2.9: Sestertius of Tiberius with *cornucopiae* of imperial children (*RIC* 1.97, no. 42), 22–23 CE.

As the iconography on these coins suggests, the good fortune of the imperial family was blended with the good fortune of the empire. This points to a more general collapse of the boundary between the polity and the imperial family in central messaging

[226] *BM Coins, Rom. Emp*. 4.678. Cf. Hug 2014, 207 (fig. 4.3); Hekster 2015, 158ff., on the commemoration of imperial women as progenitors of *prospective* lineage (also discussed in the introduction to this chapter). Matthews 2011 notes that "… the association of Faustina with *fortuna* points to a developing trend (one which became especially popular under the Severans) of associating women of the imperial household with *fortuna*" (225–26).

[227] Arya 2002, 74: "The double cornucopia of the Ptolemies was replicated in the sphere of procreation and succession during the Roman period, a theme already well-suited for Fortuna, given the background of the cults of Fortuna Primigenia at Praeneste and the Fortunae of Antium. Indeed, the double cornucopia of Fortuna appeared frequently in the coinage of the Roman emperors, to celebrate the birth of progeny, possibly a common feature by the late first century BCE. In the imperial period, the double cornucopia appears frequently, referring the emperor's offspring, i.e. in a number of Julio-Claudian examples. This theme continued under the Flavians, the Antonines, and Severans. For example, a portrait of Julia Domna holding a statue of Abundantia, signifies her 'double' abundance and fecundity, in the form of two male heirs, Caracalla and Geta."

under the empire.[228] Beginning with Augustus the emperor was portrayed as the *father* of the empire as a whole – he famously took on the title *pater patriae*, "father of the fatherland." This conflation of family and state points to a way of understanding both the stability and precarity of empire, as embodied by Fortuna. The imperial family, like all elites, were not insulated from the risks of childbirth and the precarity of infancy. And as we saw with Augustus and Marcus Aurelius – their family's instability was, in one sense, the empire's instability.

Fortuna – with her countless identities and manifestations – came to embody the good luck and divine favor underwriting Roman imperial domination.[229] While the globe of imperial-era Fortuna might symbolize power over the *oikoumenē* rather than Greek Tyche's wobbliness and instability, it would be misguided to ignore the more sinister connotations that the Roman goddess carried as a potentially fickle, changeable force, even in her most positive, triumphant manifestations. The cornucopia and especially the rudder are not uncomplicated symbols, nor are her other accouterments such as the globe and wheel. When we think hard about the pairing of the cornucopia with the more ambiguous rudder (raising questions about where she is steering, or whether the waters are calm or rough), the combination begins to look more multilayered and complex. The harvest bounty signified by the cornucopia, like all vegetal life, passes through cycles of generation, growth, and decay.

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[228] We can also view this conflation through the lens of Noreña 2011, who traces the development and deployment of imperial ideals and how they were shaped by the transformative power of one-man rule and the malleable figure of the emperor, embodied by "a nexus of ideas, symbols, and political authority – in both its empire-wide and local aspects – [that] helps us to understand how the Roman empire actually worked as a configuration of power" (15).

[229] This perspective is front and center in Plutarch's *De Fortuna Romanorum*.

Conclusion: Towards an Environmental History of the Female Body

The interior of the pregnant female body was (and in many ways, remains) a site of mystery and speculation. In the treatise, *On the Formation of the Fetus*, Galen pauses in a rare moment of geniune *aporia*, declaring himself mystified about the material and nature of the soul (*psychē*) that forms the embryo within the uterus. He uses plain language to describe his confusion on the matter: "I concede that I am at a loss (ἀπορεῖν) about the substance of the soul (περὶ ψυχῆς οὐσίας). I am unable even to reach the level of a probable statement in this regard. And so I concede that I am at a loss about the cause of the construction of the fetus."[230] This moment is striking in its acknowledgment of genuine puzzlement. While Galen's embryological treatises express certainty about matters pertaining to the stages of fetal development and material transformations that create bones, muscle, veins, arteries, organs, and flesh, his rhetoric often belies the wide range of views on these topics (and no doubt, confusion), which can be glimpsed through his pointed refutations of rival theories.

This chapter has examined metaphors and analogies from a variety of contexts that helped people visualize the hidden, mysterious processes of generation and gestation, and understand procreative failure. Figurative language and imagery, drawn from landscapes and waterscapes, reveal the unique connection as it was perceived to exist between the female body and the non-human environment – and how human strategies for encountering the environment influenced tactics for shoring up women's bodies or

[230] *Foet. Form.* 6.30 = *CMG* 5.3.3, 104.12–14 = 4.700K. Adapted from Singer, trans., 1997.

diagnosing their deficiencies. Environmental phenomena helped explain particular risks and, as we saw in Artemidorus' dreamworld, could also serve as signs of things to come.

These metaphors and analogies present a particular set of *explanations* for why procreation can be so precarious and so risky for women and their offspring. Successful vegetal growth is dependent on the proper mixture of water, heat, seeds, and good soil. Water can be especially unpredictable – there may be too much or too little rain; springs can run dry or grow muddy. Vegetal analogies became a key means to think through and visualize the process of fetal growth, reinforcing the close connection between the female body and the earth. These analogies and attendant metaphors also offered explanations for failure and damage to infant and maternal bodies. This matrix of connections reinforced an explanatory framework that permeated a range of contexts from medical discourse to the visual and poetic ideology of fertility in the Roman empire.

The vulnerability of humans at sea points to other types of unpredictability or danger, including unexpected catastrophe. A range of associations made waterscapes an important source domain for metaphors used to describe and understand birth risk. Women were often characterized by their moistness and wetness, as well as their changeability and unpredictability. The octopus-womb imagery captures this complex of associations and shows us how human generation was closely bound up with anxieties about the animal-human boundary. The sea itself was a potent symbol of danger and the pursuit of gain and power, associations which could represent both the anxieties and hopes that attended pregnancy and birth. Together, landscape and waterscape provide a way forward in thinking about the relationship between humans and the environment in

the ancient world, especially the relationship between the desire to manipulate the environment and forces that are beyond human control.

Drawing together the themes examined in this chapter, Fortuna, as an imperial symbol – with her rudder and cornucopia, her wheel and globe – points to Rome's dominion over the Mediterranean world, the *orbis terrarum*, the circle of lands. In her most positive manifestation, this imagery embodies a triumph over the dangers that threaten the fertility of landscapes and the accessibility of waterscapes. Yet, as her accessories remind us, Fortuna can also be unstable, bringing the high low and the low high, presenting the prospect of gain, but also of loss. She projects success and failure all at once. These strategies for expressing fertility and stability, embodied by the cornucopia and rudder, point to a way of understanding risk, which takes us into the very bodies of Roman women, and outwards to the land and sea, in all their many possibilities.

Chapter Three

Authority and Naturalized Risk in Soranus' *Gynecology*

In a letter to his friend Velius Cerealis, Pliny the Younger mourns the Helvidiae sisters who both died in childbirth.[1] The outcome was doubly unfortunate – neither sister survived *and* both gave birth to daughters rather than sons (*utraque a partu, utraque filiam enixa decessit*). Pliny continues, "I am afflicted by grief, but my grief is not excessive." Nevertheless, he feels great sadness "that fertility (*fecunditas*) carried off these most honorable girls in the flower of youth." The sisters' childbearing capacity, their *fecunditas* – one of the greatest assets for elite women – is what killed them. Their identity is subsumed by their fertility: they died "in their first flower of youth" (*in flore primo*), a phrase laden with sexual and procreative associations. Pliny laments that only their brother remains to represent the family.[2] Since both sisters died after giving birth to girls, he is the only one left who can produce more offspring (especially a son). The sisters' fertility was, in part, what guaranteed their family its future prosperity, and in this context *fecunditas* takes on a kind of sinister agency, which emerges in the sentence's syntax (…*fecunditas abstulit)*. Why is Pliny's grief "not excessive"?

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[1] *Ep*. 4.21. See Sherwin-White 1998, 297–98.

[2] Pliny describes their brother as follows: …*domumque pluribus adminiculis paulo ante fundatam desolatus fulcit ac sustinet*. Sherwin-White (ibid., 298) suggests comparing this letter with *Ep*. 4.15, in which Pliny promotes his friend Asinius Rufus and commends the man for various reasons, including his fruitful marriage (*fecunditate uxoris*); he also points to *Ep*. 10.2, in which Pliny tells Trajan how much he would like to have his own children, so he might be *securus et felix*. Both letters speak to the high value placed upon *fecunditas*, as well as the notion that children provide security and happiness (surely the Trajanic *alimenta* is also a theme in the background). It is on these qualities that Pliny focuses in *Ep*. 4.21. Also see Shelton 2013.

Roman disdain for excessive emotion is widely attested. Reflecting on Pliny's letter, Danielle Gourevitch also suggests that, with some exceptions, the death of women in childbirth was typically not seen as a "catastrophe" in antiquity.[3] The sisters died fulfilling their most important role, and "in such a death, there is even something beautiful and natural."[4] Gourevitch goes on to elaborate this idea, "The death of a pregnant woman is a risk you run; the death of a fertile woman is in the nature of things."[5]

The notion that death in childbirth is "natural," "a risk you run," "in the nature of things" is not necessarily intuitive, and is surely worth further investigation. This idea, furthermore, has particular significance in the medical tradition, since presumably gynecological expertise was intended to mitigate this risk. So how was birth risk construed in the medical discourse of the Roman empire? How did medical writers (and practitioners) conceive of and work towards diminishing risk? Not only were illness and death woven into the fabric of everyday life in ways that can be very hard to fathom, but the act of birth (as well as infancy) was intertwined with anxieties about mortality, pain, and illness. Pliny's letter about the unlucky sisters, much like Cicero's outpouring of grief at his daughter's death soon after she bore a son, is a reminder of this reality. Putting aside these noteworthy examples, however, childbirth is often glossed over in classical literature, despite, or perhaps because of, these risks. It is in Christian treatises

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[3] Cicero's response to Tullia's death could provide a template for "excessive" grief (e.g., *Att*. 12.14.3, 12.23, 12.28, *Fam*. 4.6.1–3). Also see Treggiari 2007.
[4] Gourevitch 1987, 192: "…il y a même dans une telle mort quelque chose de beau et de naturel."
[5] "La mort de la femme fécondée est un risque à courir; la mort de la femme féconde est dans la nature des choses" (ibid.).

on virginity that we get clear formulations of the dangers of childbirth, the discomforts of breastfeeding, and "the shame of infertility."[6]

In this chapter, I investigate the perception of procreative risk, its status as 'natural,' and negative birth outcomes through a case study of the only surviving gynecological treatise from the Roman imperial era, Soranus' *Gynecology* – one of our few texts from the period that are explicitly and comprehensively designed to address women's procreative health.[7] Perhaps the most influential gynecological work of antiquity in the longue durée, Soranus' treatise is a window into one man's perception of the childbearing process, his philosophy of care, his views on the female body, and how he understands the role of practitioners of the physician's craft, *iatrikē technē*.

Soranus' ideal caretaker mediates the relationships that center around and within a woman's body. A pregnant woman is encouraged to engage in certain types of directed self-care to ensure positive birth outcomes, and she is constantly under surveillance, her mood and habits regulated by caretakers. In one sense, she achieves a kind of ethical subjectivity through her entanglement with her fetus – she is caring for herself to care for the fetus – yet the potential for antagonism between the two complicates that status. This type of self-care is fundamentally different from the self-reflexivity of a male patient caring for his body. A pregnant woman, by contrast, is dealing with another entangled life, which might have certain needs that run contrary to her own.[8] Within this nexus,

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[6] Brown 2008, 25.
[7] The treatise is called the *Γυναικεῖα* in the *Suda*, and that designation was adopted by Illberg in his edition. Hanson and Green 1994, 1025.
[8] See Dean-Jones 1992 on the Foucauldian ethical subject as exclusively male in the Hippocratic gynecologies. Soranus, living and writing in a different era, complicates this picture with his view of the entanglement of maternal and fetal life.

Soranus creates a unique space for the practitioner of his method, extending beyond the care of the body to the regulation of society.

By construing risk as a 'natural' aspect of the generative process, Soranus creates an opening for the male practitioner of his method: the male physician exists to shore up the gap between 'nature,' which necessitates procreation, and a woman's ideal state of 'health' that is compromised by the risks inherent to the processes of generation, gestation, and birth. His power manifests itself most strikingly in his excursus on negative birth outcomes, where the male physician must intervene in the hope of saving the mother's life.

While Soranus' rhetoric and methods exemplify elite medical discourse, by no means do I intend to say that his ideas can stand in for those of *all* learned practitioners. As I will show, he is constantly engaged in comparing his methods of care – favorably – with those of other practitioners, revealing just how much contention there was over theory and practice (and the relationship between the two). Here I treat the *Gynecology* as one example of a response to risk as conceived by a man who presents himself as a technical expert, a problem-solver. By contrasting his own views with those of others, he also reveals how embedded his views are in a culture of ideas about care and the (female) body, and in a rhetoric of self-fashioning (and self-promotion). While Soranus is the focus of the chapter, his thought-world or web of belief is what I aim, most of all, to elucidate.

In the first book of his work, Soranus sets out what he calls a "natural order" (τῇ φυσικῇ…τάξει), which is constituted by the *erga* (ἔργα, "functions") of the uterus, the ultimate function being childbearing. He uses the concept of this "natural order" to

structure his text, as he explains: "…since the functions of the uterus are menstruation, conception, pregnancy, and after its completion, parturition, we shall use the natural order to speak first about the menses" (…ἐπεὶ τὰ τῆς μήτρας ἔργα καθάρσεις, συλλήψεις, κυοφορίαι καὶ μετὰ τελείωσιν ἀποτέξεις, τῇ φυσικῇ χρώμενοι τάξει πρῶτον ἐροῦμεν περὶ ἐμμήνων).[9] He follows precisely this order in the structure of his text.

In what follows, I, too, will trace the steps in the generative process, ending with a positive or negative birth outcome. After an introduction to Soranus' life and world, including a brief overview of some fundamental aspects of Methodism (the medical sect to which Soranus belonged) and a sketch of the *Gynecology*'s content, my own argument will proceed in three parts, addressing how Soranus (I) construes risk as part of the (natural) generative process, (II) attempts to manage and control gestation and birth outcomes, and (III) approaches the birth itself, especially intervention in the case of a negative outcome. This last step will focus, in particular, on the extreme forms of intervention during a difficult birth, embryotomy and extraction by hooks, which are embedded in a complex of ideas around flesh-cutting.

[9] *Gyn*. 1.5.61–4 = Ilb. 1.18.5, adapted from Temkin, trans., 1991. All translations of the *Gynecology* are drawn (unless otherwise indicated) or adapted (duly noted) from Temkin 1991. His terminology in this passage for "conception" and "pregnancy" is noteworthy and somewhat out of step with his usage elsewhere in the work, as discussed below at pp. 191–92.

Soranus' Life and World

We know little of Soranus' life. The *Suda* is our best source, in which there are two entries under "Soranus," a *maior* and *minor*. Both are described as Ephesian physicians, and their *vitae* are conventionally viewed as referring to one individual.[10] Soranus *maior*, author of "many excellent books" (βιβλία … πλεῖστα καὶ κάλλιστα), is reported to have spent time in Alexandria and Rome in the time of Trajan and Hadrian (c. 98–138 CE). The second entry refers to Soranus *minor* (ἰατρὸς νεώτερος) as the author of γυναικεῖα βιβλία, among other works.[11] The first entry has been taken to suggest that he spent a period of time training in Alexandria (perhaps accounting for his obvious familiarity with anatomy) and later worked in Rome as a physician. This seems plausible given his own observations about Roman practice and references from other authors.[12] If it is indeed correct that Soranus hailed from Ephesus, traveled to Alexandria for training, and then ended up in Rome, his career would follow an exalted but by no means unique trajectory. Soranus, like Galen (among others), followed a pattern among physicians in

[10] Σ 851, 852. Adler 1928; Hanson and Green 1994 provides the most comprehensive account in English of Soranus life, work, and reception, in addition to a rich bibliography. Burguière, Gourevitch, and Malinas (1988–2003) is the most comprehensive in French, with a lengthy and detailed introduction.
[11] Σ 852, Adler 1928.
[12] *Gyn*. 2.16.7ff. = Ilb. 2.44.1. See Hanson and Green 1994, 981, who suggest one should be cautious in assuming he visited all the places mentioned in the *Gynecology,* given all he could have learned about cultural practices in the "multicultural world of Alexandria or of Rome" (982, n. 42). On dating, besides the *Suda* entry, the late first and early second century CE is credible given that Soranus' name is absent from Celsus' encyclopedic work (c. early first century CE), despite his apparent stature, while he is listed by Galen, over a century later, as a deceased Methodist physician. Ibid., 983.

the High Empire – they had their origins in the big cities of western Asia and circulated, ultimately, to Rome.[13]

By the late Republic, Greek doctors were popular among the Roman elite, though the bias against the medical profession – as well as things Greek more generally – still had a place in elite Roman ideology. These two strains of antipathy, against both doctors and Greekness, however, are rarely joined in the literature of the imperial period. With the exception of Pliny the Elder's diatribe against Greek medicine in the *Natural History*, we find no other such explicit condemnations.[14] In Soranus' lifetime, a market for Greek physicians was flourishing in Rome, and the capital city was a place of lively sectarian debate and public display.[15]

The precise status of the *iatros* or *medicus* in the Roman empire is difficult to pin down. The medical field had no formal certifications and likewise, was not constrained or defined by the sort of associations or government agencies that regulate modern medical practice; as others have pointed out, throughout antiquity, "institutionalization of knowledge production was at such a low level."[16] By Soranus' lifetime, literary, papyrological, and epigraphic evidence attest to a wide range of specializations and self-presentations among practitioners, including midwives, *maiai*, root-cutters, *rhizotomoi*,

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[13] Lehoux 2012, 6ff. situates this kind of trajectory in the context of the circulation and development of scientific knowledge in the Roman empire.
[14] Pliny, *HN* 29.5–8; see Flemming 2000, 51. Vivian Nutton 2012b notes that this view was not shared by many living in the western empire.
[15] The city, teeming with life and competition, is evoked vividly in Mattern's biography of Galen (2013).
[16] Barton 1994b, 21; Lloyd (1983, 149–67) also points out that Greek medical terminology was very variable due to lack of consensus among practitioners, given the "organisational or institutional weakness of ancient medicine," as well as sectarian differences, particularly regarding the value of "hidden causes" – and thus dissection.

provincial *archiatroi*, and imperial *medici*.[17] In the eastern Empire, we find elite medical families, whose members might travel to Rome to amass prestige and wealth. In the western Empire, study of inscriptions has shown that the number of freed, slave, or peregrine *medici* and *iatroi* fell from eighty to twenty-five percent in the first through third centuries, perhaps indicating a general shift in the demographics.[18] There is a well-established record of celebrity doctors who moved from east to west, such as Thessalus of Tralles, the famous Methodist doctor of unparalleled popularity, who supposedly corresponded with Nero and was accompanied in Rome by throngs of admirers.[19] Galen also boasts of treating members of the imperial family under Marcus Aurelius and never fails to mention his connection with the consular Boethus. His connections to these powerful men represented the pinnacle of success in the medical profession. Soranus' polished Greek *koinē*, the nature of his prescriptions (no doubt aimed at elites with access to resources), and most of all, his deferential treatment by other authors as a celebrated physician (ranging from Galen, probably soon after Soranus' death, to Tertullian, and Caelius Aurelianus, a fifth-century adaptor) all suggest that Soranus had the status of one of medicine's "greats."[20]

Soranus' *Gynecology* exhibits clear signs of his intellectual milieu, also known as the so-called Second Sophistic. Much has been written on Greeks in the Roman empire

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[17] See Flemming 2000, 33–79. She offers a detailed overview under the chapter title, "The Social Formation of Roman Medicine," as well as an appendix with *medicae* and *iatrinai* in inscriptions (pp. 383–91). Also see Flemming 2013.
[18] Flemming 2000, 51;Nutton 1992, 39.
[19] Cf. Nutton 2012b. On Thessalus, see Gal., *MM* 10.8K, Pliny, *NH* 19.5.10. Both Galen on Pliny disparage him; the former referred to Methodists as "Thessalian asses."
[20] For more on Soranus' rather unique style and an impressive list of his *hapax legomena*, see "Le langue et le style de Soranos," in Burguière, Gourevitch, and Malinas 1988, lix–lxv.

during the "Second Sophistic."[21] In the 1970s and 1980s, the debate pivoted around the question of whether sophists should be seen "in terms of their relationship to Rome," as mediators between province and imperial capitol, or rather, as manifestations "of Hellenism, of Greek identity invigorated specifically in response to the phenomenon of Roman occupation."[22] In the last several decades, post-structural (and post-modern) interpretations have come to the forefront, and these treatments have focused on the performative and theatrical qualities of expression (in rhetoric, especially declamation, art, epigraphy) as well as cultural introspection.[23] Gender has also emerged as a central analytic, as has the role of Christianity.[24] All these studies have contributed to our understanding of the social formation of the educated gentleman, the *pepaideumenos*, as well as the cultural atmosphere of erudition and performance that Soranus must have encountered in Rome and elsewhere in the cities of the empire. Several observations of this cultural atmosphere are especially useful for the present study: an intense focus among urban elites on rhetorical training and public declamation (tools of persuasion), the display of that erudition in public spaces, and "a keen sense of the importance of

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[21] In the last few decades, some have doubted whether this is a useful or appropriate tool for periodization, e.g., Brunt 1994. But as Eshleman (2012, 16, n. 44) points out, he has found few supporters. For a comprehensive introduction to the scholarship, history, and meaning of the term, see Whitmarsh 2005, 1–22. Also see Whitmarsh 2001. Regarding the "Second Sophistic" and medical culture, see von Staden 1997. He acknowledges Brunt's claims, but argues that the contemporary disputes over the concept are not relevant to his present study. Rather, he uses the term to evoke "the epideictic culture of Galen's century and his relation to this culture" (33, n. 1).

[22] Whitmarsh 2005, 8. This former group is typified by Bowersock 1969. His book is responsible for starting the debate as such. For the latter position, see, e.g., Swain 1996. Swain pins the dates of the "Second Sophistic" at roughly 50–250 CE.

[23] Whitmarsh 2005, 9. As he puts it, "'sophistic' has been aligned with literary sophistication, and 'secondariness' with intertextuality, allusiveness, and literary self-consciousness." Also see Gleason 1995; Goldhill 2001.

[24] Most recently, Eshleman 2012.

public acts of staging… – staging oneself convincingly in all spaces at all times, as though contending on a stage for a prize in a dramatic contest (ἀγωνίζεσθαι)."[25]

These qualities have been shown to structure medical writing in the first several centuries of the common era and to form a basis for the construction of medical authority.[26] This world of display and the competition to persuade infuses the literary record, and medical treatises are "the most durable strand of a web of medical persuasion, a web mostly spun out of oral performance and expository display, such as the public lectures, debates, anatomical exhibitions, iatric contests that occurred in gymnasia, theatres, forums, and agoras of many imperial cities, and the bedside consultations to which admission was somewhat more restricted."[27] From Soranus' sober tone, style, and treatment of his antecedents, it has been suggested that he stood "somewhat apart from the competitive medical scene of imperial Rome with its sectarian jealousies and pettiness."[28] Whether or not one agrees after reading the *Gynecology*, this was undoubtedly the "scene" in which Soranus spent his life.

Soranus' Gynecology

Soranus wrote a wide range of treatises now lost, including one on the soul, a biographical account called *Lives of the Physicians: Sects and Treatises*, and medical

[25] von Staden 1997, 33, n. 1.
[26] Scholarly treatments of the topic mostly center around Galen's portrayal of competition and *epideixis* (I will address this topic later in the chapter). See von Staden 1995; 1997; Mattern 2008; Gleason 2009; Johnson 2010. Cf. Hanson and Green 1994, 990.
[27] Flemming 2000, 58–59.
[28] Hanson and Green 1994, 1005.

works on various topics such as *Seed* and *Generation*, *Commonalities*, and *Bandages*.[29] His treatise *On Acute and Chronic Diseases* survives in a fifth-century adaptation by Caelius Aurelianus.[30] Although the *Gynecology* no doubt circulated widely throughout antiquity (for which reason large parts have survived), the text also went on to renewed fame in the work of "Soranian" adaptors in Latin during late antiquity, in particular, Caelius Aurelianus (*Gynaecia*) and "Mustio" (*Genecia*, sixth century).[31] Mustio's text remained popular in the Middle Ages. Oribasius, Aetius, and Paul of Aegina also excerpt Soranus in their medical compendia.[32] These texts have proved very useful in reconstructing the text of the *Gynecology*, which is unfortunately riddled with lacunae.[33] Overall, however, the *Gynecology* has been a very successful text, perhaps the most influential gynecological treatise of antiquity.

The medical tradition in the Greco-Roman world – from the fifth century well into late antiquity – reserved a place for gynecological texts, centered around the maintenance and treatment of the female body.[34] Although numerous gynecological texts were in circulation during his lifetime, Soranus' treatise perhaps filled a gap by providing

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[29] There is a debate about whether *Seed* and *Generation* are one single or two separate treatises. For the clearest articulation of the debate, see ibid., 1033–35.

[30] Ibid., 1005–61. The extent to which this is Caelius' work rather than simply Soranus' is debated. Hanson and Green provide a detailed description of his works, both extant and lost (following and updating F. E. Kind's list in the *Pauly-Wissova*), as well as their adaptations in later authors. They also include a section on "The *Nachleben* of Soranus in the west."

[31] For Caelius' work, see Drabkin and Drabkin 1951. On Mustio, see Dietz and Rose 1882; Radicchi 1970; Prenner 2012.

[32] These Latin adaptors of the "Soranian" gynecological tradition can be contrasted with adherents to the Hippocratic tradition. The latter enjoyed less renown in later periods. See Totelin 2011.

[33] For the most detailed textual history, see the introduction to the commentary by Burguière, Gourevitch, and Malinas 1988, xlvii–lxv.

[34] For a summary of the tradition and Soranus' place in it, see Burguière, Gourevitch, and Malinas 1988, xxxii–xl.

the first Methodist treatment of gynecology and obstetrics (I will turn to his Methodism below). The gap was likely a function of the prevailing belief among practitioners of the "Method" that women (in relation to men) do not have "unique conditions," with the exception of conception, pregnancy, parturition, and lactation, according to Soranus.[35] It can be inferred that the existence of these "natural conditions in women peculiarly their own" (κατὰ φύσιν ἴδια πάθη... γυναικῶν) is what necessitates the composition of Soranus' *Gynecology*, a treatise on specifically "women's issues" (*ta gynaikeia*).[36]

Now a word on Soranus' sectarian affiliation – that is, which medical 'sect' (akin to a 'school' of philosophical thought) influenced his theory and practice. Much of our information on sectarian rivalry in this period, unfortunately, comes from detractors of precisely the sect (*hairesis* in Greek, *secta* in Latin) to which Soranus adhered – the Methodist sect (*methodikē*), traditionally designated as one of the three major medical sects, along with the Rationalist (*logikē*) and Empiricist (*empeirikē*).[37] Soranus' work in the context of Methodist medicine in the Roman empire deserves a separate treatment, but a few words are necessary here to place him in this intellectual and philosophical context, as his Methodist principles were central to his identity.[38] The Methodist sect, which seems to have emerged around the first century BCE and is very much associated

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[35] Hanson and Green 1994, 1025. Soranus takes on this issue at the beginning of book three of the *Gynecology*. Cf. Herophilus' position, elaborated by Soranus in book three, prooem., and elaborated von Staden 1989, 297ff.

[36] *Gyn*. 3.1.87 = Ilb. 3.5.1. It is worth noting that Soranus uses the term πάθη here, implying a certain pathological quality, discussed further below.

[37] On the concept of *hairesis*, see von Staden 1980. For a basic history, see Nutton 2012a; also Flemming 2000, 185–254.

[38] Important contributions on Methodism include the following: Drabkin 1951; Frede 1982; Lloyd 1983, 168–200; Pigeaud 1985; Nutton 1990; Scarborough 1991; Pigeaud 1993; Tecuşan 2004; Leith 2008.

with Rome, was viewed among its critics as "an upstart, a Roman parvenu."[39] The *methodikoi*, however, proved to be very popular, widespread, and enduring in the Roman empire, with evidence for their presence from Rome to Smyrna to north Africa, lasting well into late antiquity.[40] Caelius Aurelianus reports that Soranus was "the decisive figure in the development of Methodist theory and practice," initiating a revised version of the "Method" (*methodos*) that was a turning point in the sect's development.[41] The *Gynecology* is valuable for many reasons, including its almost unique capacity to show us the approach of a Methodist doctor, in his own words.

The *methodikoi* subscribed to the concept of "commonalities" (κοινότητες), essentially detectable physical states, of which there were three: constriction, laxity, and a third mixed state.[42] The *reason* or underlying cause for that state was not of interest to the Methodist, only identification of the commonality, from which knowledge of the treatment would follow. The *methodikoi*, like the *empeirikoi* (in response to the *logikoi*), denied the efficacy of investigation into hidden causes (and treatment based on conjectural knowledge of those causes).[43] Despite the seeming over-simplicity of the

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[39] Nutton 2012a, 191.

[40] Ibid., 192. The doxographic tradition of Methodism, which is filled with gaps, associates several names with the "birth" of the sect: Asclepiades of Bithynia, Themison of Laodicea, and Thessalus of Tralles. This genealogy, however, skates over what was undoubtedly a rather messy story, both chronologically and intellectually. For a description of these problems, see ibid., 193, 382, n. 13. For fragments of the Methodists, see Tecuşan 2004.

[41] Hanson and Green 1994, 993; Pigeaud 1985, 321–38. On Caelius' Methodism, see van der Eijk 2005.

[42] Nutton 2012a, 195ff. Also see Flemming 2000, 80–124. On Soranus' Methodism specifically, see Hanson and Green 1994, 998–1005. N.B.: κοινότητες is also translated as "communities."

[43] But they did differ in their approach to reason in crafting a medical response. See, e.g., Nutton 2012a, 191ff., especially pp. 194–95, for a summary of the development of the Methodist approach to hidden causes. The full picture is, of course, far more complex

principle of commonalities, in Soranus' text, treatments are carefully tailored to the patient, often calibrated to periods that last several days.[44] Diseases can be acute or chronic, and treatments might vary according to intensity of disease. Ailments may also be localized in one body part or dispersed. Thus it becomes clear that women's "unique conditions" (ἴδια πάθη), insofar as they exist, are simply subject to the principle of commonalities.

Soranus' *Gynecology* is divided into four books, beginning with an excursus on the *maia* (midwife) – those who are "fit" to become midwives, as well as the features of the "best" midwife.[45] The latter is defined by a set of essentially male characteristics, including literacy, erudition, and theoretical knowledge (ἐν τοῖς θεωρήμασιν πολύπειρον) and training in all branches of therapy, such as pharmacy and surgery.[46] The rest of the *Gynecology* is then devoted to what the *maia* will face in her career of care, and these aspects are divided into two categories: those that are according to nature,

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than can be elaborated here. I would like to note, however, that Methodists denied the efficacy of hidden causes specifically *in medical treatment*, but that did not preclude a Methodist from cultivating an interest in theories that involved hidden causes. Soranus can be characterized this way, given what we know of his (lost) philosophical works. See Frede 1982.

[44] Cf. Leith 2008. Critics of the *methodos* pointed to the seeming absurdity of its simplicity, but Soranus' *Gynecology* tells quite a different story: his text shows just how nuanced and even gentle (by comparison with Hippocratic treatment, for instance) his therapies can be. Hanson and Green (1994, 1006) comment on Tertullian's designation of Soranus as *mitis* (gentle) by comparison to Hippocrates, Asclepiades, Erasistratius, and Herophilus (*De Anim*. 25.5). Ultimately, it seems that a Methodist's treatment could have been very similar (or equivalent) to that of any other sect's adherent, but the reasoning behind that treatment would accord with the principle of commonalities. In an influential article, Frede has proposed that Soranus' version of Methodism is in fact a rather traditional version of Greek medicine, unlike the version promulgated by the iconoclast Thessalus. Frede 1982 ends by suggesting, "…it was largely traditional medical practice which happily survived, even under the guise of Methodism" (23).

[45] A useful summary can also be found in Hanson and Green 1994, 1025–26; Pinault 1992, 131. Midwives and their status are discussed in detail above, pp. 36–44.

[46] *Gyn*. 1.2–3 = Ilb. 1.3–4. See Flemming 2013, 278ff.

i.e., natural, *kata physin* (κατὰ φύσιν) and contrary to nature, i.e., unnatural, *para physin* (παρὰ φύσιν). Books one and two comprise the former, including care of women during pregnancy, labor, delivery, and care of the neonate; under this heading would fit investigation into the seed (σπέρμα) and generation (ζῳογονία), but he omits them as useless (ἄχρηστον) for his present purpose.[47] Books three and four concern the unnatural (*para physin*), with three centered around disease requiring regimen and dietetics, and four, on diseases and dystocia for which pharmacy and surgery are necessary. Dystocia is an interesting case, as this chapter will show, since it requires the presence of a male physician, regardless of the qualifications of the *maia*, suggesting the physician's unique power in moments of mortal danger – to bring an 'unnatural' turn of events back in line with 'nature.'

I. Naturalizing Risk: Soranus on the "Healthful" and the "Natural"

Of the four books that make up Soranus' *Gynecology*, the first is perhaps the most varied in content – ranging from practical advice on choosing a midwife and care of pregnant women until parturition to more theoretical investigations of what is "helpful" or "useful" (ἐπὶ συμφέροντι, ὠφέλιμος) for women's health.[48] I will begin by focusing on Soranus' conception of what is "healthful" (ὑγιενός, πρὸς ὑγείαν) or "beneficial for health" and then turn to the concept of what is "natural" (φυσικός, κατὰ φύσιν) vis-à-

[47] Furthermore, his treatise(s) on *Seed* and *Generation* may have expounded his position on these matters, more in the realm of philosophical discourse. He seems to be suggesting that the *Gynecology* is purely a treatise on medical treatment and avoids discussion of these hidden processes (though of course, it is much more).
[48] Midwife, *Gyn*. 1.3 = IIb. 1.4; care until parturition, 1.16ff. = IIb. 1.46ff. Helpful/useful for health, 1.8 = IIb. 1.27–28, 1.9 = IIb. 1.30–32, 1.13 = IIb. 1.42.

vis generation, tracing Soranus' line of argument.[49] His understanding of "healthful" and "natural" that we get in book one not only reveals a great deal about his perception of the physical toll of childbearing on the female body, but also elucidates some of his most basic principles in approaching his patients and society, more generally. Most of all, his treatment reveals how the potential of harm to the female body is naturalized in the generative process, that is, risk is a *natural* aspect of childbearing. In what follows, I will trace his argument through three interventions in the text on menstruation, sex and virginity, and conception/pregnancy, which build on one another.

Soranus' first explicit discussion of what is "healthful" emerges from an investigation of various aspects of menstruation in book one. After several chapters detailing the nature of the process and signs of impending menstruation,[50] he turns to the question of whether menstruation serves a "helpful purpose" vis-à-vis health.[51] This is the first of several such inteverventions in book one: he later extends the question to virginity (and by corollary, sexual intercourse) and *syllēpsis* (conception and gestation).[52]

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[49] I use "healthful" both as a synonym for "healthy" and in the sense of "promoting health" or "working towards health."

[50] *Gyn*. 1.6 = Ilb. 1.19–26.

[51] *Gyn*. 1.8 = Ilb. 1.27ff. While the parameters of the debate are rather different, it is worth noting that this debate about the "healthfulness" of menstruation is of contemporary relevance. In the developed world, women are menstruating earlier and more often throughout their lives (because of fewer pregnancies and longer life expectancy). Some have raised concern that the process is, in fact, not beneficial to health (and even harmful), e.g., Coutinho and Segal 1999. These authors argue menstruation is *neither* healthy nor natural, but rather, only useful for conception. This kind of treatment can be contrasted with the third-wave movement of menstrual activists, see, e.g., Bobel 2010.

[52] I discuss the term's precise valence in detail below. The transliterated form of σύλληψις rather than an English translation will be used throughout because Soranus uses the term to cover more than simply "conception," one translation of the term. Soranus gives a detailed account of the term's meaning at *Gyn*. 1.14.2–39 = Ilb. 1.43. For

> Ἐπεὶ τοῖς μὲν συμφερόντως γιγνομένοις δεῖ συνεργεῖν, τοῖς δὲ ἀσυμφόρως ἀποσυνεργεῖν, ἀναγκαίως τὸν περὶ τοῦ προκειμένου ποιούμεθα λόγον. σημαίνειν δὲ <δεῖ> ἐκ τῆς προτάσεως δύο, τὸ μὲν εἰ πρὸς ὑγείαν, τὸ δὲ εἰ πρὸς παιδογονίαν <ἐπὶ> συμφέροντι γέγονεν ἡ κάθαρσις, καὶ περὶ ἀμφοτέρων αὐτῶν ἐστιν ἡ σκέψις. (*Gyn*. 1.8.1–8 = Ilb. 1.27)
>
> Since, on the one hand, one must aid those things which are helpful, and on the other, hinder those which are not helpful, we are compelled to discuss this subject. And one <must> point out two questions on the basis of the problem proposed: whether menstruation is helpful, first, with regard to health, and second, with regard to childbearing. The inquiry concerns both.[53]

The passage begins with phrasing that emphasizes binary opposites, ("… on the one hand…aid those things which are helpful, and on the other …hinder those which are not helpful," μὲν συμφερόντως… συνεργεῖν, …δὲ ἀσυμφόρως ἀποσυνεργεῖν). The second sentence of the section also employs a similar construction (…τὸ μὲν εἰ πρὸς ὑγείαν, τὸ δὲ εἰ πρὸς παιδογονίαν <ἐπὶ> συμφέροντι γέγονεν ἡ κάθαρσις…), suggesting from the start that healthfulness and childbearing may be at odds, or at least, must be weighed separately against one another. In the discussion that follows, Soranus proceeds in a typical "hamartographic" fashion, that is, discussing his predecessors' positions, critiquing them, and then finally stating his own.[54]

Soranus begins by invoking Herophilus, the famous Alexandrian anatomist, who reports in his *Against the Common Dogmas* that some physicians consider menstruation helpful for *both* health and procreation (πρὸς ὑγείαν καὶ πρὸς παιδοποιίαν).[55] Soranus

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the difference between Soranus' ideas about conception and the contemporary western medical interpretation, see Burguière, Gourevitch, and Malinas 1988, xcv.

[53] Adapted from Temkin, trans., 1991.

[54] See Flemming 2000, 231.

[55] *Gyn*. 1.8.11 = Ilb. 1.27.2. Burguière, Gourevitch, and Malinas note that this is one of the few references we have to the lost work of Herophilus, "Against the Common Dogmas." On the position held by Herophilus, the editors note the similarity of

contrasts this position with that of Themison, who is associated with the development of the Methodist sect. He reports that Themison, along with "most of our people" (οἱ πλεῖστοι τῶν ἡμετέρων, i.e., Methodists), argues that menstruation is *only* useful for childbearing and *not* for health.[56] Other authorities, who remain unnamed, believe that menstruation is beneficial *neither* for health *nor* childbearing.[57] Finally, Herophilus and Mnaseas (a Methodist of the first century CE, of whom little is known), though following different doctrines, argue a sort of middle ground, that "in some women menstruation is profitable for health, in others, however, harmful."[58] Soranus does not state their positions on whether menstruation is helpful for childbearing. In sum, the authorities Soranus invokes are more likely to consider menstruation *not* profitable for health.

Soranus then proceeds to an examination of the distinct positions on menstruation, which becomes increasingly abstract. He explains that the first group, who consider menstruation to be beneficial for health and childbearing, believe that while men expel excess matter from their bodies through physical exertion, women's sedentary lifestyle requires another means of purgation of excess matter.[59] These physicians postulate a teleological nature (*physis*), one that has forethought for human beings (προνοητικὴ τῶν

Herophilus' position to Aristotle's (*Gen. An.* 1.19, 726b, *Hist. An.* 7.2.583a, Gal., *De. ven. sect. adv. Erasistr.* 5 = 9.164K). Burguière, Gourevitch, and Malinas 1988, 80. Also see von Staden 1989.

[56] On Soranus' sectarian designations (or lack thereof), see Hanson and Green 1994, 994ff.

[57] He refers to these authorities as τινὲς δε τῶν ἐνσημοτέρων ("some [men] of significance"), *Gyn.* 1.8.12–14 = IIb. 1.27.2.

[58] *Gyn.* 1.8.14–16 = IIb. 1.27.2–3.

[59] This notion of excess moisture and its purgation is central to ancient theories of female physiology. See Dean-Jones 1994, 41–109, on female anatomy and physiology. Also see, King 1998.

ἀνθρώπων ἐστὶν ἡ φύσις).[60] Thus *physis* devised menstruation as a means of expulsion to guard against the danger of excess in women's bodies.[61] Soranus expresses doubt about the premise of this position:

> πρὸς τούτους δὲ λεκτέον, ὅτι τὸ προνοητικὴν εἶναι τὴν φύσιν διαπεφώνηται καὶ βαρυτέραν ἔχει τοῦ νῦν ζητουμένου τὴν ἐπίκρισιν, εἴτε δύναται προνοοῦσα τῶν ἀνθρώπων μετρῆσαι τὰς ὀρέξεις, ὅπως μὴ πλείονα λάβωσι τὴν τροφήν, ἢ κωλῦσαι γενέσθαι τι περισσόν· ἧς γὰρ ἴδιον κηδεμονικῶς ἀποκρῖναι τὸ πλεονάσαν, τῆς αὐτῆς καὶ τὸ κωλῦσαι τὸν πλεονασμὸν γενέσθαι τῆς ὕλης. εἰ δὲ καὶ προνοητικῶς ἐγέννησε τὴν κάθαρσιν, οὐ πρὸς ὑγείας τήρησιν ἀλλὰ πρὸς παιδοποιίαν ἐπενόησεν αὐτήν· ἔνθεν οὔτε ταῖς μήπω συλλαμβάνειν δυναμέναις, οἷον ταῖς νηπίαις, παρέσχε τὴν κάθαρσιν οὔτε ταῖς μηκέτι, καθάπερ ταῖς παρήλιξιν, ἀλλὰ τῇ περιγραφῇ τῆς χρείας συναπέσβεσε τὸ ἔργον· (*Gyn*. 1.8.29–27 = Ilb. 1.28.1–3).
>
> In opposition to these people, one must say that the providence of nature has been disputed and that this proposition involves a decision which is more difficult than our problem: whether nature in her providence for human beings is able to measure their appetites so that they do not partake of too much food, or whether she can prevent the formation of surplus material. For if it is characteristic of nature to excrete providentially the excess, it would be in the power of the same nature to prevent the formation of excess material. But even if she created menstruation providentially, she did not contrive it for the preservation of health but for childbearing. Therefore, she did not bestow menstruation on those who are not yet able to conceive, like infants, as is the case in women past their prime, but extinguished this activity upon the termination of its usefulness.[62]

In passing, Soranus is grappling with the scope of teleology in living bodies.[63] He poses the question: if *physis* designed menstruation for the maintenance of health (πρὸς ὑγείας

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[60] *Gyn*. 1.8.17–18 = Ilb. 1.27.3.

[61] Trapped menses, which features prominently in gynecological treatises such as *Diseases of Young Girls* (among other Hippocratic gynecologies), is therefore a particularly dangerous affliction to the unnamed physicians in this camp (*Gyn*. 1.8.22–28 = Ilb. 1.27.3). Cf. Manuli 1982, 43ff.

[62] Adapted from Temkin, trans., 1991.

[63] An important comparison should be made with Galen's Demiurge and his own teleological ideas about nature. My thinking has been influenced by Holmes 2014. The article offers an exploration of Galen's conception of the body's "innate teleology" and

τήρησιν) by cleansing and removing excess material from the body, then why did *physis* even allow the formation of excess in the first place? Since this is not the case, and formation and expulsion are embedded in the process, there must be a different explanation. In keeping with the Methodist avoidance of hidden causes, he curtails the discussion in favor of what is manifest, asserting that the function (τὸ ἔργον) of menstruation must therefore be childbearing (ἡ παιδοποιία) since it only occurs in women of childbearing age.[64] Manuli suggests that Soranus, furthermore, "distorts" the Stoic concept of "providential nature": what is really providential is not "nature" but rather the *iatrikē technē*, a necessary bulwark against the "blindness" of individuals to care for their bodies in the interest of positive birth outcomes.[65] Successful childbearing, then, becomes the ultimate goal – and this notion pervades the treatise.

In the next section, he attacks those who think that menstruation is beneficial neither for health nor childbearing, and then arrives at Herophilus and Mnaseas' positions, who both argue that menstruation is harmful for some but healthful for others. Without belaboring their arguments, he tries to show through Methodist principles of flux and constriction (and by citing one of his other treatises, "On Communities") that

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the ethical agent who can "override the tendencies of the faculties, undercutting their odds of success" (243); the agent can, however, also "take responsibility for the care of their own lives by making use of the resources of medicine to mimic and complete the technical labor of Nature"(232). A valuable intervention is also provided by Flemming 2002, 105. She explores Galen's idea of "provident" nature in light Soranus' question in this passage quoted above.

[64] For a summary of the issues surrounding the Methodist approach to hidden causes, see Hanson and Green 1994, 994ff. Also see Nutton 2012a, 191ff., especially 194–95, for the development of the approach to hidden causes.

[65] Manuli 1982, 44.

regardless of a woman's constitution (*contra* Herophilus and Mnaseas), menstruation is *always* harmful for a woman's body, though the harm may be very difficult to detect.[66]

> Κοινῇ δὲ πρὸς τοῦτον καὶ πρὸς Ἡρόφιλον λεκτέον ὅτι βλάπτει μὲν ἡ κάθαρσις πρὸς τὸ ὑγιαίνειν ἁπάσας, ἤδη δὲ τῶν μὲν εὐπαθεστέρων καθάπτεται μᾶλλον, διαλανθάνει δὲ τὸ βλαβερὸν αὐτῆς ἐφ' ὧν δυσπαθῆ τὰ σώματα κέκτηνται. (*Gyn*. 1.8.94–98 = Ilb. 1.29.4).
>
> And both against [Mnaseas] and Herophilus one must say that in regard to health menstruation is harmful for all, although it affects delicate persons more, whereas its harmfulness is entirely hidden in those who possess a resistant body.

Furthermore, certain women are healthy without menstruating, and older women's health is not negatively affected by the onset of menopause. Likewise, young girls are no less healthy because they do not menstruate.[67] This notion of "harmfulness" that is "hidden" sounds a bit surprising coming from a Methodist doctor, perhaps attesting both to the flexibility of Soranus' own Methodism and his desire to universalize his understanding of female physiology. He concludes: catharsis of the menses is not beneficial for health but "is useful for childbearing only; for *syllēpsis* does not take place without menstruation."[68] I return to *syllēpsis* below.

In this section, we see that Soranus lines up well-known figures whose opinions resonate with his own: Themison, Herophilus, and Mnaseas. In fact, the only authorities he addresses by name are those who either believe that menstruation is not healthful or *may not* be healthful. Soranus both builds on their authority but also undercuts them,

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[66] He dismisses the notions that menstrual bleeding is a result of the ulceration of the uterus, and therefore unhealthful, and that woman can get pregnant without menstruating (*Gyn*. 1.8.51–69 = Ilb. 1.28). *On Communities*: "Περὶ κοινητήτων," *Gyn*. 1.8.86 = Ilb. 1.29.3.

[67] *Gyn*. 1.8.100–4 = Ilb. 1.29.5–6. Cf. Soranus' position on pathological amenhorrea in the context of Methodist principles, as discussed by Hanson and Green 1994, 1000–1.

[68] *Gyn*. 1.8.105–8 = Ilb. 1.29.6. Adapted from Temkin, trans., 1991.

thereby bolstering his own authority. He reveals their "errors," in effect, showing them up and displaying his command of the medical tradition.

Soranus then turns to virginity and the question of "whether permanent virginity (ἡ διηνεκὴς παρθενία) is healthful,"[69] which opens up the question of whether, overall, procreation is beneficial for women's health. This activates many important questions, as a woman's capacity for childbearing, her *fecunditas*, as we saw above, was so closely bound up with her social value. He sees the sexual act as the prelude to a cascade of effects on female health, including but extending beyond parturition. The passage is organized around debates between two (unnamed) camps – one of which believes virginity to be beneficial for health while the other does not. Soranus aligns himself with the latter.

This passage has caused perplexity in commentators precisely because Soranus seems to contradict himself: he positions virginity as "beneficial for health" (and sex as detrimental), but simultaneously conveys a pronatalist message to his readers.[70] Some have approached Soranus' position through contemporary attitudes towards bodily asceticism in the period. Virginity, furthermore, is a flashpoint in the study of late antiquity, which has drawn scholarly attention to this passage.[71] Attitudes to virginity in

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[69] It can also be translated as "lifelong virginity." Cf. Pinault 1992, 134, n. 2.
[70] It is noteworthy that Christian compilers also leave out this section in their discussions of Soranus' positions, even though one might think that his (conflicted) endorsement of continence would be of interest to them. Furthermore, early Christian writers, such as Tertullian, cite Soranus with reverence, but never this passage. For an exploration of these issues, especially in the context of Christian sexual morality, see Pinault 1992.
[71] The valorization of virginity and abstinence has indeed been explored in many studies of the transformation of sexual morality, especially in the high empire and late antiquity. Influential contributions include the groundbreaking (and controversial) study of Foucault 1988; Brown 2008, 8, 19; Rousselle 1988, 63ff. Also see Elm 1994; Harper 2013.

this period have been subject to a variety of approaches to sexual moderation, including philosophical endorsements of sexual restraint (e.g., the Stoic notion that sex should only be for procreation, even in marriage), the social (and institutional) values of *sōphrosynē* and *pudicitia* (modesty, chastity), and what Brown describes as a rethinking of "the horizons of the possible of the body itself."[72] Jody Rubin Pinault, influenced by Brown, has argued that Soranus' position on virginity should be "seen as a reflection, in medical terms, of an ascetic attitude toward the body that was widespread in the early Empire," rather than a reflection of a particular philosophical belief.[73] This is a valuable perspective, but it misses the significance of Soranus' formulation of risk, of which his position on virginity is just one part. Indeed, what seems to be a contradiction in Soranus' text – between his views on virginity and procreation – is not one at all. His logic is consistent if we follow carefully his distinction between healthful and natural.

Soranus' exploration of virginity revolves around sexual desire and the status of sexual intercourse vis-à-vis health for both males and females. He suggests looking to

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[72] Brown 2008, 21 (Stoicism), 31 ("horizons of the possible"). He continues, "By renouncing sexual activity the human body could join in Christ's victory: it could turn back the inexorable. The body could wrench itself free from the grip of the animal world. By refusing to act upon the youthful stirrings of desire, Christians could bring marriage and childbirth to an end. These were the views of the exact contemporaries of Galen and Marcus Aurelius" (32). Foucault 1988, 149ff., expounds famously on the notion of the "conjugalization of pleasure;" these issues are explored in a different context in Harper 2013, 53ff.

[73] Pinault 1992, 133. A Foucauldian influence is also clearly detectable. She is responding to Manuli 1982; Rousselle 1988; Bullough 1973; Preus 1975. Manuli's thought-provoking study hinges on what she considers to be Soranus' Epicurean ideal of withdrawal from the world; Rousselle interprets it as signifying female dissatisfaction with early marriages; Preus sees Soranus' position on virginity in terms of population control; Bullough focuses on what he perceives to be Soranus' influence by Philo of Alexandria. Pinault is right to object to Manuli's (over)emphasis on Epicurean influences, but the latter's study, nevertheless, remains the most convincing of those cited. Like Pinault, I find the rest of these interpretations to be unconvincing.

animals for some answers and asserts that sows who have had the uteri removed become "bigger, better nourished, stronger, and firm like males."[74] Without a uterus, the animals will not engage in sexual intercourse.[75] And likening women to men in this regard, he argues that since chaste men are more robust, the same should go for women.[76] He explains, "for *syllēpsis* and parturition exhaust the female body and make it waste greatly away, whereas virginity, safeguarding women from such injuries, may be suitably called healthful" (αἱ γὰρ συλλήψεις καὶ ἀποτέξεις δαπανῶσι τὰ σώματα τῶν θηλειῶν καὶ ἀθρόως ἀπομαραίνουσιν, ἡ παρθενία δὲ τῶν ἐντεῦθεν ἀδικημάτων τὰς θηλείας ὑφαιροῦσα δεόντως ἂν ὑγιεινὴ λέγοιτο).[77] The counter-arguments, as Soranus describes, suggest that sexual pleasure in moderation is beneficial for health, intercourse helps the menses flow unobstructed, and the benefits of avoiding childbearing are outweighed by the harmful nature of menstrual retention.[78]

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[74] Cf. Aristotle on *kaparia*, *Hist. An.* 632a22–30, cited by Dean-Jones 1994a, 67–68. Also see Brown 2008, 19.

[75] *Gyn.* 1.9.12–13 = Ilb. 1.30.2; 1.4.134–35 = Ilb. 1.15.1 in which he mentions that in Galatia, pigs whose uteri have been excised grow fatter. Cf. Galen, *Sem.* 1.15 = 4.570K, who also reports on the custom in the eastern Roman empire. Note that Soranus does not believe the uterus to be essential for women's survival; in fact, they are perhaps healthier without it, he suggests through his analogizing. See Burguière, Gourevitch, and Malinas 1988, 76, n. 58.

[76] This comparison is deeply embedded in Soranus' notion of sexual difference, best explored through analysis of the opening of book three, when he addresses the question of whether women have diseases uniquely their own, as discussed in this chapter's introduction.

[77] *Gyn.* 1.9.18–21 = Ilb. 1.30.3. Adapted from Temkin, trans., 1991; see Gourevitch 1987, who focuses on the harm of marrying prepubescent and pubescent girls.

[78] *Gyn.* 1.9.64 = Ilb. 1.31. "Menstrual retention" is a focus of the Hippocratic gynecologies, featuring in e.g., *Mul.* I, 2 = Li 8.14, *Virg.* 1 = Li 8.466. For introduction and translation of the latter, see Flemming and Hanson 1998; also see see King 2013, 73–128. Dean-Jones (1994, 60–61) points out the kinship between Hippocratic theories of the accumulation of menstrual blood with Aristotle's.

Soranus responds to these counter-arguments by first referencing his own treatise, *On Hygiene*, in which he lays out the argument "that intercourse is harmful in itself" (ὅτι βλαβερὰ κατὰ γένος ἡ συνουσία).[79] He then takes up an example from the animal kingdom which seems to support his point (female animals kept from intercourse are stronger), echoing what was suggested earlier about sows, and finally, he notes that women who are chaste as a result of religious duty are "less susceptible to diseases" (δυσαλωτοτέρας πρὸς νόσους).[80] If these women have menstrual problems, they are a result of inactivity and obesity and decidedly not due to abstention from sex.[81] He finishes the section by introducing a crucial idea:

> διόπερ ὑγιεινὴ μὲν ἡ διηνεκής ἐστιν παρθενία καθάπερ ἐπὶ τῶν ἀρρένων καὶ ἐπὶ τῶν θηλειῶν, τῷ κοινῷ δὲ τῆς φύσεως λόγῳ, καθ' ὃν ὑπομένει ἑκάτερα τὰ γένη τὴν τῶν ζῴων διαδοχήν, ἡ μίξις ἀκόλουθος ἂν εἴη. (*Gyn*. 1.9.79–84 = Ilb. 1.32.3)
>
> Consequently, permanent virginity is healthful, in males and females alike; nevertheless, intercourse seems consistent with the general principle of nature according to which both sexes submit to the succession of living beings.[82]

[79] Pinault points to the treatise *Precepts on Health* (attributed to Caelius Aurelianus), which may be based on Soranus' lost *On Hygeine*. In the former text, the harmful aspect of intercourse is described as *purgatio virium*, "purging of strength." Pinault (1992, 126–27) connects this to Soranus' statement that sexual intercourse brings on "atony," arguing that it is thus associated with excessive laxity in Methodist terms. Also see Brown 2008, 18–19; Manuli 1982, 42, explains, "Lo sperma infatti conserva in Sorano una connotazione esclusivamente alimentare, e non assume mai quella di «residuo», che comporta al contrario la necessità di una sua eliminazione, al pari di tutti gli altri residui, come l'urina e le feci."

[80] *Gyn*. 1.9.67–72 = Ilb. 1.32.1–2. The prevailing interpretation of this passage is that he is referring to the vestals. Burguière, Gourevitch, and Malinas 1988, 81, n. 115. On vestals, see Beard 1980.

[81] *Gyn*. 1.9.73–79 = Ilb. 1.32.2.

[82] Adapted from Temkin, trans., 1991.

For the present purposes, the crucial phrase is "the general principle of nature" (τῷ κοινῷ δὲ τῆς φύσεως λόγῳ). The principle or logic of *physis* dictates that sexual intercourse is key for creating descendants and therefore propagating human life. The passage brings into focus Soranus' contrast between the "healthful" and the "natural." While he states that virginity is good for males as well as females, his focus here is on women's health and the conflict between what is most beneficial to their health and what is necessitated by *physis*, namely procreation. It is childbearing, on the one hand, that exhausts the body and makes it waste away, and the corollary being that such weakening makes the body prone to disease. Virginity, on the other hand, makes women less susceptible (δυσαλωτοτέρας) to disease. Thus Soranus suggests here that childbearing, though natural, creates susceptibility in women – it heightens the possibility of succumbing to disease.[83]

The conflict between the natural and healthful is made explicit again a few sections later, when Soranus turns to *syllēpsis*. He centers the discussion around a question in keeping with the sections examined above on menstruation and virginity, the question of the process' usefulness for health. But before I move to a discussion of *syllēpsis* in light of this question, a detour is necessary to clarify what precisely the term means for Soranus, since he cares a lot about terminology.[84]

He begins a section on the signs (σημεῖα) of *syllēpsis* with a careful definition of both that term and *kyēsis*. He works through his definition explaining *syllēpsis* in a

[83] Contrast this with Galen's position: "In Galen's scheme, on the other hand, in the normal course of events – where pregnancy is followed by a straightforward birth and purgation – everything is safe" (Flemming 2002, 106).
[84] For details on Soranus' lost treatise, "Etymologies of the body of man," see Hanson and Green 1994, 1021–23.

manner used throughout the work, by providing a single-sentence definition and then parsing each part of it in order. *Kyēsis*, he explains more briefly, is related to κεύθησις (a *hapax legomenon*) which, to follow Temkin, might be translated as "concealment." Soranus explains, τὸ γὰρ κεύθειν ἐστὶ τὸ κρύπτειν, καὶ τὸ ἐν τῇ μήτρᾳ δὲ συνειλημμένον κρύπτεται ("for *keuthein* means to conceal and that which is held in the uterus is concealed").[85] *Kyēsis* may be translated as "pregnancy," since it refers, by Soranus' definition, to the "concealment" – or perhaps better, "containment" – of the fetus in the body of the mother. He devotes more time to explaining *syllēpsis*, which, by its usage throughout the work, encompasses what English speakers would term conception and gestation. This definition must come with a caveat that Soranus is not entirely consistent in his usage. In a list of functions (*erga*) of the uterus, discussed above, he uses the term to refer specifically to conception as distinct from the rest of pregnancy– *syllēpsis* as opposed to *kyophoria* (κυοφορία), which can be likened to *kyēsis*.[86] When it comes to formally defining *syllēpsis*, however, he writes, σύλληψίς ἐστιν κράτησις ἐπίμονος σπέρματος ἢ ἐμβρύου ἢ ἐμβρύων ἡ ἐν ὑστέρᾳ διὰ φυσικὴν αἰτίαν ("conception is the prolonged hold on the seed or embryo or embryos in the uterus from a natural cause").[87] The term, therefore, by this definition, covers the

[85] *Gyn*. 1.14.3–4 = Ilb. 1.43.1. Adapted from Temkin, trans., 1991. On this passage, Burguière, Gourevitch, and Malinas (1988, 84, n. 159) point out that Soranus is mistaken in his etymology, which Caelius does not even adapt in his Latin work: "Ce passage n'est pas traduit par Caelius, sans doute parce que *praegnans* a un étymologie tout différente. En outré Soranos se trompe complètement dans ses rapprochements: dans le nom κύησις l'élément radical signifie gonfler, et n'a rien à voir avec κεύθειν, contenir, cacher, ni avec κρύπτειν cacher, envelopper."
[86] *Gyn*.1.5.62= Ilb. 1.18.5.
[87] *Gyn*. 1.14.6–8 = Ilb. 1.43.1. Later in the section, he draws a distinction between *analēpsis* and *syllēpsis*, the former being simply the "reception" of male seed and the latter "both retention and attachment" (κράτησίς τε καὶ συγκόλλησις), which refers to

entire length of pregnancy until the onset of parturition – encompassing both the "retention" of male seed in the initial stage of pregnancy and the development of the fetus as it "changes" (μεταβέβληται) into a *physis* and a *psychē*, a soul, as he puts it.[88] Here, *kyēsis* refers to pregnancy vis-à-vis the external (the woman's body conceals and contains the child), and *syllēpsis* the internal retention of the fetus. Overall, this definition of *syllēpsis* covers Soranus' usage throughout the *Gynecology*, and it will be followed in this chapter.

As to the question of the healthfulness of *syllēpsis,* Soranus builds on the arguments he made in his discussions of the healthfulness of menstruation and virginity. The passage itself is similar in form and style to his section on virginity discussed above, and likewise, it considers the arguments of unnamed authorities. He starts with a syllogism that he proceeds to dismantle: "Some people believe *syllēpsis* to be healthful,

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the embryo as well as the seed (*Gyn*. 1.14.37–39 = Ilb. 1.43.7). He also notes a distinction between *syllēpsis* and retention in the uterus that occurs *kata physin* and *para physin*. The later encompasses dystocia, for example, when the fetus is held in the womb and must be extracted through intervention. This is not *syllēpsis*, "for [retention] is not brought about by the natural function, rather by one which is contrary to nature" (οὐ γὰρ ὑπὸ τῆς κατὰ φύσιν ἐνεργείας, ὑπὸ δὲ τῆς παρὰ φύσιν ἀποτελοῦνται*, Gyn*. 1.14.33–34 = Ilb. 1.43.6).

[88] Soranus sees pregnancy as divided into three stages, which he covers via a description of care for the pregnant woman (discussed below) and in a description of growth in the womb (*Gyn*. 1.16–19 = Ilb. 1. 46–58). On the fetus' ensoulment, he explains (*Gyn*. 1.14.17–18 = Ilb. 1.43.3): μεταβέβληται γὰρ ἤδη τὸ σπέρμα καὶ φύσις ἐστί, κατὰ προκοπὴν δὲ καὶ ψυχή, καὶ οὐκέτι σπέρμα ("For the seed has been changed and is already a nature, in process of time soul too, and no longer seed"). Soranus does not broach the issue of the fetus' animation here, but it seems likely from this passage that he subscribes to the widely held "gradualist view" of fetal development, as opposed to the idea of animation at the initial attachment of the seed (in short, conception) or the rival view of animation at birth. There are clues for Soranus' position in Tertullian's *De Anima*, however. For the best explanation of the gradualist position, see Hanson 2008. On Soranus' lost philosophical treatise, "On the Soul," cited in (and probably quite influential for) Tertullian's *De Anima*, see Hanson and Green 1994, 1006. Also see Waszink 2010. Regarding this matter, the loss of Soranus' treatise(s) is felt acutely.

because every natural act is useful, and *syllēpsis* too is a natural act" (Ἔνιοι τὴν σύλληψιν ὑγιεινὴν εἶναι νομίζουσιν, ὅτι πᾶν φυσικὸν ἔργον ὠφέλιμόν ἐστιν, φυσικὸν δὲ ἐνέργημα καὶ ἡ σύλληψις).[89] In other words, if every natural act is useful (for health), and *syllēpsis* is a natural act, then *syllēpsis* is healthful. He quickly points out, however, that he has shown menstruation to undermine this model: that just because an "act" is "natural" and "useful" does not mean that it is necessarily useful for health. Or rather, "useful" does not always mean "useful for health."

> πρὸς ταῦτα δὲ λεκτέον, ὅτι καὶ ἡ κάθαρσις φυσικὸν ἔργον, ἀλλ' οὐχ ὑγιεινόν, ὡς ὑπεμνήσαμεν. οὐ πάντως γε μὴν εἴ τι ὠφέλιμόν ἐστιν, τοῦτο καὶ ὑγιεινόν· ἀμέλει καὶ τὸ καθαίρεσθαι καὶ συλλαμβάνειν ὠφέλιμον μέν ἐστιν εἰς γένεσιν ἀνθρώπων, οὐ μὴν ὑγιεινὸν ταῖς κυοφορούσαις. (*Gyn*. 1.14.7–11 = Ilb. 1.42.1–2)
>
> Opposed to such arguments [implied by the syllogism], one must say that menstruation too is a natural act, but not a healthful one, as we have recalled. As a matter of fact if a thing is useful, it is not in every case healthful as well. Indeed, both menstruation and *syllēpsis*[90] are useful for the propagation of human beings, but certainly not healthful for the childbearer.[91]

This passage both explicitly builds on his argument about menstruation as useful for childbearing but not health and echoes the idea with which he concluded his discussion of virginity – that nature's logic necessitates the "succession of living beings" (τὴν τῶν ζῴων διαδοχήν), as he put it, despite the negative effects of sexual intercourse on the female constitution.[92] The tension between the natural and the healthful could not be clearer, and it is explicitly extended to encompass pregnancy. As I have pointed out

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[89] *Gyn*. 1.13.2–4 = Ilb. 1.42.1. Adapted from Temkin, trans., 1991.
[90] συλλαμβάνειν is a verbal noun related to *syllēpsis*. Here, I chose to use the latter word as an alternative to the infinitive simply because I believe "pregnancy," which Temkin uses, does not quite fit Soranus' usage, as explained above.
[91] Adapted from Temkin, trans., 1991.
[92] See Flemming 2000, 236.

above, procreation serves a teleological role in the text, but Soranus' approach to health is more complicated. As Flemming observes, "If, for the Hippocratic writers, to be a healthy woman is to be a reproductive woman, for Soranus (and others among the *methodikoi*), to be a woman is to be reproductive (the exceptions only serving to prove the rule), which is not healthy but useful; and it is towards this utilitarian end that Soranus directs his efforts."[93]

Soranus suggests several aspects of pregnancy to buttress this argument, such as the digestive issues (which he terms *kissa*) that accompany it – these he calls πολλὰ… δυσχερῆ ("many inconveniences") – as well as more general problems with food distribution in the body when the mother must provide both for herself and her fetus.[94] He caps off the section with an agricultural comparison, which adds rhetorical strength to his case by investing it with a sense that he is professing a universal truth about childbearing, extending beyond humans and animals to the earth itself: "And that pregnancies (κυήσεις) bring about atrophy, atony, and premature old age (τὴν ἀτροφίαν καὶ τὴν ἀτονίαν καὶ τὸ προωρότερον γῆρας), is manifest from the obvious facts and furthermore from the similarity with the earth which later becomes exhausted from continuous production of fruit (τὰς ἐπαλλήλους καρπογονίας) as not to be able to yield fruit year after year."[95] Like human procreation, agricultural production might be

[93] Ibid., 238.
[94] *Gyn*. 1.13.18 = Ilb. 1.42.4. *Kissa* is discussed in detail below.
[95] *Gyn*. 1.13.30–35 = Ilb. 1.42.5. Chapter two discusses these vegetal analogies in detail. It is worth noting that atony is also the deleterious affect that is ascribed to sexual intercourse by Caelius Aurelianus (following Soranus), which indicates a state laxity (Pinault 1992, 8).

understood as "natural" but not "beneficial to the health" of the land.[96] But like sex, pregnancy, and birth, it is "useful," or rather, essential, for the maintenance of human communities.

Through Soranus' three discrete investigations in book one on the useful, the healthful, and the natural, a picture emerges of a woman whose body is exposed to risks that inhere in the process of childbearing. Because so many medical works are lost, it is hard to say how representative his view is in the context of his contemporaries. Soranus presents a particularly dire set of possibilities for a *paterfamilias* looking to protect his female relations and offspring – this is both part of his rhetorical agenda and broader conceptualization of the generative process (and his role within in). He shows his readers that generation is fraught with peril for women, and that menstruation, sex, and *syllēpsis* are by no means therapeutic, as various treatises on women's health imply.

Though Soranus' view was probably not unique, it is hard to overstate how radical a departure this is from traditional ideas transmitted in the Hippocratic gynecologies. At a basic level, Soranus suggests that procreation is inherently damaging for the female body: it weakens the body, makes it age faster.[97] This means that childbearing women become more prone to the development of other diseases. Furthermore, a pregnancy that proceeds "naturally" may in fact end in a difficult and "unnatural" delivery. I want to suggest that Soranus' arguments about sex and *syllēpsis* are key to understanding how he conceptualizes the risks of childbearing. Sex and

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[96] Manuli 1982 associates the land metaphor here with a dichotomy she makes regarding perceptions of the uterus. She argues that there are two fundamental types of metaphorical thinking about the organ: as the land (fertile, fruitful, maternal) and as an animal (appetitive, sensual, diseased). Also see duBois 1988; Cole 2004; Hanson 2013.
[97] See Manuli 1982, 42ff. She notes that pregnancy is always harmful ("la gravidanza è sempre nociva").

syllēpsis are harmful and, as a result, open up the possibility of various other forms of harm and susceptibility. These aspects are presented as part of a process that is natural and essential for the propagation of human communities. In this sense, risk is naturalized as part of procreation, and health assumes a subordinate position.[98]

In configuring childbearing as a necessity for women, Soranus makes abundantly clear that he also sees it as the primary function of marriage. Before launching into a long discussion of the best time for intercourse that results in *syllēpsis*, he devotes a section to the question of how to recognize women who will be successful childbearers; these are the women capable of both συλλαμβάνειν and τίκτειν, conceiving and carrying the fetus, as well as bringing it to birth.[99] The section begins with a passage on the usefulness of marriage:

> Ἐπεὶ τέκνων ἕνεκα καὶ διαδοχῆς, ἀλλ' οὐχὶ ψιλῆς ἡδυπαθείας, αἱ πολλαὶ γάμοις συγκαταζεύγνυνται, παντελῶς ἐστὶν ἄτοπον περὶ μὲν τῆς προγονικῆς αὐτῶν εὐγενείας ἐξετάζειν καὶ τῆς τῶν χρημάτων περιουσίας, περὶ δὲ τοῦ πότερον δύνανται συλλαμβάνειν ἢ μή, καὶ εἰ πρὸς τὸ τίκτειν εὐφυῶς ἔχουσιν ἢ οὔ, ἀνεξέταστον ἀπολιπεῖν· δεόντως τὸν περὶ τοῦ προκειμένου ποιούμεθα λόγον. (*Gyn*. 1.11.3–9 = Ilb. 1.34.1)
>
> Since women usually are married for the sake of children and succession, and not for mere enjoyment, and since it is utterly absurd to make inquiries about the excellence of lineage and the abundance of their means but to leave unexamined whether they can conceive or not, it is only right for us to give an account of the matter in question.[100]

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[98] This should be compared to the idea that Galen also "institutionalizes" the risks of childbearing (with a somewhat different set of parameters), as argued by Flemming 2002, 106–07. Her argument hinges on Galen's effort to achieve "congruence" with Hippocratic theory in the construction of his own authority.

[99] *Gyn*. 1.11.7–8 = Ilb. 1.34.1. Cf. Rousselle 1988, 20ff.

[100] διαδοχή, here translated as "succession," carries the implication both of continuation of a family line as well as inheritance.

He goes on to paint a holistic picture of the woman most capable of childbearing, "since the uterus is similar to the whole body."[101] Many aspects of her anatomy and physiology ought to be examined. A woman's digestion matters, as does complexion and psychological wellbeing – as these aspects are signs of her capacity for procreation. He again employs an agricultural comparison to bolster his point, reminding his reader that "poor land" (λυπρὸν χορίον), one could say unhealthy land, weakens or destroys the vegetal life it is meant to nurture.[102] As discussed in chapter two, for Soranus, a woman's body is like a landscape, which must be surveyed in all its aspects. In short, one ought to exercise medical expertise before inquiring about other matters, and any other response to the prospect of marriage is out of place (ἄτοπον). This, of course, elevates Soranus' own type of knowledge above others, and again, configures successful childbearing as the ultimate goal, especially vis-à-vis other benefits of conjugal life. Soranus' configuration of his authority vis-à-vis risk reduction (discussed further below), has interesting resonances with the modern medicalization of reproduction.

Soranus' views on marriage would not have been foreign to Roman and Greek readers. The idea of marriage *liberorum procreandorum causa* (for the sake of producing children) is embedded in legends of Rome's early legal history: Aulus Gellius reports the first Roman divorce, that of Spurius Carvilius and his beloved wife, was a result of the censors' insistence that his marriage should produce offspring.[103] It was in the aftermath

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[101] *Gyn*. 1.11.14–15 = IIb. 1.34.2. This notion can be seen in the context of Methodist medicine, in that the uterus, "similar to the whole body," thus receives treatment based on commonalities just like any other part. This should be considered in light of Soranus' excursus at the beginning of book three, in which he discusses whether women have their own "unique" affections.
[102] *Gyn*. 1.11. 57–63 = IIb.1.35.6.
[103] Gell., *NA* 4.3.2, 17.21. Gourevitch 1990, 139.

of Augustus' marriage law that Greek doctors in Rome, such as Soranus, "began to elaborate a real medical discourse of Roman marriage."[104] The phrase τέκνων ἕνεκα καὶ διαδοχῆς in fact echoes surviving Latin marriage contracts from the Roman empire, in which marriages are explicitly stated to be "for the sake of producing children," in accordance with the *lex Julia de maritandis ordinibus*. By way of illustration, a marriage contract from Philadelphia in Egypt, dating to the second or early third century CE, begins, *Nomissianus filiam suam virginem Zenarion e lege Iulia quae de maritandis ordinibus lata est liberorum procreandorum causa in matrimonio eam collocavit…* ("Nomissianus has given his daughter, Zenarion, a virgin, in marriage for the sake of begetting children by the Julian law which was passed concerning marriage in the orders").[105] Whether or not Soranus was familiar with this sort of contractual language, it is important to keep in mind that in the Roman empire of his day, *liberorum procreandorum causa* was very much part of the legal discourse on marriage.

Thus marriage, in Soranus' view, is a social institution that promotes what is natural, that is, childbearing.[106] In other words, procreation is both the natural and

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[104] "…commencent à élaborer une véritable stratégie médicale du mariage romain." Ibid., 140. Also see Harper 2013, 61–78, esp. 62-64. Harper observes, "What distinguishes Soranus from his philosophical contemporaries is his clinical insistence on fertility as a criterion of suitability" (62–63).

[105] *P. Mich.* VII, 434 and *P. Ryl.* IV, 612 = *ChLA* IV, 249, see Leiwo and Halla-Aho 2002, 568. This contract is especially interesting because it shows signs of bilingualism while employing phrases drawn from a template, such as *liberorum procreandorum causa*. The individuals contracting the marriage likely had some tie to the Roman army in Egypt, and probably spoke Greek as their dominant language. Several of the signatories sign their names in Greek. This is one example of the embeddedness of the discourse around marriage and procreation. For a basic overview of marriage contracts and the legal status of women vis-à-vis marriage, see Grubbs 2002, 81–135, 122–135 (on contracts, specifically). Also see Treggiari 1991.

[106] Manuli makes a similar point in 1982. She writes, "Riproduzione biologica e riproduzione sociale si identificano, e tutto il patologico che nasce dalla maternità viene

essential use of the female body, and this notion is reflected in the social institution of marriage.[107] In making his case, Soranus bolsters the significance of his own medical expertise and the expertise transmitted by the *Gynecology*. His text provides the knowledge required to make the best procreative decisions, as well as marital decisions – the two are entangled. He wants to teach his readers how to avoid the hazards of marrying a woman incapable of successful childbearing, as well as shore up the risks to the female body that arise during the process, the result of its imperfect realization of its natural calling.

II. Reluctant Host, Unwelcome Guest: Negotiating Birth Outcomes

Soranus argues that a natural logic, embodied by the social institution of marriage, compels women to procreate, which is a natural but not healthful process. Women's individual wellbeing is measured against and eclipsed by the broader social good. Or put another way, their health is subordinated to nature. A woman's own self-interest, i.e., health, may push her in a direction that conflicts with her natural as well as social role. If a woman were to think only of the preservation of her health, she would remain a virgin, Soranus implies, but that is not satisfactory, given the need for "children and succession" (τέκνα, διαδοχή). The idea that childbearing trumps health is also incorporated into Soranus' prescriptions for prenatal care, which are carefully designed to maximize the

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convalidato e quasi gratificato dall'adempimento ad una necessità sociale e politica che corrisponde all'istituto matrimoniale e che comporta la legge economica della trasmissione ereditaria dei beni."

[107] Weighing these ideas in Soranus' work, Flemming 2000 concludes, "The female is the kind of human who performs a certain kind of useful productive role; only that is absolutely evident and necessary" (246).

wellbeing of the fetus. Indeed, a woman's comfort during pregnancy is measured against what is considered best for the fetus, and a lot of anxiety is centered on the latter.

The pregnant woman embodies the conflict between her own health and the broader social good. In other words, one could also see (as Soranus does) the "health" of the society at odds with the health of the female body. The wellbeing of her fetus and its subsequent flourishing is required to maintain human society, so it can be understood as representative (or carrying the potential) of this social good, and its health and postnatal longevity the good itself. But as Soranus shows, ensuring optimal health for the fetus means subjecting the pregnant woman to a difficult and limiting regimen. Regimen and dietetics were crucial to the development of Greek medicine, as observed in the texts of the Hippocratic corpus (e.g., *On Regimen*), among others, and Soranus' prescriptions are part of this long history. Indeed, he is very much working within an established tradition.

Soranus also shows just how much women may suffer while pregnant – certain aspects of pregnancy resemble disease and can be treated as such. Furthermore, at various points in the pregnancy, a woman's desires and behavior may run contrary to what is deemed best for her fetus; these impulses must be controlled by a knowledgeable caretaker.[108] This caretaker serves as regulator and mitigator of potential harm. "Everything is geared towards the bearing and rearing of children," Flemming has argued

[108] I use "caretaker" to leave room for ambiguity in the identity of the individuals administering care. From Soranus' introduction, it is plausible that he addresses a midwife in a section such as this (*Gyn*. 1.1.14–20 = Ilb. 1.2.1), but the caretaker at his early stage might also be an attendant who is part of the household, perhaps under the direction of a midwife or male physician. "Caretaker," while not translating anything specific in the Greek, leaves room for the possibility of various individuals filling various roles.

in a discussion of the *Gynecology*, and the pregnant woman's body and mind must be carefully calibrated to give her child the best chance at life.[109]

The concept of "maternal-fetal conflict," borrowed from contemporary medical anthropology and sociology, helps us to understand the tension within the woman's body, as discussed by Soranus. Similar strains have been detected in embryological/gynecological texts in the Hippocratic corpus, which, as noted, presents a very different outlook on the healthfulness of procreation.[110] "Maternal-fetal conflict," as the label suggests, is used to describe cases in which a pregnant women behaves and engages in practices that are – or rather, are *perceived* – as harming her fetus. In contemporary obstetrics, some have suggested that the term be revised to de-emphasize the notion of pregnancy as a "conflict" between mother and fetus, focusing instead on the conflict between a woman and her physician.[111] This distinction also makes sense for a study of antiquity – the "conflict" between mother and fetus is *perceived* by the physician (among others) and mediated, of course, by notions of what is healthy or unhealthy for a developing fetus.

The sociologist Elizabeth M. Armstrong provides a guide to how we might approach this problem. Her work, *Conceiving Risk, Bearing Responsibility: Fetal Alcohol Syndrome and the Diagnosis of Moral Disorder*, explores the concept of "maternal-fetal conflict" or "maternal-fetal antagonism" through a study of Fetal Alcohol Syndrome (FAS) in the United States.[112] She traces the emergence of the FAS diagnosis, which

[109] Flemming 2000, 245.
[110] Hong 2012.
[111] Diekema, Mercurio and Adam 2011, 51.
[112] Also see, for example, Markens, Browner, and Press 1997.

"describes a set of birth defects associated with prenatal alcohol exposure."[113] A major component of her argument rests on what she describes as "a growing tendency in medicine, law, and society at large to see the pregnant woman and the fetus as not only separate but at odds, their individual welfares as distinct and oppositional, rather than mutual."[114] This is not to say that there is a clear analogue in Soranus' *Gynecology*. After all, Armstrong's argument is premised on the emergence of twentieth-century technologies that monitor fetal wellbeing, turning the fetus into "a patient in its own right."[115] Yet there are continuities worth considering between Greco-Roman and contemporary medical culture, which hinge on the perception of the physician as someone trained to manage the risks inherent to the physical body, as well as the medicalization of reproduction.

Risk, as the title suggests, is at the center of Armstrong's study, in particular, the idea that over the course of the last several decades in the United States, "Pregnancy itself was considered normal, but each individual pregnancy presented the occasion for risk of a potentially abnormal outcome. The concept of risk in pregnancy allowed obstetrics to extend the scope of its purview 'farther back into the pregnancy, into a woman's history and her environment.'"[116] This change altered the parameters by which responsibility and blame were assigned, leading to a "diffusion of risk throughout pregnancy."[117] While I do not want to equate twentieth-century notions of risk with ancient ones, the notion that "diffusion of risk throughout pregnancy" expands the parameters of maternal-fetal

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[113] Armstrong 2003, 3.
[114] Ibid., 14.
[115] Ibid. This issue is tied to the emergence of the "fetal rights" movement, part of the push back against *Roe v. Wade* in the US. Markens, Browner, and Press 1997, 352.
[116] Armstrong 2003, 143. She is quoting Arney 1982, 142.
[117] Armstrong 2003, 143.

conflict is very helpful for a study of Soranus' text. In the *Gynecology*, the possibility of harm to the mother and (especially) the fetus is ever-present and dispersed throughout pregnancy. Regimen and dietetics, popular methods of treatment and self-care in antiquity, were one way of gaining some control – in essence, they were a way to medicalize the childbearing process. Soranus uses this form of treatment to optimize the fetus' development in the face of its mother's needs and desires.

Soranus divides the care of the pregnant woman into three stages that correspond to his notions of fetal development. In the first stage, the "seed" (σπέρμα) must be protected to ensure that it is not detached from the uterus, resulting in a miscarriage;[118] in the second, one must direct care for "alleviation of subsequent symptoms" (πρὸς παρηγορίαν τῶν ἐπιγινομένων συμπτωμάτων) to allow for the fetus' healthy development; the third and final stage, which "aims at the perfection of the embryo" (εἰς τὴν τοῦ ἐμβρύου τελείωσιν), is designed to increase a woman's "endurance for parturition" (εἰς εὐχερῆ τῆς ἀποτέξεως ὑπομονήν).[119] Soranus provides far more detail on the first two stages because the seed/fetus is more fragile and malleable, which means that more care is required to ensure optimal development.

In the first stage, the reader is made aware of the many causes of miscarriage. Care, in particular, is focused on the wellbeing of the seed that is transforming into a embryo.

> When *syllēpsis* has taken place, one must be on guard against (φυλάττεσθαι) every excess and movement both bodily and psychic (κίνησιν σωματικήν τε καὶ ψυχικήν). For the seed is evacuated through

[118] In this initial stage of pregnancy, the seed has not yet transformed into an embryo. It has been deposited in the uterus and must be protected so that it can be retained for subsequent development.
[119] *Gyn*. 1.16.2–9 = IIb. 1.46.1.

> fright, sorrow, sudden joy and, generally, by severe mental upset; through vigorous exercise, forced detention of breath, coughing, sneezing, blows, and falls, especially those on the hips; by lifting heavy weights, leaping, sitting on hard sedan chairs, by the administration of drugs, by the applications of pungent substances and sternutatives; through want, indigestion, drunkenness, vomiting, diarrhea; by a flow of blood from the nose, from hemorrhoids or other places; through relaxation due to some heating agent, through marked fever, rigors, cramps, and in general, everything inducing forcible movement (τὸ κοινότερον πᾶν τὸ βιαίαν κίνησιν ἐπάγον) by which a miscarriage (ἔκτρωσις) may be produced.[120] (*Gyn*. 1.16.10–22 = Ilb. 1.46.2)

The possibility of miscarriage is, it seems, lurking around every corner. These are the known causes, Soranus counsels, and "those within our control are to be eschewed."[121] Since these activities and affections may cause miscarriage, and they are *known* causes, one ought to try to control them. Because there is such a wide array of potential causes, the pregnant woman becomes extremely restricted in the initial stage of care. Soranus gives the caretaker explicit instructions about her daily regimen: her bathing schedule, massage and anointment, eating (or fasting), drinking, and exercise.[122]

The seed, at this initial stage of development, is described as exceedingly fragile. The first day after *syllēpsis*, Soranus suggests that women should stay in bed for a day or two, avoid massage of the abdomen, limit food intake (mostly cereals, τροφὴν σιτώδη), and not drink wine.[123] All these instructions are meant to ensure that the seed is

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[120] Adapted from Temkin trans., 1991.
[121] Τούτων οὖν τὰ ἐπὶ τῆς ἡμετέρας ἐξουσίας ὑπάρχοντα πεφυλάχθαι προσῆκεν…, *Gyn*. 1.16.22–24 = Ilb. 1.46.3.
[122] *Gyn*. 1.16.24–78 = Ilb. 1.46.3–10.
[123] Soranus explores the signs of conception at *Gyn*. 1.14.40ff = Ilb. 1.44. He acknowledge that some think it is not possible to know when conception has taken place; but he thinks "one must work out the indication (σημείωσιν) of *syllēpsis* from the many signs lumped together and by their differentiation," such as a shivering sensation after intercourse, closure of the cervix, and dryness of the vagina (meaning retention of the seed), later confirmed by cessation of the menstrual period and swelling of the breasts, among other signs." Adapted from Temkin, trans., 1991.

"implanted securely and firmly in the uterus" (πρὸς τὴν ὑστέραν ἔμφυσιν ἀσφαλῆ καὶ ἰσχυρὰν) and not shaken out of place.[124] Two days later, she should begin a bit of exercise, which includes short walks or "passive" activities, such as traveling by sedan chair, but excludes riding in carts drawn by animals, to avoid shaking.[125] Her diet also must change to include meat, fish, and vegetables that are not too pungent (he gives clear specifications), because these sorts of foods "irritate, attenuate, and wear down the whole physique" and are at odds with aiding the development of the seed, "which is like mucus as long as it is not yet held together by coagulation" (μυξώδες ὂν ὅσον καὶ οὔπω διακεκρατυμμένον τῇ πήξει).[126] Sex, likewise, is off limits, because it involves movement of the body and especially the uterus.[127] Soranus includes instructions on the temperature of her bath water (rather warm), when to drink water (before meals), and recommends fasting after a massage to ensure that the body is calm before the intake of food, to ensure good digestion, and in turn, ensuring high quality nutriment for the fetus.[128]

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[124] *Gyn*. 1.16.24ff. = Ilb. 1.46.3ff.
[125] *Gyn*. 1.16.48–49 = Ilb. 46.6. Asclepiades, one of the early practitioners or perhaps better, "fore-runners" of the Method, is credited by Celsus with introducing the notion of "passive exercise." Hanson and Green 1994, 991.
[126] *Gyn*. 1.16.63–64 = Ilb. 1.46.8. He gives specific information about what she ought to eat (fish that is not greasy and lean meats) and avoid (e.g., no leeks, garlic, overly moist foods etc.).
[127] φυλάττεσθαι δὲ καὶ συνουσίαν, καὶ γὰρ αὕτη κίνησιν ἐμποιεῖ κοινότερον μὲν τοῖς ὅλοις σώμασιν, μάλιστα δὲ τοῖς περὶ τὴν ὑστέραν τόποις ἠρεμίας δεομένοις, *Gyn*.1.16.64–69 = Ilb. 1.46.9.
[128] *Gyn*. 1.16.70ff = Ilb. 1.46.10. On the medical history of bathing in antiquity, see Jackson 1990; 1999; Fagan 2006. Also note the centrality of bathing in Pliny's diatribe against Greek doctors: *HN* 29.5–8.

All these instructions are meant to guard against miscarriage, but Soranus is quick to add that should a woman not follow his regimen and still retain her fetus, there is no reason to assume the latter is unharmed.

> μηδεὶς δὲ ὑπολαμβανέτω διότι, κἂν παραβαινούσης τινὸς ἔνια τῶν εἰρημένων ἢ πάντα μὴ γίνηται τοῦ συλληφθέντος ἔκτρωσις, οὐχ πάντως ἠδίκηται τὸ συλληφθέν· βέβλαπται γὰρ ὥστε καὶ ἀτονώτερον γίνεσθαι καὶ ἀναυξητότερον καὶ δυστροφώτερον καὶ τὸ <κατὰ> κοινὸν εὐαδίκητον εὐάλωτόν τε τοῖς βλάπτουσιν καὶ κακόμορφον καὶ κατὰ ψυχὴν ἀγενές· (*Gyn*. 16.79–85 = Ilb. 1.47.1)
>
> Even if a woman transgresses some or all of the rules mentioned and yet miscarriage of the fetus does not take place, let no one therefore assume that the fetus has not been injured at all. For it has been harmed: it is weakened, becomes retarded in growth, less well nourished, and, in general, more easily injured and susceptible to harmful agents; it becomes misshapen and of an ignoble soul.

The implications of this passage are rather striking if followed to their logical conclusion. He is not suggesting that the fetus *may* become malformed, undernourished, and more susceptible should it survive this first stage; instead, he claims that it *will* happen if his regimen is transgressed (βέβλαπται is in the indicative mood and perfect tense).[129] This is definitive completed action, and the damage is wrought not only on the body but the soul, and implies susceptibility to further harm. Indeed, the harm done to the fetus in this early stage seems to prefigure other risks. The child is more easily injured and susceptible to harmful agents down the line (εὐαδίκητον εὐάλωτόν τε τοῖς βλάπτουσιν). As a house, he continues, that is built on good foundations lasts a long time, and those that are

[129] Cf. Lehoux 2014, 227–28. In an illuminating discussion of *Hippiatrica Cantabrigiensia* 44.4, he argues that authors of medical and veterinary texts "never thought any particular instance of generation was guaranteed to produce any particular result, so ideas of probability always underlay their expectations just as improbability underlay the surprises" (227). He buttresses his argument by pointing out that the author of the *Hippiatrica* uses *an* plus the optative (*apotekoi*) to describe the likelihood of a desired birth outcome based on the method suggested. Here, by contrast, Soranus uses an indicative.

poorly constructed collapse "at a slight provocation" (πρὸς ὀλίγην ἀφορμήν), the same is true of a fetus.[130]

The passage is both a scare tactic and compelling advertisement for Soranus' methods – *if you do not follow my instructions*, the passage implies, *you will regret it*. But what of all the people who *do not* or *cannot* follow his regimen? The *Gynecology* is aimed at an elite audience, no one but elites would be able to abide by his recommendations, which imply the presence of cooks, slaves, human-drawn litters, and masseurs. All women who cannot undertake his regimen would, by his logic, guarantee their children an "ignoble soul," along with various physical limitations and predispositions. A woman who works in the fields, lifts heavy equipment, sits on hard chairs, and lacks access to proper meat or fish, would produce a child that conforms to Soranus' dire pronouncements. This also goes for elite women who put their own desires ahead of what Soranus considers best for the development of their offspring. This positions the text firmly within the context of the aristocracy, which is consistent with the history of regimen in Hippocratic sources.[131]

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[130] *Gyn*. 1.16.85–91 = IIb. 1.47.2.

[131] See *Vict*. 3.69 = Li 6.604, where the Hippocratic author professes to be speaking for "the great majority of people" (τῷ πλήθει τῶν ἀνθρώπων); yet from his lengthy and complex recommendations, he leaves little doubt that only elites could have the time for his regimen. See Holmes 2010, 180, on this "double audience" of the many and the few; more generally, on regimen, see ibid., 177–82. Brown (2008, 24), likewise, argues that "The writers of the second century A.D. couched their precepts in universal terms. In reality they wrote for the privileged few." On Soranus and status, Manuli (1982, 45) argues that he subordinates Epicurean tendencies to his pronatalist message for the senatorial elite.

In the populations of the Roman empire, it is possible that about one in two children perished by the age of five.[132] Soranus' pronouncement can be viewed as an explanation for the fragility of children (and high infant mortality) – a profound judgment with historical implications.[133] A corollary of this passage is that because of the malleability and fragility of a fetus in its early stages of development, it could be made robust only through its mother's proper regimen, like a house built on good foundations. This is, in a sense, an exhortation to elites, a pronatalist (and in a certain sense, eugenic) appeal that women ought to be subject to a particular type of control and surveillance during their pregnancies.[134] By means of such control, the best possible children would be produced.[135] The fetus, embedded in its mother's body, was molded through its mother's regimen – her body was the gateway to the child, and the child's condition revealed information about the uterine environment. In this regard, regimen (or the failure to adhere to regimen) can be seen as a source of blame for the mother. After birth, the process of molding continues, through massage that perfects the shape of its limbs and a strict regimen for the wet nurse, who takes over responsibility for the child's nourishment.[136]

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[132] See chapter one for a lengthy discussion of infant mortality and life expectancy at birth.
[133] Also see Scheidel 2001; Golden 2004.
[134] Manuli (1982, 45) suggests this is part of "un'aspirazione al totale dominio tecnico sul corpo dell'utero."
[135] I have made a version of this argument in an *Eidolon* article (Bonnell-Freidin 2016).
[136] On shaping the newborn infant's body, see Gourevitch 1995. Also see Dasen 2011; 2013. There is considerable bibliography on nursing and wet nurses (also discussed in chapter one), notable contributions include Bradley 1986; 1991; Joshel 1986; Fildes 1988; Dasen 2010 .

In the second stage of care, a pregnant woman is afflicted by *kissa* (κίσσα), which Latin adaptors translate as *pica*.[137] The latter term might be familiar to modern readers as a disorder, not confined to pregnant women, that involves "recurring ingestion of nonnutritive substances" such as dirt or paint.[138] Soranus defines *kissa* more broadly than the modern *pica* to include what Malinas and Gourevitch refer to as "vomissements gravidiques."[139] I will use the Greek term *kissa* to avoid the connotations of the modern diagnostic category. *Kissa* begins around the fortieth day of pregnancy and continues for four months, though sometimes it lasts a longer or shorter time. It involves general digestive problems (and is more encompassing than what we call "morning sickness"): anorexia, upset stomach, craving "for things not customary like charcoal, tendrils of the vine, unripe and acid fruit," vomiting, constipation, among other gastric problems.[140] During this phase, the difficulties women experience most closely resemble the symptoms of a disease. As noted above, Soranus provides evidence for his argument that *syllēpsis* is not beneficial for health when he writes that "one has to point out that many inconveniences (πολλὰ…δυσχερῆ) beset pregnant women who are heavily burdened (ταῖς κυοφορούσαις βαρουμέναις) and suffer from *kissa* (τὴν κίσσαν ὑπομενούσαις)."[141]

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[137] A detailed commentary on this section is supplied by Gourevitch and Malinas 1991. Note in particular the chart illustrating the regimen Soranus prescribes on p. 229. Drawing on this treatment, there is also an analysis of this section vis-à-vis principles of Methodism in Hanson and Green 1994, 998.
[138] Hatmann et al. 2012. On translating *kissa*, see Burguière, Gourevitch, and Malinas 1988, 89–90, n. 196.
[139] Gourevitch and Malinas 1991.
[140] *Gyn*. 1.17.14–30 = Ilb. 1.48.3–4.
[141] *Gyn*. 1.13.17–19 = Ilb. 1.42.4. Adapted from Temkin, trans., 1991.

It has been pointed out that Soranus' Methodism is especially discernable in this section, as is the complexity of his treatment based on the principle of commonalities, a salutary illustration of the application of Methodist principles.[142] According to these principles, *kissa* is caused by pregnancy. There is excessive blood in the uterus that is yet to be consumed by the weak fetus; when this blood backs up into the stomach, normal digestion is interrupted, causing the problems associated with *kissa*.[143] In Methodist terms, *kissa* is characterized by flux or laxity, which indicates measures to constrict.

Soranus recommends a complex regimen to combat *kissa*, that begins with fasting and then adds mild foods and a bit of cold water, followed by a rubdown with linen until the skin shows red. He includes recommendations for bathing every two to three days and exercise, increasing in intensity over time.[144] He emphasizes that the most important aspect of caring for a woman suffering from *kissa* is control over what foods she eats in accordance with Methodist principles. A long section is devoted to the types of food that are best, including fowl, game, seafood, vegetables, fruits, and nuts. He gives instructions for preparation and recommendations for which parts of the animals are most easily digested, and it is worth noting, likewise, the degree of detail that attends his cooking recommendations.[145] For cases in which *kissa* becomes overwhelming, he offers a set of

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[142] Gourevitch and Malinas 1991, 222.
[143] Hanson and Green 1994, 998; Gourevitch and Malinas 1991, 224ff. Hanson and Green compare this idea to the Hippocratic *Nat. Puer.,* in which the male fetus is more vigorous and thus consumes more blood in utero.
[144] *Gyn.* 1.17.31–57 = Ilb. 1.49. Cf. Leith 2008.
[145] *Gyn.* 1.17.86–115 = Ilb. 1.50. At times, his suggestions are clearly linked to generation in a quasi-talismanic manner: e.g., for fowl, the breast is best to eat, for game, the snout, feet, ears, stomach, and most notably, uterus. His detailed recommendations: fruits from the storeroom (ταμεῖον), pickled olives, apples, and quinces ought to be baked. He gives the reason along with other cooking recommendations, "for raw they are difficult to digest, boiled in water they lose much of their styptic effect, but well-crushed and

constricting pharmacological recommendations to treat flux (for example, vomiting) – namely, binding of limbs and cupping the stomach.[146]

From Soranus' extensive prescriptions for *kissa,* the aspects relating to women's food cravings are most relevant to the present study.[147] The discussion closes with a passage on the management of desire:

> ταῖς δὲ πρὸς τὰ βλαβερὰ τῶν κυουσῶν ἐπιθυμίαις τὸ μὲν πρῶτον ἐνστατέον διὰ λόγων, ὡς τῆς ἀπ' αὐτῶν βλάβης [καὶ] τῶν τὰς ἐπιθυμίας ἐμποιούντων παραλόγως ᾗ καὶ τὸν στόμαχον κακούσης, οὕτως δὲ καὶ τὸ κατὰ γαστρός, διὰ τὸ μήτε καθαρὰν μήθ' ἁρμοδίαν ἐπισπᾶσθαι τροφήν, ἀλλὰ τοιαύτην ὁποίαν ἐπιπέμψαι δύναται τὸ σῶμα κακῶς διακείμενον· καὶ γὰρ τὸ ἀπὸ τῆς γῆς ἀπορρέον ὕδωρ καθαρᾶς μὲν οὔσης διαυγές ἐστιν, βορβορώδους δὲ θολερόν. εἰ δ' ἀνιαρῶς ἔχοιεν, κατὰ μὲν τὰς πρώτας ἡμέρας οὐδὲν προσενεκτέον, ὕστερον δὲ καὶ μετά τινας ἡμέρας, μὴ τυγχάνουσαι ὧν θέλουσιν τῇ δυσθυμίᾳ τῆς ψυχῆς ἀπισχνοῦσιν καὶ τὸ σῶμα. πρὸς δὲ τὸ κουφότερον ἀδικηθῆναι, πρῶτον μὲν ὑποδεικτέον ὅπως μὴ πρὸ τῆς ἀποθεραπείας τοῦ σώματος λάβωσιν καὶ τὸ ἐπιθυμητόν, ὅπου καὶ τὸ κατὰ γένος ὠφέλιμόν ποτε λαμβανόμενον ἀδικεῖ… (*Gyn*. 1.17.136–50 = Ilb. 1.53.1–3)
>
> One must oppose the desires of pregnant women for harmful things first by arguing that the damage from the things which satisfy the desires in an unreasonable way harms the fetus just as it harms the stomach; because the fetus obtains food which is neither clean nor suitable, but only such food as a body in bad condition can supply. For likewise, water streaming forth from the earth is transparent, if the earth is clean; If, however, it is muddy, the water is turbid. If, however, they feel wretched, though one should offer them none of these things during the first days, some days later one should do so; if they do not obtain what they want, even the body, through despondency of the soul, grows thinner. But that the harm may be the slighter, one must first point out to them that they should not partake of the desired thing before a rubdown of the body, when

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sufficiently baked, besides keeping their quality they also gain digestibility. If, however, one wishes to have them boiled, they must be boiled resting upon rods or suspended by something, so that they do not touch the water but are boiled by the rising steam" (*Gyn*. 1.17.102–10 = Ilb. 1.51.2–4).

[146] *Gyn*. 1.17.58–85 = Ilb. 1.50. Hanson and Green 1994, 999.

[147] Cf. Gourevitch and Malinas 1991, 227.

> sometimes even the taking of that which is beneficial in kind causes harm...[148]

It is worth recalling that *kissa* is a phase of pregnancy that occurs *kata physin*, though it may resemble disease (*para physin*).[149] It is perhaps this sort of blurring between the natural and unnatural (or pathological) that leads Soranus to call conception, pregnancy, and parturition *pathē* – recall the "natural conditions in women peculiarly their own" (κατὰ φύσιν ἴδια πάθη...γυναικῶν).[150] Indeed, the juxtaposition of κατὰ φύσιν and ἴδια πάθη is a striking encapsulation of that tension, borne out in his description of the experience of pregnancy.

To return to the passage, a key component of *kissa* is the emergence of desires (ἐπιθυμίαι) that run contrary to a woman's wellbeing and especially, that of her fetus. As such, it is a *natural* part of the process for a woman to desire foods that inflict harm both on herself and her fetus. First he recommends trying to reason with her (τὸ μὲν πρῶτον ἐνστατέον διὰ λόγων), that in harming her body, she harms the fetus. He returns to a metaphor drawn from nature, much like the agricultural metaphors elsewhere in book one – her body is like the earth, and by polluting her body, she is polluting the nutriment transferred to her fetus. If reason fails, and she is overtaken by despondency of the soul (δυσθυμίᾳ τῆς ψυχῆς), he recommends a psychological trick to avoid her losing too much weight (from the verb, "to shrink," ἀπισχνόω).[151] Withhold the object of her desire for a time, he suggests, and then offer it when she is least expecting. Here Soranus is balancing the desires of a woman with the best interest of the fetus – that by fully

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[148] Adapted from Temkin, trans., 1991.
[149] Cf. Manuli 1982, 47.
[150] *Gyn*. 3.1.87 = Ilb. 3.5.1. See Flemming 2002.
[151] See Pigeaud 2006; Burguière, Gourevitch, and Malinas 1988, 232, n. 93.

refusing to fulfill her wishes, one may do more harm than good. After all, access to the fetus must be gained through the mother. Achieving the right balance may involve a bit of psychological game-playing, the overall aim of which is harm reduction at the level of her body and, by extension, the fetus (πρὸς δὲ τὸ κουφότερον ἀδικηθῆναι).

In one sense, the mother and fetus are operating here as a single organism – in particular, because they share their source of nutriment – but simultaneously, they can inflict harm on one another. The presence of the fetus provokes all sorts of problems in a woman's body (πολλὰ…δυσχερῆ), and likewise, while the woman's body is meant to nurture what is engendered, aspects of pregnancy provoke desires that, if fulfilled, can be harmful to the fetus. When the mother's desires or behavior run contrary to best practice, the tension can be understood as a version of maternal-fetal conflict. Soranus' stated purpose at this point, and moreover, that of the caretaker, is to decrease the possibility of damage to the fetus.[152]

The final stage of care for the pregnant woman centers around strengthening her *sōma* (body) and *psychē* (mind/soul) for parturition. This is the period in which the fetus reaches its final stage of "perfection" (τελείωσις). At this point, Soranus is concerned less with the fragility of the fetus than the endurance of the mother as she approaches the birth. There is definitely a psychological aspect to the preparation, she must relax in this period, as relaxation and looseness are crucial for a swift birth.[153] Her caretaker(s) must

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[152] On the notion of reproductive "harm reduction" in anthropology, see, e.g., Fordyce and Maraësa 2012, 5.

[153] This idea has a long history in Greek thought, evidenced by Soranus' rationalizing account of why women loosen their hair during birth (*Gyn*. 2.1.111–24 = Ilb. 2.6.1–2). On the "folk" history of binding/loosening, a thought-provoking treatment is found in Bettini 2013. One take on Soranus and "superstition" can also be found in Lloyd 1983, 168–81.

make sure she eats more, engages in passive exercise, and sleeps a lot; in this period, he stresses the need for "the complete relaxation of her mind" (τῇ παρόλου διαχύσει τῆς ψυχῆς).[154] This allows the body to become "more resistant," and as a result, "the gravida enjoys better health and is prepared to bear the pain of her travail with more strength, while the embryo partakes of more nutritious food which is healthful and sufficient."[155] This final phase is about endurance of labor pains, παρασκευάζεται τὰς ὠδῖνας εὐτονώτερον ἐνεγκεῖν.[156] All these measures are meant to prepare the woman to give birth with the most strength and are designed as preparation for a difficult mental and physical experience. After all, for Soranus it is the most important – useful – activity a woman can perform, and it requires endurance, not unlike preparation for battle or an athletic competition.[157]

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[154] *Gyn*. 1.18.7–12 = Ilb. 1.54.2. Adapted from Temkin, trans., 1991.

[155] *Gyn*. 1.18.12–16 = Ilb. 1.54.3: δυσπαθεστέρου δὲ γινομένου τοῦ σώματος, ἡ κύουσα μὲν ἄμεινον ὑγιαίνει καὶ παρασκευάζεται τὰς ὠδῖνας εὐτονώτερον ἐνεγκεῖν, τὸ ἔμβρυον δὲ νοστιμωτέρας καὶ ὑγιοῦς καὶ αὐτάρκους μεταλαμβάνει τῆς τροφῆς.

[156] On the terminology of pain in Greek medical literature, see, e.g., King 1998, 122ff. and Loraux 1982. King, drawing on Loraux, among others, argues that a distinction should be made between *ponos* and *odyne*, the former as a dull pain that must be endured, vs. the latter, which requires intervention. Soranus, overall, uses the verb ὠδίνω and noun ὠδίς to describe the pains of labor (as shown above, e.g., τὰς ὠδῖνας εὐτονώτερον ἐνεγκεῖν; also see 4.4.45–50 = Ilb. 4.7.6), while *ponos*, for example, is used for the feeling of pain that characterizes headaches. In his text, the former are temporary but sharp pains that must be borne – one must prepare to endure them, as he counsels in the text. This complicates the neater definitions supplied by King and others.

[157] This is not a new comparison. For example, Euripides' Medea famously compares childbirth (unfavorably) with battle (*Med*. 250–51). There has also been debate surrounding the question of whether women who died in childbirth were treated like men who died in battle (see Brulé and Piolot 2004). This comparison also features centrally in the depiction of the maternal-fetal relationship in various Hippocratic texts in Hong 2012.

III. Survival and Difficult Births: Soranus on Negative Birth Outcomes

In the best scenario, the fetus proceeds down the birth canal in cephalic presentation, and the entire birth is accomplished with speed as the mother braves the pains of labor for which she was prepared through her regimen.[158] This is the process that proceeds *kata physin*. In the worst case scenario, the birth becomes a struggle for survival, putting the mother and fetus in great danger.[159] Based on Soranus' definitions and the structure of the work, difficult birth is classed as *para physin*. He devotes a large part of his fourth book of the *Gynecology* to the diagnosis and treatment of various forms of dystocia. A difficult birth tells us a great deal about Soranus' view of the birth process. Unlike his confident statements about the effects of regimen and diet on the fetus (i.e., when the fetus "has been harmed"), namely, that its development can be directly influenced through appropriate rule-following, he is somewhat more noncommittal about how to ensure a birth goes well.[160] He is clear about the multiplicity of reasons for a difficult birth, which are numerous and range from external factors (e.g., the room is too cold causing constriction) to internal ones (e.g., a small uterus).[161] These factors can be

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[158] On the positioning of the infant, Soranus writes, "For the normal position of infants is head first, the hands stretched alongside the thighs, the fetus presenting in a straight line" (τὸ γὰρ κατὰ φύσιν σχῆμα τοῖς γεννωμένοις τὸ ἐπὶ κεφαλήν ἐστι, παρατεταμένων τῶν χειρῶν τοῖς μηροῖς καὶ ἐπ' εὐθὺ φερομένου τοῦ ἐμβρύου, *Gyn*. 4.2.103–6 = Ilb. 4.3.2).

[159] Cf. Hong 2012, 84–85. Note in particular her description on p. 85 of a second-century CE grave stele for a woman named Socratea in Paros, which she translates as follows, "The unstoppable Fury of the newborn infant (βρέφους ἀφύλακτος) took me, bitter, from my happy life with a fatal hemorrhage. I did not bring the child into the light by my labor pains, but it lies hidden in its mother's womb among the dead." Hong connects the inscription to a discussion of the Furies in Aeschylus' *Eumenides* after Orestes kills his mother.

[160] 16.79–85 = Ilb. 1.47.1.

[161] 4.4.3–14 = Ilb. 4.7.1. Unlike Galen (and the Hippocratics), however, he does not attribute difficult birth to the presence of a female child. Flemming 2002, 107ff.

controlled through proper preparation and examination of the woman's body (recall his position on marriage in book one), but the text also gives the impression that despite one's best efforts to perfect the fetus, condition the mother's body, and fine-tune her environment, difficult birth is still a possibility, even if the chances are diminished through careful planning. This risk is inherent to the process of childbearing. When that possibility turns into a reality, Soranus makes it clear that a male doctor is required to take over from the midwives and attendants.[162] The most invasive procedures, embryotomy and extraction by hooks, are an especially interesting window into male authority over the body and anxiety about its boundaries. These issues are best understood in the context of ideas about skin-boundaries and dissection.

Birth *para physin* provides the text's clearest illustration of the risks of childbearing that were explored earlier in this chapter, as well as the ambivalence that characterizes the relationship between the mother and fetus. Indeed, difficult birth is the realization of one of the risks of pregnancy, namely, that the birth will deviate from the optimal course and threaten the wellbeing of both mother and offspring. More to the point, both mother and fetus threaten *each other's* wellbeing.

Though a substantial section of Soranus' description of normal birth is unfortunately missing from the manuscript, from what remains (and evidence from later adaptations of the *Gynecology*), there is a clear sense that both the birthing woman and the midwives and attendants must work together with the rhythm of the parturient's

[162] Hanson 1994. This article uses a wide variety of sources, including, crucially, Soranus' *Gynecology*, to argue that men only entered the birthing chamber when the birth deviated from expected patterns (compared to a legally complicated birth above, pp. 45–46). Also see Gourevitch 1987, 191.

body.[163] This notion is most clearly illustrated by Soranus' description of the dilation and "drawing together" of the uterus.[164] The midwife is meant to help draw down the fetus *along with* the uterus' dilations – for if she attempts to do so during her contractions, she "produces inflammation, or hemorrhage of the uterus, or drags it downwards," presumably leading to uterine prolapse.[165] The fetus, in this section, does not assert a clearly defined agency found in other descriptions in Greek medical literature. The fetus in the Hippocratic treatise *On the Nature of the Child*, for instance, famously kicks and shakes, rupturing the surrounding membranes and initiating its own birth. In that description, the fetus has become so hungry that it must search for its own food, no

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[163] For the issues with *Pinax* (the table of contents) and the text of manuscript P, see Burguière, Gourevitch, and Malinas 1990, xvii–xx. The editors' commentary offers the evidence for what is unfortunately missing in the manuscript (and can, at times, be reconstructed with reference to later adaptations).

[164] He is referring to the dilation of the cervix (διαστέλλω) and the action in which "the uterus draws itself together" (εἰς αὐτὴν ἡ μήτρα συνέλκεται, *Gyn*. 2.1.131–32 = Ilb. 2.6.3), which could be translated as "contraction." There has been debate about the status of uterine "contractions" in Greek medical thought. On the Hippocratics, Hanson 2008 argues, "They pictured the womb as no more than a passive container which housed the fetus as it grew and assumed that the organ did not participate in the birth process through peristaltic contractions by which to accomplish delivery. Thus in normal birthing the fetus of term was said to initiate its birth by breaking one of the membranes that enclosed it and held it fast in the womb" (101). Fetal activity and confinement are emphasized. Galen, in *Nat. Fac*., considers the womb capable of retaining and expelling contents, but he nevertheless "did endorse Hippocrates' notion that the fetus at term initiated birth by virtue of restless twisting about, for Galen viewed the fetus as sentient enough to react negatively to its confinement in the womb and as sufficiently aware to realize that its food supply had become inadequate" (103; *pace* Dean-Jones', 1994a, 212, who argues that the author of *Mul*. I was aware of uterine contractions). Flemming (2002, 111) teases out the complexities of Galen's position on contractions and maternal/fetal agency, and concludes that "it seems likely that, when Galen simply states that the delivery of a girl is a longer, more arduous, business than that of a boy, his case mostly rests on the inferior qualities of the female foetus, on the intrinsic and pervasive hierarchy of humanity." These ideas about uterine "contractions" and agency have implications for perceptions of maternal–fetal conflict; for the Hippocratics, see Hong, 2012.

[165] *Gyn*. 2.1.133–35 = Ilb. 2.6.3. Soranus covers prolapse (πρόπτωσις) in detail at *Gyn*. 4.6 = Ilb. 4.35, noting possible causes of prolapse such as botched embryotomy and forceful removal of afterbirth.

longer satisfied with the nourishment received passively from the mother. It has been observed that unlike the active child in the Hippocratic treatise, Soranus' text emphasizes the "active role of uterine contractions."[166]

Soranus' treatise focuses on the augmentation of the body's natural mechanisms for expelling the fetus, although there are traces of fetal agency that is so much a feature of birth in the Hippocratic gynecologies. In Soranus' *Gynecology*, after rupture of the chorionic membrane, the fetus "cooperates" with the birth process by assuming a certain position, the cephalic, in the womb and proceeding down the birth canal. Furthermore, Soranus is clear that the fetus' cooperation is part of the process. One cause of dystocia is a dead fetus' inability "to cooperate with the birth" (συνεργεῖν τῇ ἀποτέξει),[167] implying that live fetuses do play an active role of some sort. He does not clearly specify *how* the fetus cooperates, though there are two clues: his emphasis on cephalic presentation and the assertion that a fetus can become trapped inside an overly thick membrane, "unable to break it."[168] The notion of the fetus active in its own birth was so pervasive in Greco-Roman culture that although Soranus does not explicitly describe it as such, the idea is still woven into his discourse of birth.[169] Most of all, his account emphasizes *cooperation* between mother and fetus in accomplishing a normal birth.

When the two do not cooperate, the birth gets difficult. The child and/or mother

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[166] Burguière, Gourevitch, and Malinas 2003, 35, n. 29. They observe, "Quant à Soranos, dans le livre II, il a déjà montré le rôle actif des contractions utérines." Their use of "contractions" is controversial (see n. 164 above), but their interpretation of fetal agency is what is most relevant to the present study.
[167] *Gyn*. 4.2.101–2 = IIb. 4.3.1. The verb συνεργεῖν can also be translated "facilitate," but "cooperate" more vividly evokes the implications of the prefix συν-.
[168] *Gyn*. 4.2.144–45 = IIb. 4.4.2.
[169] See, e.g., Hanson 2004. She uses evidence from uterine amulets to argue that one invocation to a fetus at birth was to come out, "Onto your little feet!"

may not survive the ultimate danger, the *kindunos* of childbirth. Dystocia explicitly embodies the more subtle maternal-fetal conflict in the rest of the work and requires the *direct* intervention of a male physician (as opposed to *indirect* intervention through regimen, for example). As has been observed of the maternal-fetal relationship in the Hippocratic corpus, "…the embryologies' emphasis on conflict affirms and validates a system whereby men must protect their own interests and those of their unborn children from the very bodies of the women who bear them. In the gynecologies, female biology and the mechanics of birth endanger the household by putting mother and child's lives at risk, thereby necessitating medical intervention."[170] In Soranus' text, it is the *male* physician who must disentangle the two bodies that are so intimately connected and threaten each other's survival.

> In cases of difficult labor the physician should also question the midwife (Ἐπὶ τῶν δυστοκουσῶν χρὴ τὸν ἰατρὸν ἐπερωτᾶν τὴν μαῖαν). <Now whether> it [i.e., dystocia] is caused by constriction and contraction (διὰ στέγνωσιν καὶ συναίρεσιν) of the region through which the fetus is to travel, or by coldness or heat of the atmosphere, or by hardness of the body, or because of a concavity of the loins, or a naturally small uterus (φύσει μικρομεγέθη τὴν ὑστέραν), or because of conceiving too early in life... or whatever other cause, one should first promote ease and relaxation (τῇ ἀνέσει καὶ τῷ χαλάσματι). And one should neither have immediate recourse to surgery nor allow the midwife long to dilate the uterus forcibly. (*Gyn*. 4.4.3–14 = Ilb. 4.7.1)

He could not be more clear. In the event of a difficult birth, is it the male physician, ὁ ἰατρός, who must take over from the midwife and confront the danger. Hanson, surveying evidence from classical Greece through late antiquity, has argued that male doctors appeared "when births deviated from expected patterns and proved difficult."[171] She sketches an image of a tense room filled with many different people: midwives,

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[170] Hong 2012, 85.
[171] Hanson 1994, 198 Cf. King 2013, 180ff.

slaves, family members – all female until the arrival of the male physician. Throughout the rest of Soranus' book four, the male presence is unmistakable as indicated by the use of masculine participles and adjectives for those undertaking the action.[172] This is the first direct intervention by a male physician, but of course, the voice of a male physician has been present in the text throughout.

The household dynamics that underlie Soranus' text are well illustrated by Galen's famous description of his treatment of the wife of Boethus, a powerful Roman statesman.[173] The episode can serve as an idealized template for imagining a male doctor's appearance at a difficult birth, as it so clearly evokes the power relations in a traditional home as well as the dynamics that attended a male physician's treatment of a woman. In the episode, Galen intervenes, taking over from the woman's midwives, whom he describes as "the best in the city" (i.e., Rome), but who have misdiagnosed the woman's ailment, an abdominal swelling with vaginal discharge, which steadily worsens. At a moment of crisis, Galen rushes into the room where Boethus' wife has just collapsed after evacuating a watery substance, and in doing so, he effectively crosses the boundary into a women's space. Galen takes over from the panicked attendants and revives her quickly. After this initial success, Boethus grants Galen full access to his wife to undertake her treatment (also meaning access to the women's quarters); of course, Galen brings about a complete recovery and later receives a large cash reward.

By allowing Galen to treat his wife, to cross the threshold into the women's quarters, Boethus grants the physician a unique form of power over his wife's body, "he

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[172] Hanson 1994, 169. Also note that Celsus' description of embryotomy emphasizes male actors, e.g., *Med*. 6.29.8, *valens homo non imperitus*….

[173] She is only referred to as "Boethus' wife," never by her own name. On (not) referring to women by name in Galen's oeuvre, see Mattern 2008, 89ff. Cf. King 2013, 90–93.

is handing over some of his patriarchal authority."[174] On this model, the male physician at a difficult birth pushes aside the midwife who yields to his superior knowledge.[175] In doing so, he takes control of another man's wife and child. The physician's treatment of dystocia may be seen as an *agōn* characterized by a complex set of power dynamics, an *agōn* in which there is not one life at stake, but two.[176] It evokes the hierarchical relationship between the *iatros* and the *maia*, as well as the power dynamics of the relationship between *iatros* and *paterfamilias*.[177] I will return to the notion of agonistic display.

If the fetus perishes in the womb and manual rotation has proven ineffective, the male physician must turn to "more forceful methods," namely embryotomy (ἐμβρυοτομία), the dismemberment and removal of its body parts with a knife (ἐμβρυοτόμος), or extraction by hooks (ἐμβυουλκία, with an ἐμβρυουλκός), which involves drawing out the fetus by a hook fastened into the fetus' body.[178] These

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[174] Mattern 2013, 167. The notion that physicians have privileged access to women's bodies and must not abuse that power is clearly discernable in the medical tradition, as evidenced in the Hippocratic Oath, for example.

[175] In the case of Boethus' wife, the midwife is very pleased (ἥδετο) when she realizes how wrong she was, and Galen correct (*Praen*. 8.8 = *CMG* 5.8.1, 112.23–26 = 14.643–44K).

[176] von Staden, Gleason, and Mattern have examined performative and agonistic aspects of medical practice in Galen's oeuvre – in prognosis and therapeutics and, most obviously, though public anatomical demonstration. See von Staden 1995; 1997; Gleason 2009; Mattern 2008.

[177] See above, chapter one, on the status of the midwife.

[178] Soranus covers manual rotation at *Gyn*. 4.4 = IIb. 4.7–9.1 and the use of embryotomy and birthing hooks at *Gyn*. 4.5 = IIb. 4.9–12, which includes advice on where and how to insert the hook into the fetus' body for the quickest extraction. Hanson and Green note the absence of the so called "fetal-slayer," ἐμβρυοσφακτής in his text. That term appears in Tertullian, *De Anim*. 25.5 (Hanson and Green 1994, 1004, n. 129). On the archeological record of these tools, see Bliquez 2015, 249–62; 1995; 1994. Caution should be exercised when using Pompeian evidence to extrapolate to the western empire overall. I do think it is safe to assume, however, that tools available to physicians in

techniques require a great deal of manual expertise at a moment of crisis and are seen as a last resort. The parturient's survival was far from guaranteed. (Indeed, I remain skeptical about the extent to which these operations were performed, but that does not make Soranus' description and rhetoric any less interesting.)[179] There are occasional references to calming the woman struggling in labor – assuring her there is nothing to fear – but there is no discussion of the difficulties in undertaking such harrowing procedures on fully conscious women.[180] When he does discuss challenges, he focuses on the physical procedure, rather than the pain or fear of the parturient. Soranus, nevertheless, emphasizes the necessity of intervention – "it is necessary to take care of the mother"(τὴν κυοφοροῦσαν τηρεῖν ἀναγκαῖον), which carries "underlying danger" (ὑποκείμενον...κίνδυνον).[181] This "danger" encompasses hemorrhage or what physicians today would associate with infection – fever, inflammation, and ultimately gangrene, the last of which Soranus notes is basically a death sentence. In such a case, "there is little hope" (ὀλίγας ἐλπίδας), he cautions. King's description of hope, *elpis*, in

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Pompeii, a regional metropolis, would have been available in Rome. Also see Gourevitch 2004.

[179] For a discussion of the terminology for the tools (e.g., *aenum spiculum/embryosphaktes, embryotomon, embryoulkos*) and the archeological evidence, see Bliquez 2015, 255–59. On the practice of embryotomy and removal by hooks, see Mazzini 1996.

[180] *Gyn*. 4.4.45–50 = IIb. 4.7.6: χρηστέον δὲ τοῖς ἔμπροσθεν ὑποδειχθεῖσιν καὶ τὴν μὲν ὠδίνουσαν ἐπιθαρρεῖν παραινετέον ὡς ἐν ἀκινδύνῳ τυγχάνουσαν, τὴν δὲ ἄπειρον ὠδίνων διδακτέον ἐντόνως μάλιστα τὸ πνεῦμα κατέχειν καὶ πρὸς τὴν λαγόνα συνωθεῖν…

[181] *Gyn*. 4.4.150–62 = IIb. 4.9.1, adapted from Temkin, trans., 1991. Celsus similarly refers to the procedure as necessary in certain circumstances (when the fetus has perished), but it "can be counted among the most difficult, for it requires the utmost caution and restraint, and bears with it the greatest danger (… *numerari inter difficillima potest: nam et summam prudentiam moderationemque desiderat, et maximum periculum adfert*, *Med*. 29.1). Adapted from Spencer, trans., 1935. Note the similarity of Celsus' use of *periculum* and Soranus' κίνδυνος.

Greek medical culture is especially relevant: "…hope is not something optimistic, it carries the sense of waiting for an uncertain future."[182]

In his instructions for difficult births – through rotation of the fetus and especially surgical procedures – Soranus is, in a sense, performing a feat of display, a form of *deixis*. In his chapters on more aggressive treatments, he provides directives with a mechanical precision that involves moving from one activity to another, as if working down a list of options with increasing levels of invasiveness.[183] At no point is there any mention of blood, seeing a dismembered fetus, or what one assumes was the agony of the parturient. Indeed, Soranus' embryotomy is particularly bloodless. There is a certain bravado inherent in his enumeration and (implied) capacity to reduce the fetus to its parts without any distraction from the more gruesome aspects of the procedure.

Soranus' clinical tone belies the complexity of the procedure's cultural baggage. The imagery of the fetus' dismemberment probably struck ancient readers (as well as modern ones) as macabre, and to some, even outrageous. This further accentuates the physician's presence as the actor performing the procedure. In Soranus' instructions, especially those that involve surgical manipulation (χειρουργία) during the birth, the ambivalent dissolution of the whole is not limited to the fetus. The narrative zooms in on the local site of conflict: the labia, cervix, vagina, uterus, as well as the fetus' limbs.[184] As the bodies themselves are dissolved into their parts, the presence of the male physician

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[182] King 2013, 95. Here, she is discussing the case of Phaethousa from the *Epidemics*: in this case, Phaethousa's only "hope" of recovery was the return of her menses. Also see von Staden 1987.

[183] While this may seem unsurprising from the perspective of a modern reader, we must be very cautious about projecting contemporary expectations onto this text.

[184] For instance, the hands (*Gyn*. 4.5.73–76 = Ilb. 4.11.2) or the head in hydrocephalic fetuses (4.5.76–84 = Ilb. 4.11.3).

becomes increasingly vivid. He implicitly claims the authority to perform these maneuvers that involve permeating the boundary of the flesh. Likewise, it is significant that when it comes to using tools – violent tools such as hooks and knives – the user is explicitly male in the text. And as he brings order to a disordered body though disintegration of another, he moves the process towards closure at a moment of extreme uncertainty.

Soranus shows us how easily a fetus' limbs can be detached from its body and how to do so most effectively. "The bones are easily freed from their connections," he explains. "But it is necessary to put together the removed parts (συντιθέναι δὲ τὰ κομισθέντα) and pay heed lest <any> have been left behind."[185] The struggle to remove the fetus becomes a process of reducing a whole to its constituent parts, and each must be accounted for until the process is complete. But the word συντιθέναι, "to put together," is also significant. The physician is not just accounting for body parts, he is told to "put them together," to reassemble the fetus' body. This is a powerful image: the disconnected limbs are unified in a gruesome imitation of what could have been.

Underlying the process of συντιθέναι, which appears in the text as a practical step in embryotomy, is a desire for bodily unity, perhaps motivated by a sense of the instability of the body's integrity and man's power to control it. Cutting human flesh, furthermore, has a complex cultural significance. The act in itself is polluting, save for instances in which it becomes indispensible for civic and bodily preservation, such as in battle on behalf of the state or "to gain control of an individual pathological crisis."[186] The

[185] *Gyn*. 4.5.127–130 = Ilb. 4.12.4.
[186] von Staden 1992, 229. In this influential article, von Staden explores the "political, social, cultural, economic, ideological, scientific, and philosophical factors" (234) for

complex set of social anxieties around flesh-cutting provides an interesting, and crucial, backdrop for interpreting Soranus' discussion of embryotomical procedures.

The practice of embryotomy, insofar as it was socially sanctioned, falls into the category of "individual pathological crisis," and also speaks to the fetus' ambiguous status as not quite human. Soranus refers to τὸ ἔμβρυον in these sections on ἐμβρυοτομία and ἐμβυουλκία (as the terms themselves would suggest), as opposed to τὸ βρέφος, for instance, the term frequently used in the chapters of book two on care of the neonate. There is no doubt a major boundary between dismembering a βρέφος and an ἔμβρυον.[187] In part, the fetus' ambiguous status is bound up with the prioritization of the mother's life when it becomes clear that impaction is too serious for a live vaginal birth to take place. Insofar as the practitioner of embryotomy is male, the capacity to permeate the flesh boundary is linked with male power over the physical body and anxieties about the limits, and limitations, of that power. This latter aspect is also manifest in Soranus' distancing (and deictic) rhetoric.

The boundary between surgery (χειρουργία) and dissection (ἀνατομή) was of course distinct in antiquity, but the two also have certain things in common. With the exception of a brief period in Alexandria, human dissection and vivisection were off-limits, while animal dissection became the common vehicle for anatomical study and display.[188] Surgery, however, offered physicians one of the few socially acceptable

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human dissection's brief efflorescence in Alexandria and its prior and subsequent rejection. He argues that flesh-cutting, overall, was only sanctioned in Greek culture "to resolve a crisis especially in the service of one's country" or, as quoted above, to affect a resolution to a bodily crisis (e.g., disease or wounding).

[187] See Laes 2014a.

[188] See von Staden 1992. For a general history of anatomy in Alexandria under Herophilus, see von Staden 1989, 138ff.

opportunities to see beneath the human skin. From Galen's corpus, we also learn that there were several other ways – for example, by encountering a patient suffering from *anthrax* (a disease which dissolves human flesh), a dead brigand, or most notably for this study, dissecting bodies of exposed infants.[189] The total social alienation of these individuals seems to negate, or at least modify, the prohibition on human dissection.

Some have argued that epideictic rhetoric and agonistic display are crucial aspects of the cultural backdrop in the rise of anatomical demonstration during the "Second Sophistic."[190] This was the era of Galen's famous anatomical demonstrations. Plutarch also mentions the practice of surgical demonstration in the theater, "as if this were a familiar urban spectacle."[191] As a physician to elites in the Roman empire, Soranus, no doubt, lived and breathed this atmosphere.

Although on theoretical and sectarian grounds Soranus spurned dissection as a valid mode of inquiry, there is no doubt that he had a keen knowledge of the body's interior, acquired through anatomical study. In the preface to his excursus on "the nature of the female parts" (τὴν φύσιν τῶν γυναικείων...τόπων) in book one, he warns:

> …some of this can be learned directly, some from dissection (ἐξ ἀνατομῆς). And since dissection, although useless (ἀχρηστός), is nevertheless studied for the sake of profound learning (χρηστομαθείας ἕνεκα), we shall also teach what has been discovered by it. For we shall easily be believed (πιστευθησόμεθα) when we say that dissection is useless, if we are first found to be acquainted with it, and we shall not arouse the suspicion that we reject through ignorance something which is accepted as useful. (*Gyn*. 1.3.39–45 = Ilb. 1.5)

[189] On the *anthrax* epidemic, see Gal., *AA* 2.224–5K. He suggests using the bodies of dead brigands or exposed infants at *AA* 3.385–86K. Gleason 2009, 86, n. 5, 89–90.
[190] von Staden 1995; 1992; Gleason 2009; Mattern 2008.
[191] Gleason 2009, 89; Plut., *Mor*. 71a.

As Lloyd puts it, Soranus' anatomical expertise that emerges from his descriptions of female anatomy "would not have disgraced a committed proponent of that method."[192] Understanding the discoveries of dissection is part of Soranus' notion of what it means to be educated, to be the best physician or midwife. It is also a useful tool for making a case against rivals or authorities.[193] In a sense, Soranus seems to be saying that despite dissection's status as "useless" (ἀχρηστός) among Methodist practitioners, it is part of the elite medical toolkit and a key ingredient in rhetorical success (perhaps not so useless after all).[194] One must utilize this knowledge to promote confidence in one's authority (πιστευθησόμεθα) – to earn the trust or confidence, *pistis*, of one's audience. This kind of language implies the competitive marketplace of physicians in antiquity, in which their expertise was constantly under attack by rivals, vying for the trust of affuent patients. It also reveals anatomy's rhetorical embeddedness in Soranus' discourse.

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[192] Lloyd 1983, 189. Furthermore, Soranus at times draws on anatomical knowledge to evaluate others' claims: for instance, at *Gyn*. 1.4.117ff = IIb. 1.14, he discusses Diocles' notion that the uterus has small breast-like protuberances (μαστοειδεῖς) called cotyledons (κοτυληδόνες), providentially (προνοητικῶς) created by *physis* to allow the fetus to practice breast-feeding. But Soranus counters this notion: "But these statements are proven wrong by dissection (καταψεύδονται δὲ τῆς ἀνατομῆς) – for one finds no cotyledons (οὐχ εὑρίσκονται γὰρ αἱ κοτυληδόνες) – and the account of them which has been brought forward has no foundation in nature (ἀφύσικός) as has been shown in the commentaries *On Generation*" (adapted from Temkin, trans., 1991). These commentaries are unfortunately among Soranus' lost works.

[193] This has been emphasized in scholarship in Soranus' anatomy. Ibid., 182–200; Hanson and Green 1994, 1003.

[194] Frede 1982 makes a similar argument about the value of anatomy as construed in the *Gynecology*: he suggests that Soranus believes anatomy is "good to know… an amenity of life, a decorative ornament of the educated person" (14). The Methodists were not alone in scorning anatomy as useless. The Empiricists share the belief, arguing that "in addition to being cruel, neither practice [vivisection and dissection] reveals what is happening inside the body of a living person: vivisecting precedes dissection" (Hanson and Green 1994, 1004).

Embryotomy is bound up with anxiety about flesh-cutting, best seen through a comparison with dissection in the cultural context of the second century CE. Though *anatomē* (ἀνατομή) did have a very specific set of cultural connotations at this time, it is worth noting that the term can simply be translated as "cutting up," ἀνα-τομή, from *temnein*, "to cut." The term *embryotomia* (ἐμβρυο-τομία), "embryo cutting," also derives from the same verb, *temnein*. The sacrifical overtones of the verb are manifest and relate the usage to other applications of the term:

> Also outside its sacrificial use, "to cut" tends to designate acts of violence, practically all of which, like sacrificial cutting, entail the violation of skin boundary, often in combat, as a way of trying to gain control of a crisis, be it a moral, civic, or military crisis. In these contexts "to cut" (*temnein*) often means to maim, to decapitate, or to castrate. Acts of skin-transgressing cutting, in combat as in sacrifice, thus have in common, first, their violence and, second, that they belong to a context of overcoming a crisis – of coping with a threat, of resolving a critical disorder, imbalance, impurity, or impasse.[195]

Within the context of the maternal-fetal relationship characterized by conflict – and in a difficult birth, when that conflict has come to an impasse – the associations with combat and crisis, of course, make a lot of sense.[196] Furthermore, the moral and civic implications are interesting with regard to Soranus' implicit pro-natalist message, placing the social good (which is also "natural") ahead of a woman's individual health. Is a difficult birth, in which the fetus perishes, somehow a civic failing, as well as a failure of a natural process? This seems plausible given the way Soranus lines up childbearing as a biological as well as a social goal.

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[195] von Staden 1992, 230. He continues by pointing out that there are "peaceful" contexts in which the term is used, but for the most part, *temnein* relates to "skin-transgression," which is violent.

[196] This also emerges from the discussion of the maternal-fetal relationship in the Hippocratic corpus found in Hong 2012.

The connection between dissection and embryotomy also comes through in Tertullian's *De Anima*, in which he discusses the ensoulment of the child in relation to the "cruel necessity" of embryotomy. He describes both dismemberment of the fetus in the womb as well as the use of the birthing hook, practiced by many of the great physicians of antiquity: Hippocrates, Asclepiades, Erasistratus, and "Herophilus, dissector also of adults (*maiorum quoque prosector*), and gentler (*mitior*) Soranus himself."[197] By practicing embryotomy, Herophilus becomes both *prosector* of infants, as well as of adults. Tertullian, who lived merely a generation after Soranus, shows how related embryotomy and dissection were in his mind. Furthermore, *prosector* also has sacrificial overtones. The verb *prosecere* can mean "to cut off the parts to be sacrificed," which seems quite similar to the usage of *temnein* above.[198] Tertullian's phrase attests to the close connection of sacrifice, anatomy, and embryotomy.

Compounds of *temnein* also appear in the *Gynecology* in association with amputation, a form of surgery. For instance, ἀποτέμνειν and ἐκτέμνεσθαι are both used as the verbs for cutting out a part of a prolapsed uterus that has turned black (τὸ μελανθέν) or excising the whole organ (ὅλη).[199] Soranus' justification for amputation is that the part has become a "foreign and unrelated body" (ἠλλοτριωμένον δὲ σῶμα καὶ

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[197] *De Anim*. 25.5. *Mitior ipse Soranus* may well refer to the sections of the *Gynecology* discussed here. On Tertullian's critique of Herophilus and others, see von Staden 1989, 142–43.

[198] From the *LSJ,* the verb *prosecere* is defined as follows: "In relig. lang., *to cut off* the parts to be sacrificed: *vetui exta prosecarier,* Plaut. *Poen*. 2, 1, 8 : *ubi exta prosecta erunt,* Cato *R. R*. 134: *hostiae exta,* Liv. 5, 21 : *exta prosecuit*, Suet. *Aug*. 1 : *prosecta pectora,* Val. Flac. 3, 439." *Prosecere* is not a direct calque of *temnein*, however; it would be if the Latin term were *secere*, which also has the meaning "to cut" or "amputate" in a surgical sense (so used by Cicero, Pliny, and Celsus). *Secere*, however, does not seem to have the same sacrificial overtones as *prosecere*, which makes Tertullian's usage all the more interesting, attesting to the importance of the connection between sacrifice and dissection.

[199] See *Gyn*. 4.6.179–85 = Ilb. 4.40.1–2.

ἀνοίκειον).[200] I chose the example of the excision of the uterus (or part thereof) both for the organ's status as lacking in vital importance for health (recall the sows who grow fatter with their uteri removed) and for the phrase, ἠλλοτριωμένον δὲ σῶμα καὶ ἀνοίκειον, which might just as well describe the status of the impacted fetus in its mother's body.[201] The uterus and fetus share a similar status in Soranus' text with regard to their presence in the female body: he suggests that a woman may be healthier without both of them. Furthermore, their presence poses a unique set of risks. Both can become dangerous and require excision, a form of *temnein*, but their excision compromises a woman's natural (and social) role as a childbearer. Throughout the *Gynecology*, the fetus' ambiguous status as both part of the woman's body and as a separate entity and locus of conflict is illuminated by this comparison: embryotomy may also be seen partially as amputation, while the process itself requires the amputation of the fetus' limbs.

Flesh-cutting in the form of anatomical dissection, amputation, embryotomy – all these activities are sources of power over the body, as well as sources of anxiety about that very power. In the second century, furthermore, they are implicated in a discourse of display, the display of control over bodies, both human and animal, and a show of mastery over one's rivals. These surgical activities were probably disquieting in a number of ways for ancient physicians and patients. As a source of knowledge for the human body, animal dissection blurs the boundaries between human and animal, which is itself undoubtedly disturbing at a number of levels, revealing that "the attempt to anchor status

[200] *Gyn*. 4.6.184–85 = IIb. 4.40.2.
[201] Cf. Burguière, Gourevitch, and Malinas 2003, 48, n. 145.

distinctions in the 'natural' reality of the body was inherently unstable."[202] I would venture that surgery is similar in this regard, with the arrow pointing in the other direction (i.e., that surgery could be disturbingly reminiscent of animal dissection for its practitioners and observers).

Dismemberment of a fetus in a difficult birth combines many strands of anxiety about the "humanness" of the fetus, the fragility and permeability of flesh, the fetus' ability to harm the maternal body, and vice versa. Furthermore, in Greek culture, childbirth could be seen as a source of pollution in itself, which, in combination with dismemberment, makes embryotomy especially problematic. As the procedure of last resort, it embodies all the anxieties about the risks of childbearing. Soranus' description of the process places the male physician front and center, reminding the reader that his authority and knowledge are the ultimate bulwark against the ravages of a cruel nature.

Conclusion: Doctors, Medical Knowledge, and Birth Risk

Through a series of arguments about women's bodies, Soranus implies that the potential for harm is naturally embedded in the process of childbearing, which provides a clear opening for the physician to do his work. The nature of pregnancy makes mediation between mother and child necessary, a mediation that involves a form of surveillance and control over her body through regimen and dietetics. A pregnant woman's obligation to care for her body – and be cared for – turns her into an ethical subject of sorts, a status both facilitated and complicated by her entanglement with her fetus. As the text suggests, the practitioner does not pursue ideal health in the treatment of fertile patients; health is

[202] Gleason 2009, 87. Here she refers also to display in which there is a potential for slippage of status.

pursued insofar as it is possible, given the constraints of procreation. Health is ultimately subordinate to nature. Though Soranus never makes explicit *who* is monitoring a woman's regimen, the male physician casts a shadow over the whole process. This is in the nature of the text itself, as a product of a male medical culture exerting control over female bodies. The male physician enters the birthing chamber and intervenes directly when a birth becomes life-threatening, but he has always been there.

Throughout the *Gynecology,* Soranus builds his authority in a variety of ways. He elevates his own expertise by engaging with and undermining the views of famous physicians such as Herophilus and Diocles. When it comes to childbirth, the denouement of the generative cycle, he shows how a natural process can so quickly become unnatural, heightening risk for the mother and fetus. Embryotomy and extraction by hooks presents the most radical option for resolution in a difficult birth. The implication that only males are suitable to perform the task speaks to the anxiety surrounding a procedure that is embedded in the complex history of flesh-cutting. In this context, the text suggests that difficult birth, an "unnatural" state, requires a male expert to bring the process back in line with nature, insofar as that is possible, even if it requires dismembering a fetus. This realignment with *physis* is meant to keep a woman's body intact in order to preserve her fertility for another attempt at childbearing (the optimal outcome of an embryotomy). The physician behind the text is both an emissary of and safeguard against a less than benign *physis,* and he is the one with the authority to manipulate bodies and perform these potentially life-saving procedures (though we can only assume that if and when physicians resorted to these invasive procedures, they often ended with illness and death).

The *Gynecology*, ultimately, represents one physician's attempt to understand,

contextualize, and control the risks of childbearing. But it is also more than that. Soranus portrays in dire terms the far-reaching consequences of deviating from his instructions, from the development of susceptibility in infants to the deformation of their souls. The risks of reproduction do not begin and end with maternal and infant mortality, they extend out to the structuring of culture at large. Creating the strongest, most perfectly-formed children is a broader social concern for communities in their quest for growth and stability, one which places Soranus' own authority front and center, indeed, at the very heart of decision-making processes ranging from the formulation of maternal regimen to the selection of a bride. Soranus' gynecological medicine is designed to regulate the most vital mechanism for social continuity: procreation.

Chapter Four

Amulets and Agency

In the competitive medical marketplace of the Roman empire, therapeutic methods were constantly up for debate. Amulets are a case in point, one tool among many for individuals seeking relief or protection from pain, disease, and harm (bodily or otherwise). Soranus dismissed their efficacy in the *Gynecology*, while still sanctioning their use in certain circumstances for the sake of a patient's psychological wellbeing: "Yet one should not forbid their use; for even if the amulet has no direct effect, still through hope it will possibly make the patient more cheerful."[1] Unlike Soranus, Galen sometimes encourages fastening substances to the body as amulets (οὐσία περιαπτομένη), such as wolf excrement, understood to be efficacious medicaments. He draws a line, however, at textual amulets, "barbarian incantations (ὀνόματα βάρβαρα), as some wizards (ἔνιοι τῶν γοήτων) are accustomed to use."[2] Amulets no doubt fell in a grey area for many physicians seeking to demarcate their turf against 'magical' healers (such as the wizards Galen derides). Such physicians considered amulets effective in certain circumstances based on principles, such as sympathy, that governed their views of

[1] καὶ γὰρ εἰ μηδὲν ἐξ εὐθείας παρέχει τὸ περίαπτον, ἀλλ' οὖν δι' ἐλπίδος εὐθυμοτέραν τὴν κάμνουσαν τάχα παρέξει (*Gyn*. 3.12.107–13 = Ilb. 3.42.3). Translations of Soranus' *Gynecology* are reproduced or adapted from Temkin 1991. I discuss this passage further below.

[2] Gal., *SMT* 10.21 = 12.297.3–8K. Similarly, at *SMT* 9.19 = 12.207K, where Galen discusses a green jasper amulet, on which people "engrave a serpent emitting rays" (γλύφουσιν ἐν αὐτῷ τὸν τὰς ἀκτῖνας ἔχοντα δράκοντα) as an effective remedy for a stomachache. Having tried the amulet, he concludes it is effective without the engraving. See Jouanna 2011; Gourevitch 2016, 265–66. This amulet is discussed further below.

the faculties inherent to materials more generally. In short, there was clearly disagreement about amulets, yet they remained a pervasive part of the healing process.

In Greco-Roman culture at large, amulets were ubiquitous. The *bulla*, distinguishing freeborn Roman boys from their servile counterparts, was a container for amulets worn around the neck, meant to protect the child from ills of various kinds.[3] All freeborn boys, thus, visibly carried amulets around their necks until they reached puberty. Medicinal amulets could also take many forms – animal, vegetable, and mineral – and were used to ease a wide variety of ills, such as broken bones, colic, and difficult labor. In Greek, amulets are called *periapta* and *periammata*, from *periaptō*, "to fasten, attach," because they were affixed to the body.[4] In Latin, they are usually indicated by compounds of *ligo* ("to bind,"), such as *alligo*, *adalligo*, *deligo*, or *circumligo*, much like *periaptō*.[5] Oftentimes, the act of applying the amulet, as specified by one of these verbs, signifies their presence. The earliest attested use of the noun *amuletum* is found in Pliny's *Natural History*, although it has a somewhat looser meaning than the English word, "amulet."[6] Most often, Pliny refers to amulets with compounds of *ligo* in participial forms. Unlike

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[3] On the *bulla*, bestowed soon after birth, see Palmer 1998. Female children may have been protected by a parallel amulet called a *lunula*, although the evidence is not abundant; see Dasen 2015b, 189ff. *Bullae* and *lunulae* are also discussed in chapter five.
[4] *LSJ* s.v. περίαπτος, περίαμμα. Hanson 1995, 287.
[5] See Jouanna 2011 for further discussion of this terminology.
[6] In English, the term 'amulet' refers to "Anything worn about the person as a charm or preventive against evil, mischief, disease, witchcraft, etc.," *OED* s.v. 'amulet'. Pliny's usage of *amuletum* is somewhat more versatile. For example, in a discussion of cyclamen, it is called *amuletum* because of its especially remarkable properties when added to wine: *amuletum vocant, narrantque et ebrietatem repraesentari addita in vinum* (*HN* 25.115; on the interesting valence of *repraesentari*, see Ker 2007, esp. 347–48). More familiar usages occur elsewhere: the bat can be used as an *amuletum* to protect sheep, *amuletum esse, privatimque ovilibus circumlatum totiens et pedibus suspensum susum super limine* (*HN* 29.83).

the noun 'amulet' in English, the Greek and Latin terms (often participial) explicitly signify the act of applying or fastening an object to the body. When I use the term 'amulet' in this chapter, I refer to a range of devices encompassed by these Greek and Latin variants – in general, materials fastened to or placed near bodies (human and non-human) for healing and/or protection.

Amulets were a way to deal with risk – to mitigate harm (such as that wrought by the evil eye) or prevent an illness or problem (such as back pain) from further tormenting an individual. In certain respects, they overlap with cursing and binding technologies, insofar as they participated in an individual's handling of agonistic, risky situations.[7] In various respects, childbirth could be classed as such, and beginning with our earliest Greek medical texts, authorities suggest using amulets to mediate the procreative process.

What can birthing amulets teach us about views of female anatomy and physiology, as well as the birthing process in the Roman empire? First, the amulets explored here often function as symbolic, external manifestations of internal mechanisms, which also exercised the capacity to disrupt and participate in a birth, drawing even more actors into the process. By analogically representing physical processes, such as pregnancy or birth, amulets could provide a way of understanding what was happening anatomically and physiologically beyond the reach of human sight. As we shall see, some

[7] Faraone has argued, influentially, that cursing was a tool used in agonistic contexts, often by individuals in a "defensive stance," and perhaps tapping into political rivalries, (see, e.g., Faraone 1991). Eidinow 2007 draws on his argument, but questions the "defensive" aspect (ibid., 4). She investigates divination and cursing side-by-side: "My argument is that the values of ancient Greek culture prompted its members to focus their anxiety about the uncertain future on specific situations in their lives, situations that were felt to present significant potential for great danger or opportunity. Oracles and cursing were used in response to such situations: these were the 'risks' of an ancient Greek community" (ibid., 13).

amulets metaphorically or analogically represent fetuses or body parts, but most of all, they represent physical *processes*. For this reason, analogy is perhaps the most helpful conceptual tool for elucidating their functionality, since it entails a set of systemic relational connections. Amulets were used under conditions of uncertainty, as a means of controlling birth outcomes, while at the same time reinforcing certain views about female bodies and the mechanics of birth.

Based on these observations, I argue that birth(-related) amulets embody the idea that fluid dynamics – inside and outside the female body – govern the physiology of generation and more specifically, the birth process. Successful conception, gestation, and birth were seen as functions of properly managing (or harnessing) the fluid economy within the body. This economy centered around blood, and the fetus itself as composed of and nourished by blood. Birth, moreover, was dependent on the movement of fluids, and postpartum recovery was characterized by lochial flow and lactation. The amulets examined below evoke the very bodily processes for which they provide protection.

The chapter examines a long tradition of birthing amulets, both in the textual and material record. This juxtaposition raises some difficult questions. From textual sources, we can discern a rather consistent view of female physiology and how the amulets were thought to work, a topic which preoccupies section I of the chapter. But what can these texts teach us about practices? Textual descriptions and prescriptions reveal what particular men *thought* women did, or what tools men *thought* women used (or should use) and how these tools worked, but that is obviously not the same as accessing the contours of birthing practices. Put another way: when Pliny's *Natural History*, Soranus' *Gynecology*, or obscure texts such as Pseudo-Dioscorides' *De Lapidibus* describe

birthing amulets, are they actually providing an account of quotidian usage? Are they more accurately operating in an echo chamber of textual tradition than the world of contemporary practice?

Occasionally a medical author will allude to discussions with women on certain matters, as Galen does regarding women's sensation during conception.[8] Such moments are, unfortunately, rare. This problem evokes an important debate between Rousselle and Manuli in the early 1980s. Rousselle argued that Hippocratic gynecological works derived from a female oral tradition, while Manuli characterized the treatises as "an expression of a male voice of social and sexual domination."[9] Demand has suggested, in a synthetic gesture, that to a certain extent, *both* are perhaps correct: the two arguments are the "products of different perspectives on the same situation" – meaning that the Hippocratic gynecologies constitute the reception of material (pharmacological, anatomical, etc.) derived from a female oral tradition, but perceived through a male lens, deeply rooted in the elite thought-world of Hippocratic theory.[10] My current view is perhaps more pessimistic than Demand's. Female domestic spaces and bodily interiority are clearly an intense focus of the male imagination.[11] In that sense, Manuli's view appears rather more plausible, though I do not want to discount evidence suggesting real, albeit rare, engagement with female patients and their experiences. The boundaries of this debate are still shifting.

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[8] Gal., *Sem*. 2.5–9 = *CMG* 5.3.1, 66.1–17 = 4.514K.
[9] Demand 1994, xvi; the debate played out in Rousselle 1980 and Manuli 1980b; 1983.
[10] Demand 1994, xvi.
[11] As noted in chapter one, there was a clearly a great deal of male interest in "women's secrets," in elaborating "folk knowledge, concerned with the body, fertility… and to a degree, exoticizing it" (Flemming 2007, 275).

These evidentiary problems get at an important methodological question: to what extent can (or should) textual descriptions elucidate the logic of amulets in the material record – or vice versa? What I can say is that we have to consider our authors' context (time, space, status, etc.), agendas, sources, and generic constraints, at the same time as we attempt comparative study across media. We must be careful to negotiate the relationship between the textual and material record and not let the former entirely govern our interpretation of the latter.[12]

With these methodological considerations in mind, let us turn to birthing amulets. To study these devices in a comprehensive way, we must consider inscribed uterine amulets along with literary descriptions of organic materials applied to the body. While Galen separates talismans with written incantations from what is essentially *materia medica* fastened to the body (οὐσία περιαπτομένη), he appears to realize that his wolf-excrement amulet is in certain respects similar to the amulets a wizard might recommend. Galen's categorical division thus suggests that an inscribed talisman might in fact be considered by some to fall into the same category of *periaptomena* as his wolf-excrement remedy. In antiquity, these boundaries were clearly porous and might be more or less strictly demarcated by physicians and healers depending on the nature of their audience, rivals, and philosophical/naturalistic inclinations.

To enter the textual world of birthing amulets, we engage with a tradition of amulets known as *ōkytokia*, "quick-birthers" (sg., *ōkytokion*). *Ōkytokia*, which appear in

[12] As I discuss below, 'uterine' amulets made primarily from hematite pose particular problems, for despite their prevalence, they are mentioned in no surviving textual sources. See Faraone forthcoming, 96–97. My thanks to the author for sharing his work in advance of publication.

numerous pharmacological and medical texts from antiquity (and beyond), are comprised of organic substances to be ingested, pasted, fastened to, or placed nearby a parturient's body during childbirth (often on or near her pubis). The quick-birther amulet made from wild cucumber, *sikuos agrios/cucumis silvestris*, provides a clear illustration of this phenomenon. The Hippocratic *Diseases of Women* I is the earliest among a set of texts that reproduce – with various alterations – the same wild cucumber *ōkytokion*. These texts also include Soranus' *Gynecology*, and the elder Pliny's *Natural History*.

The wild cucumber *ōkytokia* bring into focus a flexible view of agency during birth, where a number of competing actors (both individuals and things) engage to produce an outcome. These amulets and their longevity in the textual record speak to what von Staden has called the "semantics of matter" (discussed below), the traceable cultural signification of particular materials across textual and ritual contexts.[13] Here, we are again well-served by his felicitous pronouncement quoted in chapter two, "Matter, as a matrix of meaning, can be as intransigent as an abstract idea."[14]

The material record poses more questions than it answers regarding the use of birthing amulets (for more on this point, see below, section II). The tradition of so-called uterine amulets, fashioned primarily from hematite (aka. bloodstone), furnishes an important comparandum for our textual sources. While featuring Egyptian gods and iconography (e.g., Isis, scarabs), the uterine imagery is "entirely Greek."[15] As I discussed briefly in chapter two, these amulets get their name from the depiction of a jar-like

[13] Von Staden 1993.
[14] von Staden 1992, 16. This phrase comes in a discussion of "The continuities between magico-ritual purification and Hippocratic therapy of the uterus," which "are… not only conceptual but also material in nature" (ibid.).
[15] Faraone forthcoming, 96.

uterus, often surrounded by an *ouroboros*, and sometimes featuring (invocations of) various gods, *voces magicae*, or specific pleas to the uterus itself (στάληι μήτρα, "Contract, womb!"). While over two-hundred and fifty hematite uterine amulets survive from the imperial period, they receive no treatment whatsoever in Greek or Latin texts.[16] Indeed, while birthing amulets get considerable attention, uterine amulets are never described or referenced, although materials (hematite, jasper) from which they were fashioned do appear in remedies for various procreative problems (such as retained menses). While uterine amulets were not necessarily birth charms per se (rather, they were probably used for a wide variety of uterine complaints), their iconography resonates in key ways with views of the procreative fluid economy that emerge from medical sources.[17]

Amulets – whether made from hematite or wild cucumber – were used to diminish certain risks during birth. The amulets examined here, especially *ōkytokia*, helped resolve difficult labor by facilitating expulsion of the infant or drawing it out of the womb. Uterine amulets probably participated in healing or protecting the womb from problems leading up to or induced by the birth process, such as hemorrhage and prolapse. These amulets, in various ways, were understood to participate in the fluid economy of birth. Although the relationship between our textual and material sources is complex, together they serve us well in constructing a more vivid picture of the networked environment that affected the birthing process. Amulets constitute one node in a web of actors.

[16] Ibid., 96–97.
[17] Ibid., 96.

Agency and Sympathy

While the methodological problems raised in this chapter are to a certain extent intractable, our sources, both textual or material, do have interesting things to teach us about dynamics in and around the birth process. Specifically, I am interested here in the configuration of agency during birth, how a network of individuals and objects participated in bringing about a particular outcome. In chapter one, I painted a picture of the birthing process – and birthing room – as entrenched in a network of relations among different individuals, sometimes with conflicting agendas. Here, I expand that network to include objects – in this case, amulets – as nodes in this web of interrelations.

Studies of agency in the birth process have often focused on the notion of a *child's* agency in bringing about its own birth, and by contrast, the vessel-like passivity of the uterus.[18] There is no question that the active child/passive uterus concept was a persistent one, as I have already shown in chapter two and three.[19] In learned medicine, however, this notion changed over time to incorporate more agency for the female body.[20] Galen points out that the uterus and the stomach both have a retentive (καθεκτική) and

[18] E.g., Gaillard-Seux 2008; Dasen 2015a, 46ff.
[19] The active child/passive uterus model is well attested in the Hippocratic corpus, and has received much attention, beginning with Fasbender 1897. For a concise summary of the Hippocratic theory of birthing and changes over time, see Hanson 2004; 1987. See also Demand 1994, 19ff.
[20] We should distinguish this notion of bodily agency, however, from a pregnant *woman's* agency in generation and birth. As suggested in chapter three, the latter should be understood through a pregnant woman's capacity for self-care, also encompassing care for her fetus. In general, the uterus (not unlike a fetus) has the unique status of being both part of and separate from female body.

an expulsive (προωστική, ἀποκριτική) faculty (δύναμις).[21] The uterus retains the fetus until it has matured and then works to expel it, with the help of the epigastric muscles.[22] The flexibility built into Galen's view of uterine functions is helpful for the present study – not only does it nuance active-passive models, but it suggests that a wider set of forces are responsible for facilitating and complicating the process.

The notion that birth was a struggle between the mother and child, mediated by other people or objects, challenges the active/fetus-passive/mother view. A gold phylactery from the third or fourth century CE, found in a field near Oxford, exemplifies this agonistic characterization. It expresses hope that a women named Fabia "shall master the unborn child and bring it to birth" (ἵνα τὸ ἔ(γ)κυον κρατήσ(ει) καὶ τεξετ(αι)).[23] The invocation to "master" the fetus (κρατήσει) suggests a vigorous struggle in which the phylactery itself plays a role.[24]

How should we understand the forces that loop these amulets into the networked birth process? The most powerful and mysterious forces (especially the divine) have often been considered illusive and immaterial, but as we shall see further on, their power is made evident through material forms and representations. In the apt phrase of Miller,

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[21] *Nat. Fac.* 3.2–3 = 2.147–49K. See pp. 217, n. 164 on these issues, especially the scholarly controversy around the issue of uterine contractions in ancient sources.
[22] *Nat. Fac.* 3.3 = 2.152K. As I explored in chapter three, Soranus discusses the dead fetus' inability "to cooperate" (συνεργεῖν) with the birthing process, *Gyn.* 4.2.101–2 = Ilb. 4.3.1. His diction suggests there is another active force that needs "cooperation" in order to complete the birth.
[23] The phylactery is published with translation and commentary by Tomlin 2008, who translates the full text as follows: "*Characters. Magical names.* Make with your holy names that Fabia whom Terentia her mother bore, being in full fitness and health, shall master the unborn child and bring it to birth; the name of the Lord and Great God being everlasting" (222).
[24] Cf. Dasen 2015a, 137; Tomlin 2008, 223–24. Both take this amulet to suggest a view of the active fetus during birth.

"immateriality can only be expressed through materiality."[25] Miller's anthropological work is emblematic of what can be called the "material turn." His perspective has been influenced by Latour's actor-network theory, especially its central tenet that *non-humans* or *things* have agency.[26] "The project of [actor-network theory]," writes Latour, "is simply to extend the list and modify the shapes and figures of those assembled as participants and to design a way to make them act as a durable whole."[27] This view is distinct but not unrelated to Gell's view of artifacts as human technologies imbued with their own agency, which then act on human viewers.[28] More than Gell's theory, however, actor-network theory is fundamentally non-anthropocentric insofar as it turns attention away from human actors (or the self), in contrast to more traditional approaches to the 'social' that firmly divide objects from other social actors or focus on 'social forces'.[29] Actor-network theory is based on a 'flat ontology' – "[a]gency resides in traceable effects on any course of action, and is distributed across heterogeneous networks or human-thing assemblages."[30] It challenges a hierarchy of humans (actors) and non-human things

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[25] Miller 2005, 28. I am also influenced by the treatment of agency and material culture in Gordon 2015. He draws on Miller as well.
[26] A thorough overview of the theory is provided in Latour 2005, see especially pp. 70–82.
[27] Ibid., 72.
[28] Gell 1998.
[29] In this regard, Latour 2005 pushes back against what he sees as a trend in the social sciences: "…we don't want to rush into saying that actors may not know what they are doing, but that we, the social scientists, know that there exists a social force 'making them do' things unwittingly. Inventing a hidden social drive, an unconscious, would be a sure way of reintroducing this ether of the social that we try to dispense with. Not because actors know what they are doing and social scientists don't, but because both have to remain puzzled by the identity of the participants in any course of action if they want to assemble them again" (47).
[30] Van Oyen 2016, 2; her book is based on the premise of material agency, and she reinterprets *terra sigillata* pottery as *actively* shaping history.

(acted-upon), advocating, rather, that we must take into account *more* actors, and that 'objects' should be seen as "participants in the course of action."[31]

Actors do not exercise agency alone in a vacuum – they participate in a chain of actions and a web of interrelations. Here, the relationship between actors and the "networks" they form provides the locus of investigation. "Action is borrowed, distributed, suggested, influenced, dominated, betrayed, translated," Latour emphasizes; it is our job both to embrace this "uncertainty about the origin of action" and to trace and explore the entanglements and logic that produce particular events, behaviors, and outcomes.[32] In this chapter, I draw on some central tenets from actor-network theory to consider amulets among the actors participating in birth and the processes before and after a birth – not just because amulets were *understood* to play an active role in mediating between maternal and fetal bodies, but because they *did do so*.

Anthopologists have observed that in many cultures, the most obvious manifestations of diseases, injuries, or physical states (such as pregnancy) are identified with an object or substance in the natural world, which then becomes central to medical intervention.[33] The phrase 'like cures like' (*similia similibus curantur*), invoked to identify 'magical' forms of thinking as well as homeopathy, exemplifies the 'doctrine of signatures', a common approach in pre- and early modern medicine.[34] *Analogy* provides a useful concept to describe the relationship between amulets and the physical processes in

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[31] Latour 2005, 71ff.
[32] Ibid., 46.
[33] Analogy or analogical thinking encompasses a type of thinking and explanation "in which one object or complex of objects is likened or assimilated to another," often when one is considered to be better known or understood than the other (Lloyd 1992, 178).
[34] On "signatures" and Pliny, see Stannard 1982, 14ff.; cf. Conte 1994, 94.

which they take part. Analogy, which refers to the correspondence (full or partial) between things at a superficial or deeper level, can serve "to provide explanations and to control reality."[35] My approach to the amulets examined in this chapter emphasizes unseen properties individuals would like to control. In other words, analogies depend not simply on surface appearance, but also on some inherent property of material or fabric, which both explains and influences a bodily process.[36]

Sympathy is a concept that lends itself well to actor-network theory, since it ascribes active power to objects and parts that together form networks. Indeed, actor-network theory can help us see more clearly how amulets make sense in a networked cosmos, and how their logic is consistent within this worldview. Turning now to the elder Pliny's encyclopedic *Natural History*, written during the first century CE, we find a window into views of cosmic sympathy that structured the ways many literate Romans probably understood amulets. His text is especially valuable to the present study because of its unparalleled wealth and variety of amulets, and because he lived and wrote during the first century at the height of the empire, and was himself involved in imperial administration as the scion of a successful equestrian family.[37] While the *Natural History*

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[35] Lloyd 1992, 178.

[36] On this account, I agree with and nevertheless diverge from French 1994, who observes of Pliny's recipes and recommendations, "…there is a relationship between the natural object and the desired outcome. This is part of the generally accepted sympathies of things" (245). Here he refers, for instance, to Pliny's recommendation of a dog's placenta to "summon" (*evocat*) a fetus, placed on a parturient's loins (Plin., *HN* 30.123). There is no doubt an affinity between the fetus and afterbirth (which would probably extend to a woman's afterbirth as well), but the correspondences are not always so tidy or straightforward. In fact, they are often more complex.

[37] See Flemming 2000, 131ff.

is deeply idiosyncratic, it also provides a rich picture of nature from a privileged perspective within the Roman empire.

Pliny views nature as providential, in keeping with his Stoic proclivities.[38] The natural world is a medicine chest for the human who knows how to identify its gifts: "Not even the forests and the wilder face of nature lack in medicine, nowhere that hallowed parent of all things does not distribute remedies for humankind, so that even the desert itself becomes a drugstore, for at every point there appear wonders of that discord and concord."[39] This discord and concord, better known as sympathy and antipathy, organize Pliny's universe. He considers *Nature* to be "parent of all things," that is, a creator as well as the force that organizes and controls the generation of plants and animals.[40]

Sympathies and antipathies are best seen at the level of individual *natures* in Pliny's world, or *natura rerum*, the "nature-of-things."[41] These natures shape the relationships among and within minerals, plants, animals, humans, and even celestial bodies. The pervasiveness of sympathy and antipathy is marshaled at the beginning of book twenty, where Pliny describes "the peace and war in nature," and "the hatred and friendship of things mute and lacking sense," which the Greeks call "*sympathia* and *antipathia*." He makes a wide sweep: magnets draw certain stones to themselves, a diamond can be broken with goat's blood, the sun consumes water, while the moon

[38] His terminology is Stoic, but a close look at his sources reveals a more eclectic range of meaning. See, e.g., Hahn 1991; Gaillard-Seux 2003, 118ff.
[39] Plin., *HN* 24.1: *Ne silvae quidem horridiorque naturae facies medicinis carent, sacra illa parente rerum omnium nusquam non remedia disponente homini, ut medicina fieret etiam solitudo ipsa, ad singula illius discordiae atque concordiae miraculis occursantibus*.
[40] French 1994, 202.
[41] Ibid., 201. My thinking on matters of nature, sympathy, and antipathy in Pliny (and others) has been influenced by Holmes 2017a, as well as Holmes 2012, 2014b. Here, I draw on her distinction between "capital-N" Nature and "little-n" nature(s).

produces it. All this is for human benefit (*omnia ea hominum causa*).[42]

For Pliny, healing is understood to be a function of sympathies and antipathies operating at the level of individual natures; it entails recognizing the relationships among natures and drawing on them to enhance the health of living bodies. In this sense, animals also engage in healing practices in the form of what Holmes has called "animal intuition." Animals know which substances will bring them relief from ailments: for example, an ailing stork seeks out marjoram to heal itself (*HN* 8.98). To a certain extent, humans lack this intuition, and this is what Pliny's work provides (and more).[43] The medical books of the *Natural History* are a Roman's key to the knowledge required to ensure flourishing and to make use of the empire's bounty.[44] In particular, Pliny provides the tools for land-owning Romans (like himself) to care for themselves and their *familiae* with the materials readily available in their environment.[45]

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[42] Plin., *HN* 20.1–2. See Wallace-Hadrill 1990. He argues, "Like Lucretius, Pliny is a crusader, with a passionate mission: by showing how nature is designed for man, to persuade man how properly to make use of his natural environment. This underlying crusading zeal has direct consequences for his style and his choice of subject matter. If the purpose of nature is to benefit man, the ways man uses and abuses nature are an essential part of the subject matter" (85). Cf. Hahn 1991 on the enormous importance of medicine as proof of providential nature, and Conte 1994, especially 92ff.

[43] Holmes 2017a. The *Natural History* is a stopgap for human frailty, because humans are unique in their insufficiency to use nature's bounty intuitively.

[44] On the relationship between pharmacy and imperialism, see Flemming 2003. The medical books of the work break down as follows: 20–27 concern medicinal plants; 28–32 tackles medical zoology; 33–37 contains various sections minerals and gemstones, which also features medicinal information. On Pliny's place in the pharmacological and intellectual tradition (especially in relation to Theophrastus), see the concise treatment by Lloyd 1983, 135–49.

[45] Recent readings of the *Natural History* have focused on the relationship between Roman imperialism and mastery of the (natural) world: e.g., Nass 2011; Carey 2006; Murphy 2004. The theme also receives treatment in French 1994, 196–254.

Pliny was by no means alone in utilizing sympathy (and antipathy) to understand the interconnections among parts of the body, or between creatures and objects in the environment. With a rather different set of priorities, physicians such as Galen also relied on the concept to understand the "networked body."[46] Soranus, too, though he eschews hidden causes, turns to sympathy when he wants to explain the spread of a localized affection elsewhere in the body, "If the uterus is diseased, it influences the cardia of the stomach and the meninges by sympathy. It also has a kind of natural sympathy with the breasts."[47] Sympathy could help explain how an affection in one part of the body might travel to another, or why the uterus and the breasts formed a "community," *koinōniē* (for example, the breasts shrivel just before a miscarriage because they are in sympathy with the womb). Sympathy could also explain the relationship between a part and whole. In Stoic theory, the universe was understood by analogy to a living body, where hurt or disease in one limb can affect the entire body.[48] Sympathy describes that relationship – other parts might sympathetically respond to a localized affection.

Sympathy has been widely invoked – often quite problematically – with the phrase "sympathetic magic."[49] This notion raises questions about the 'magical' qualities of amulets. Indeed, the very term 'magic' arouses controversy among historians, and for

[46] Holmes 2012; 2013; 2014 concern different aspect of Galen's view on sympathy, as well as 'proto-sympathy' in the Hippocratic corpus.
[47] Sor., *Gyn*. 1.8.135–37 = Ilb. 1.15.2. Dickson 1997, 8. For Soranus, sympathy can also explain the effect of psychological distress on the body. He eschews antipathy, however, as an explanatory cause (see below, pp. 270–71, as well as n. 98). Galen's perception of the relationship between breasts and uterus is elucidated by Holmes 2012, 61–63. The organs' sympathy relies on venous connections.
[48] Holmes 2014, 132. While the human body could clearly serve as an analogy for the cosmos, it could also be construed metonymically, as it participates, as one node or part, in a networked whole.
[49] On these issues and the history of scholarship, see Graf 2003, 8–19, 205–06.

good reasons. For Pliny, the majority of amulets he recommends would not fall under his definition of 'magic'. An amulet prescribed by a *magus*, a sorcerer and supernatural healer, is by definition 'magical', *magicus*, in Pliny's *Natural History*. By contrast, the amulets Pliny describes as effective were simply vehicles to harness the natural sympathy and antipathy inherent to matter. Indeed, Pliny simply saw many amuletic recipes as part of the Roman healing tradition to which he was contributing through his own work in the *Natural History*, a tradition that he (implicitly) juxtaposes to that of the magi. Thus, while his amulets and their properties might qualify as magical to most modern observers – to use the term with an 'etic,' modern connotation – for Pliny, they were simply part of the therapeutic or prophylactic profile of the organic materials under scrutiny.

Galen and Soranus make it clear that certain amulets qualify under the rubric of superstition (falling outside of rationalizing medical doctrine, likely practiced by foreign experts, such as magi). Yet even between these two physicians, there was clearly a difference of opinion about the nature of their efficacy. The confusing history around one of Galen's favorite sources for remedies, Archigenes, highlights the porousness of these boundaries around amulets.[50] Archigenes, who lived and practiced under Trajan, wrote a great deal on the pulse, nosology, and surgery, among other topics, and was associated with the Pneumatists, although he essentially seems to have been an eclectic.[51] It also seems clear, however, based on his afterlife in works by authors such as Alexander of Tralles, that he was a key figure in the *physika* (φυσικά) tradition, that is, 'natural

[50] Nutton 2012, 210. He points out that among authors from the Roman period, Galen's citation of Archigenes' remedies is exceeded only by those of Rufus of Ephesus.
[51] *Suda* s.v. Archigenes. While Galen associates him with Pneumatists, elsewhere he links Archigenes with Empiricists and Methodists (Bouras-Vallianatos 2016, 384).

remedies', including substances applied as amulets.[52] And while there is debate about the contours and scope of this tradition – and debate about whether Achigenes in fact wrote a book of *physika* that began circulating in the second century CE – the range of his works suggests precisely the kind of eclecticism in practice this chapter aims to present. In such a context, the diversity and scope of Pliny's recommended remedies would seen quite at home.

All this is to say that we are clearly working along a continuum in terms of acceptance and rejection of objects' efficacy when applied to the body as amulets. That continuum, however, is perhaps less important than the shared views of sympathy that pervade our authors' understanding of why and how amulets did (or did not) work. In this regard, actor-network theory offers a set of tools that can help us understand how and why amulets could act on bodies and, in turn, diminish (or compound) risk.

Most vital to the discussion that follows is the notion that particular types of matter have important properties that cut across time, space, and genre, transcending boundaries generated both by our actors and ourselves (such as 'folk medicine', 'learned medicine', and 'magic'). As von Staden argues in a well known essay on the chaste tree, particular materials are embedded in "a complex, rich web of continuities in the 'meanings of natural matter'."[53] We are well-served by his concluding remarks on the

[52] On Archigenes, see Bouras-Vallianatos 2016; Nutton 2012, 208ff., as well as Jouanna 2011. Bouras-Vallianatos argues for a close association between Archigenes and the *physika* tradition, and that for Alexander of Tralles, he was a paragon of the tradition.
[53] Von Staden 1993, 52–53; "…Nor should the heterogeneity of uses obscure the fact that these consistent, transepochal valorizations of the [chaste tree] cut across the rhetorical and methodological boundaries traditionally erected by science between itself and myth or cult" (52).

chaste tree as carrying both a kind of intransigent signification that is simultaneously rooted in contemporary practice (whether in ritual, healing, etc.). He explains:

> The chaste tree illustrates the rich repository of cultural signification represented by the 'natural matter' used, for example, in Greek science and in Greek cults. Attention to the meanings of such matter-in-use not only is a curb on decontextualizing readings of texts, it also spurs on reconsideration of the very nature of ancient 'science' as a theoretical and pragmatic activity that, while not a mere epiphenomenon of political, legal, or religious culture, yet is inextricably embedded both in the verbal and in the 'material' culture of its times.[54]

Tracing the history of wild cucumber *ōkytokia* can tell us about amulets, their meaning, and transmission, as well as about the plant itself, as it was deployed to protect bodies from harm. Uterine amulets provide a comparandum that reveals both the embeddedness and variation of approaches to healing and protecting the female body and its procreative functions.

I. *Ōkytokia* in the Textual Record

I.1. *Introducing the Wild Cucumber*

In Sophocles' *Oedipus at Colonus,* the chorus celebrates the fertility of the land and the river Cephisus in Attica:

> οὐδ' ἄυπνοι κρῆναι μινύθουσιν
> Κηφισοῦ νομάδες ῥεέ-
> θρων, ἀλλ' αἰὲν ἐπ' ἤματι
> ὠκυτόκος πεδίων ἐπινίσεται
> ἀκηράτῳ ξὺν ὄμβρῳ
> στερνούχου χθονός· (685–91)
>
> …nor are the sleepless streams that flow
> from the waters of Cephisus diminished,
> but ever each day the river,

[54] Ibid., 55–56.

quick to bring crops to birth,
flows over the plains of the broad-breasted earth
with pure moisture.[55]

The passage draws on the traditional trope of the earth as a fertile female body (explored in chapter two), and its ability to bring forth crops, enhanced by the flow of "pure moisture," the fluid economy. Water nurtures crops, analogous to blood in the female body, which nurtures a fetus. Because of the river's ability to nourish vegetal life, it is *ōkytokos* (ὠκυτόκος), "quick-birthing," so the crops grow quickly and easily.[56]

Many centuries later, Plutarch described the moon as *ōkytokos*, quoting a passage by the Greek lyric poet Timotheus. Plutarch explains this characterization by asserting that the moon, especially the full moon, releases moisture, easing childbirth for women, reminiscent of Pliny's statement about sympathies and antipathies: "the sun consumes water (*sole devorante*), while the moon produces it (*luna pariente*)."[57] This lunar phenomenon, Plutarch notes, explains the moon's association with menstruation and why so many inanimate objects, such as wood or grain, become soggy at the full moon.[58] Substances and bodies that are *ōkytokos* would thus appear to be closely associated with – or composed of – moisture. The association of *ōkytokos* with moisture has implications for our understanding of the birth process and is critical for the study of amuletic

[55] Adapted from Lloyd-Jones, trans., 1994.
[56] The name of the hormone oxytocin, which stimulates uterine contractions during birth, derives from the Greek word *ōkytokos*.
[57] Plut., *Quaest. Conv.* 3.10.3 = 658e–659b; Plin., *HN* 20.2; note that the verb *parire* usually means, quite literally, "to give birth" (as in, here, *luna pariente*, "the moon gives birth to water/moisture"). I thank Emilio Cappetini for bringing Plutarch's passage to my attention. Timotheus lived during the latter half of the fifth and beginning of the fourth century BCE. The moon's role in generation and birth is explored at length in chapter five.
[58] The moon, of course, is also linked to menstruation; see chapter five for further discussion. On medicine in Plutarch's *Moralia* more generally, see Durling 1995.

ōkytokia.

Ōkytokia have a long history inside and outside the medical genre – they were both a common feature of the preparation for birth, as well as an enduring metaphor to indicate quick delivery – not just of a child. In Aristophanes' *Thesmophoriazousae* (411 BCE), a woman feigns pregnancy and tells her husband she is in labor, sending him out to buy *ōkytokia*. This gives her the opportunity to introduce a baby in a pot, which was presented to her husband by a deceitful midwife.[59] A scholiast of Euripides' *Hippolytus* defines the term in the clearest language, explaining the power of Cretan dittany, which is classed among *ōkytokia*, since "it is given to women laboring with difficulty for the sake of birthing quickly" (ταῖς δυστοκούσαις δίδοσθαι χάριν τοῦ ταχέως τίκτειν).[60] We find references to *ōkytokia* well into the imperial period. Telephus, a grammarian and Greek tutor to Lucius Verus (emperor, 161–69 CE), composed a handbook of synonyms called *Ōkytokion*, which furnished orators and rhetoricians with "quick and easy delivery of just the right adjective with which to decorate their compositions."[61] The playful title of Telephus' handbook implies a complex set of analogical relationships. It aligns the writing process with labor, suggesting a relationship between a literary composition and a child, and thus between a writer and a parturient.

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[59] Ar., *Thesm*. 502–516. The baby, kicking the lid of the pot, evokes Hippocratic descriptions of fetuses, eager to leave the confines of the womb at the end of gestation, who "were thought to thrash about in the uterus and break the fetal membranes," initiating their birth (this conforms to the active child, passive uterus model discussed above). Hanson 2004, 275–76.

[60] *Scholia in Euripidis Hippolytum* 58.

[61] Hanson 2004, 276. This work is mentioned in the *Suda* under Τήλεφος, T 495 (ἔστι δὲ συναγωγὴ ἐπιθέτων εἰς τὸ αὐτὸ πρᾶγμα ἁρμοζόντων πρὸς ἕτοιμον εὐπορίαν φράσεως, βιβλία ι΄.) and under Ὠκυτόκιον, Ω 61 (τοῦτο δέ ἐστι βιβλίον ἄξιον κτήσεως πρὸς εὐπορίαν φράσεως καὶ ἑράσμιον).

Telephus' choice to name his treatise *Ōkytokion* raises tricky questions about agency: is the writer/mother simply a passive vessel for the active composition/child? Or is the reverse true? While the notion of a composition or child trying to burst out of the confines of the mind or womb is evocative, the title also suggests an active role for the writer and mother, who needs help accelerating the birth process. In my view, the question of *who has more agency* is not worth pursuing since childbirth clearly features a number of dynamic relationships. Let us ask, instead, how a multiplicity of actors affect one another to produce particular outcomes.

Throughout pharmacological and medical literature, plants and other organic substances are processed, ingested, applied as salves, introduced into orifices, and worn on the body as amulets (*peraptein*, *alligare*/*circumligare*, etc.). One such plant was "wild cucumber" (*sikuos agrios* in Greek, *cucumis silvestris* in Latin), which is usually referred to in English as "squirting cucumber."[62] In Greek and Roman pharmacy, the plant is characterized by an expulsive quality that can be harnessed for various purposes, such as hastening chilbirth when it has become difficult (*ōkytokion*). It is a common species, spread widely throughout the Mediterranean, which is part of what makes it suitable for a case study.[63]

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[62] Equating ancient plants with modern counterparts is methodologically dangerous (the same goes for stones, discussed below). This issue has concerned scholars working on ancient pharmacology, and here I rely, in particular, on the recent work of Totelin 2008. In this section, I accept the identification of the σίκυος ἄγριος with *Ecballium elaterium*, though I do want to introduce a note of authorial caution into what can be seen as a facile and anachronistic identification. When referring to the plant in an ancient context, I shall use the term "wild cucumber," a direct translation of the Greek and Latin terminology.

[63] It is also interchangeably referred to as σίκυς ἄγροις, as in Dioscorides *Mat. Med.* 5.150. The plant is common throughout the Mediterranean and still used for various medicinal purposes. According to the United States Department of Agriculture,

Our only evidence for the plant's use comes from a range of medical/pharmacological sources, so it is difficult to say whether it was actually used by birthing women with frequency in the Roman empire. Indeed, the amulet is reproduced in our sources in such a way as to suggest a pattern of textual transmission more than anything else. Given the plant's ubiquity, however, it is not impossible that wild cucumber *ōkytokia* enjoyed continued popularity in the empire – but that must necessarily be a conjecture. What the history of the wild cuumber teaches us, first and foremost, is a lesson in both the malleability and endurance of particular ideas about birth and female physiology.

A long history of drug lore is embedded in the works of the Hippocratic compilers, Theophrastus, Dioscorides, and Pliny the Elder. While these texts are firmly situated in elite literary traditions, the texts also owe much to the remedies and classificatory traditions of root-cutters (*rhizotomoi*, *herbarii*), drug-vendors (*pharmacopōlai, medicamentarii*), and other herbalists – in many cases, itinerant merchants who transmitted a great deal of information orally. Theophrastus, for example, lived in a milieu that, under the influence of the Hippocratics, favored characterizations of remedies (φάρμακα/medicamenta) "as pure substance with more or less precise

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Ecballium elaterium flourishes in Northern Africa (Algeria, Libya, Morocco, Tunisia), Western Asia (Cyprus, Israel, Jordan, Lebanon, Syria, Turkey), Europe (Greece, Italy [including Sardinia and Sicily], Romania, France, Portugal, Spain, Moldova, Ukraine, Albania, Bulgaria, Former Yugoslavia). Caution is required in making comparisons between ancient and modern flora because of variations in climate; it is nevertheless striking that the plant currently flourishes throughout the territory of the Roman empire. United States Department of Agriculture: Agricultural Research Service, http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?14775. In Turkey, the plant is currently used in treatment of sinusitis: Sezik 1997. Also see King 1998, 152. She notes that "Ecballium elaterium, the squirting cucumber, is said to inhibit ovulation in mice if taken as 100 milligrams per kilogram of body weight." She cites Farnsworth *et al*. 1975.

properties." The notion of providential Nature (who bestowed drugs as "gifts") replaced the conceptualizations of the herbalists that could be termed numinous.[64] This shift is also exemplified by Pliny's characterization of a plant's medicinal properties, "the vast and obscure work of divine power" (*opus ingens occultumque divinitatis*).[65] In sum, all these authors surely received information about common, efficacious remedies from individuals in their communities, but they were also operating in rich literary and philosophical traditions, where authority was in part built on displaying knowledge of and engaging with precedents.

Whether or not wild cucumber *ōkytokia* were part of a Roman midwife's toolkit (or some midwives, somewhere in the plant's Mediterranean reach), these amulets convey a clear, rich picture of how an amulet might be deployed and understood by Greeks and Romans.[66] The squirting cucumber contains seeds that are stored in an oval pod-like casing, often covered in little spikes, which does not bear much resemblance to the contemporary cultivated cucumber (*Cucumis sativus)*.[67] As it ripens, the fruit turns from a green to a yellowish color, and when touched, squirts out a mucus-like liquid containing its seeds. This is how it disperses seeds and facilitates their dissemination. In

[64] Gordon 2015, 144.
[65] Plin., *HN* 19.21; see Wallace-Hadrill 1990.
[66] On the complex relationship between the oral and written tradition, see Totelin 2008, 21–66. She argues convincingly that Hippocratic recipes should not *simply* be seen as a reflection of an oral tradition, but rather, they represent "a cultural product that deserves to be studied in its own right" (18).
[67] Dioscorides calls attention to the difference in the fruit of the wild and domesticated cucumber (*Mat. Med*., 4.150.1), pointing out that the wild form "is a great deal smaller and resembles longish acorns" (ἐλάσσονα πολλῷ καὶ βαλάνοις ἐπιμήκεσιν ἐοικότα ἔχων), although the leaves and stalks of the plant are quite similar to that of the cultivated variety. This description accords with a comparison of the fruit and foliage of modern *Ecballium elaterium* ("squirting cucumber") and the cultivated cucumber, *Cucumis sativus*, which Dioscorides refers to as σίκυος ἥμερος.

modern botanical terms, the plant's explosion of mucus and seeds constitutes "rapid plant movement." In a description of the wild cucumber, Pliny comments on precisely this feature: "Unless… [the fruit] is cut open before it is ripe, the seed leaps out, endangering the eyes (*semen exilit oculorum etiam periculo*)."[68]

The plant's expulsive property is exemplified by its Linnaen taxonomy, *Ecballium elaterium* and belongs to the family known as *Cucurbitaceae Ecballium*. Its genus, *Ecballium*, is related to the Greek ἐκβάλλειν, "to throw out" (and can also mean "miscarry" or "abort").[69] *Elaterium* is the Latinized form of the Greek *elatērion* (ἐλατήριον), a substance derived from wild cucumber, which was popular in Greco-Roman pharmacy. Both Dioscorides and Pliny describe the process of rendering the drug from the plant, which involves distilling liquid from the fruit by pressing it, adding water, and drying the mixture in the sun until it becomes solid. After being pounded into powder, it is formed into troches or lozenges (τροχίσκοι, *pastilli*).[70] As Dioscorides explains, "it activates purging (*katharsis*) both upwards and downwards."[71]

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[68] Plin., *HN* 20.3.

[69] I will return to the implications of this verb in a discussion of a related term, *ekbolion*.

[70] Dioscorides, *Mat. Med*. 4.150.3–5; Plin., *HN* 20.3. Note that Dioscorides' and Pliny's recipes are quite similar, though Dioscorides' description of the process is rather more in–depth (and clear). The two are clearly drawing on a common source. On parallels in Pliny and Dioscorides' pharmacy and botany, see Flemming 2000, 138; Scarborough 1986.

[71] *Mat. Med*. 4.150.6. All translations of this work are reproduced or adapted from Beck 2005. The adjective *elatērios*, from which the term *elatērion* derives, means "driving" and is used in medical literature to mean "purgative;" thus, *elatērion* is a "purgative drug." In fact, some translators refer to *elatērion* as the "diver." It should be noted that medical texts sometimes call for "purgative drugs" (*pharmaka elatēria*), which does not specifically indicate the substance *elatērion*, but rather, the whole class of purgative substances (e.g., *Loc. Hom*. 47 = Li 6.346.19–20 L; *Mul*. II, 129 = Li 8.276.15– 16). Quite often, however, the term *elatērion* does refer to the substance derived from the plant. *Ecballium elaterium* is still considered a purgative of sorts today. The description

The story of wild cucumber begins with the Hippocratic gynecological texts, after which it is traceable through Dioscorides' *Materia Medica* (c. 64 CE), Pliny the Elder's *Natural History* (77 CE), Soranus's *Gynecology* (first-second century CE), parts of Galen's oeuvre (second century CE), and several post-classical sources. While the Hippocratic texts precede the period under examination by many centuries, their influence and authority is indisputable, and they remained central to medical culture of the Roman empire. So it is with the Hippocratic recipes that we shall begin.

I.2. Ōkytokia *in the Hippocratic Gynecologies*

Sympathy is a concept that postdates the Hippocratic texts under consideration here. Yet Hippocratic descriptions of the movement of fluids within bodies – and the relationship among parts, and part to whole – lend themselves well to views of sympathy developed much later (especially in Galen's works).[72] Thus, while sympathy can offer a clear explanation for why amulets can affect living bodies for Pliny in the first century CE, this is not true of the occasional amulet in the Hippocratic corpus. Affections outlined in Hippocratic texts retrospectively understood as sympathetic by Galen, "can also be seen, from a perspective focused on differences [between Hippocratic and Galenic theory], not so much as proto-sympathetic but as distinctive elements in systems shaped by fluid dynamics rather than by their nodal parts."[73] Tracing an amulet from the

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on a packet of the seeds from Horizon Herbs, a distributor of medicinal herbs in Oregon, USA, explains that "the dried juice is a strong laxative… When fruits ripen, they fall spontaneously from the vine and eject their contents to some distance."

[72] Holmes 2014.

[73] Ibid., 136.

Hippocratic corpus through Pliny's *Natural History* reveals how these different viewpoints are ultimately blended into a coherent system.

Affecting and shaping bodily fluid dynamics, *sikuos agrios* and *elatērion* appear throughout the Hippocratic corpus as excellent purgatives. They turn up in the gynecological texts, usually to expel retained menstrual blood or afterbirth, as well as to extract impacted fetuses. In general, Hippocratic treatises implicitly draw a line at explanations that justified the use of amulets (as famously illustrated by *On the Sacred Disease*). This does not mean, however, that amulets are entirely absent from the corpus, and it especially does not mean that Hippocratic theory and practice lacked overlap and affinities with other traditional healing practices. Quite the opposite is true.[74] The "semantics of matter" matter.[75]

Wild cucumber, in fact, is one of the few plants singled out for special praise in the Hippocratic corpus. We find this in *Diseases of Women I*, where the author describes an "expulsive remedy for the womb" (ἐκβόλιον ὑστέρων) to remove a dead fetus or placenta: "fashion some of the juice of the wild cucumber like a little cake, she should apply it as a plaster, having fasted for two days prior; you will not find anything better than this."[76] This notion is enduring. Theophrastus explains that "of all drugs, [*elatērion*]

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[74] For example, see Laskaris 2002 for one perspective on these overlaps in *On the Sacred Disease*.

[75] Von Staden 1993.

[76] *Mul*. I, 78 = Li 8.178.12–14: σικύου ἀγρίου τὸν ὀπὸν ὅσον ποιεῖν ὡς μαζίον ἐμπλάσασα προστιθέναι, προνηστεύσασα ἐπὶ δύο ἡμέρας, οὐκ ἂν εὕροις τούτου ἄμεινον. On this passage, see Riddle 1992, 77. However, he translates *ekbolion* as "abortive," which is too specific. See below for a discussion of this issue. Also note, the Hippocratic treatise *Superfetation* classes *elatērion* among "stronger" (ἰσχυρότερον) suppositories for cleansing the uterus. *Superf*. 33.7 = Lienau 92.26–27 = Li 8.502.23–24.

keeps the longest, and, the older it is, the better it is."[77] Pliny cites Theophrastus, adding that *elaterium* "begins to be potent when three years old."[78]

There is evidence that "wild" plants were considered more potent or "masculine" than their cultivated counterparts.[79] This certainly seems to be the case with "wild cucumber." Dioscorides, for instance, describes it as a strong purgative, while the root of cultivated cucumber (ἡμέρου σικύου ἡ ῥίζα) is an emetic that works "gently" (πραέως) when taken with hydromel.[80] Wild cucumber's potency and similarly, its masculinity, suggest the material properties of the plant were invested with a relatively unique ability to affect the body – to behave as an agent of physical change. Furthermore, the plant's projectile emission of fluid might also be compared to the human male's capacity to eject semen; after all, the domesticated cucumber is a well-documented sexual symbol, although, interestingly, ancient sources seem to focus more on its seeds as fertility symbols rather than its shape.[81] Paired with the wild cucumber's ability to eject seeds and liquid, the analogical relationship with male anatomy seems inescapable – an observation that probably contributed to the plant's association with conception.

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[77] *Hist. Pl.* 9.14.1: πάντων δὲ ὅλως τῶν φαρμάκων πλεῖστον διαμένει χρόνον τὸ ἐλατήριον, καὶ τὸ παλαιότατον ἄριστον. All translations of *Hist. Pl.* are reproduced or adapted from Hort, trans., 1916.
[78] Plin., *HN* 20.3.5.
[79] I thank Laurence Totelin for bringing this idea to my attention. See Totelin 2015, 33, where she cites Theophrastus, *Caus. Pl.* 3.1.3, 5, noting that he describes the plant *silphium* as "emasculated" (*ekthēlunetai*) by cultivation. Also see Foxhall 1998.
[80] Dioscorides, *Mat. Med.* 4.151; also see *Mat. Med.* 4.150.5: "two *obols* are sufficient," which provides a contrast with *elatērion*, of which only one obol should be given to adults, "for it is dangerous to give more" (πλεῖον γὰρ δοθὲν κινδύνους ἐπιφέρει). Adapted from Beck, trans., 2005. "Male" and "female" stones are variably potent in the same way; see Dasen 2015a, 25–52.
[81] From a cross-cultural perspective, this topic is discussed in some detail in Norrman and Haarberg 1980. On ancient sources, see Totelin 2008, 202.

Medical authors recommend *elatērion*/*sikuos agrios* in remedies for both non-pregnant and pregnant women. For the non-pregnant women, the plant is employed to draw down the menses, cleanse the womb of impurities through expulsion of its contents (possibly to promote fertility), or pull the uterus back into place if it has deviated. For pregnant women, the plant has abortive properties and aids in ejecting a fetus during a difficult birth or if it has died in the womb; after the birth, it helps expel placenta and lochial fluid. Overall, *elatērion* and *sikuos agrios* appear to possess properties well suited to the expulsion of blood, and fetuses, ultimately, were seen as composed of blood.[82]

In the Hippocratic texts, sometimes the plant or its juices are prescribed on their own: to be drunk pure or diluted in water, applied internally (injected into the vagina as a douche or rubbed on the cervix), or inserted into the vagina as a suppository.[83] Another recipe in the same treatise suggests the following mixture for drawing down menstrual fluid: "take four cups of *elatērion*, mixing into it goose grease, goat's fat and misy,

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[82] A similar point is made by Totelin 2008, 215. Cf. Gaillard-Seux 1998, 79.

[83] E.g., consumed pure: *Nat. Mul.* 40 = Li 7.384; diluted in water: *Nat. Mul.* 38 = Li 7.380–82; douche: *Nat. Mul.* 33 = Li 7.368; rubbed on cervix (with water): *Superf.* 4 = Lienau 74.12–16 = Li 8.478.10–14; suppository: *Mul.* I, 78 = Li 8.178.12–14, *Mul.* II, 157 = Li 8.332.14–15. Often wild cucumber or *elatērion* is combined with multiple ingredients in a recipe and then ingested or applied. For instance, in *Nature of Women*, the following drug is prescribed for expelling a fetus from the womb (an *ekbolion*): "Expulsive remedy: mixing a little ranunculus and *elatērion* in vinegar, give it to drink well diluted" (Ἐκβόλιον· βατράχιον καὶ ἐλατηρίου μικρὸν μίξας ἐν ὄξει εὔκρατον πῖσαι; *Nat. Mul.* 32.21 = Li 350.21–352.1). On the topic of ranunculus, frogs, in fact, have a long-standing association with the uterus. As Dasen and Ducaté-Paarmann 2006 explain, "A… long-lasting metaphor of the womb is the toad. The animal personifies the movements of an organ which not only moves in the belly, but bites and asks to be fed. In Switzerland, Germany and Austria, the animal was dedicated as an offering not only by women but also by men suffering from pains in the belly or in the stomach" (256). This, of course, ties back in to the animal/aquatic associations of the womb discussed in chapter two.

making it into a suppository, apply on a piece of cloth."[84] In the Hippocratic *Diseases of Women* I, which has many parallels with *Nature of Women*, the author suggests applying the drug in a suppository wound in wool: "having ground an obol of *elatērion* and myrrh in honey and rolled it up in wool, apply it [sc. to the orifice of the womb]."[85]

Especially relevant to the present study are the instances of *sikuos agrios* or *elatērion* applied in cloth or wrapped in wool. Indeed, as we shall see, the suppository, in a sense, is amulet-*adjacent*. The application of drugs topically wrapped in wool or other cloths, such as linen, occurs frequently in gynecological texts.[86] Drugs are sometimes applied externally to the skin or internally to the cervix.[87] In particular, recipes for pessaries wrapped in linen or wool (ἐς εἴριον, ἐν εἰρίῳ) are found in *Diseases of Women* I as well as *Nature of Women*.[88] In a passage from *Diseases of Women* I, this formula is repeated in such a way as to make it easy to miss a rather unusual recipe in a list of nine "quick-birthers for a woman having difficulty giving birth" (ὠκυτόκια δυστοκεύσῃ):

> Ὠκυτόκιον· ῥητίνην τερμινθίνην, μέλι, ἔλαιον διπλάσιον τούτων, οἶνον εὐώδεα ὡς ἥδιστον, ταῦτα ξυμμίξας, χλιήνας, διδόναι ἐκπιεῖν πλεονάκις· καταστήσει δὲ καὶ τὰς μήτρας, ἢν φλεγμήνωσιν. Ἕτερον ὠκυτόκιον· τοῦ σικύου τοῦ ἀγρίου, ὅστις ἂν ἤδη λευκὸς ᾖ, τὸν καρπὸν ἐμπλάσας κηρῷ, εἶτα εἰρίῳ ἐνελίξας φοινικέῳ, περίαψον περὶ τὴν ὀσφύν. Ἢν δὲ ἡ κύουσα πουλὺν χρόνον ἐπέχηται καὶ μὴ

[84] *Nat. Mul.* 32.81 = Li 7.362.5–6: ἐλατηρίου πόσιας τέσσαρας, ξυμμίσγων στέαρ χήνειον καὶ αἴγειον καὶ μίσυ, βάλανον ποιέων, προστίθει ἐν τῷ ῥάκει.
[85] *Mul.* I, 78 = Li 8.176.5–6: Ἢ ἐλατηρίου ὀβολὸν καὶ σμύρνης τρίψας ἐν μέλιτι, ἐς εἴριον ἐνειλίξας, προστιθέσθω.
[86] For an overview of the use of wool in medical practice, see Bliquez 2015, 343–47.
[87] By way of example, for wild cucumber, the following recipe for drawing down lochia or menses is suggested: Ἢ ἐλατηρίου ὀβολὸν καὶ σμύρνης τρίψας ἐν μέλιτι, ἐς εἴριον ἐνειλίξας, προστιθέσθω (*Mul.* I, 78 = Li 8.176.5–6).
[88] This is often indicated by the phrase "wrap in wool and apply (sc. to the cervix)," using verbs such as (ἐν)ελίσσω ("to wrap, roll in"), followed by προστίθημι ("to apply, put on"). For instance, the following series of recipes makes repeated use of this terminology: *Mul.* I, 78 = 8.178.15–180.2, *Nat. Mul.* 96–97 = 7.414.1–3–19. Cf. Totelin 2008, 68ff.

> δύνηται τεκεῖν, ἀλλ' ὠδίνῃ πλείους ἡμέρας, νέη δ' ἔῃ καὶ ἀκμάζῃ καὶ πουλύαιμος, τάμνειν χρὴ τὰς ἐν τοῖσι σφυροῖσι φλέβας καὶ ἀφαιρέειν τοῦ αἵματος… προσθετὸν δὲ ποιήσας πρόσθες χαλβάνην καὶ δαφνίδας καὶ ῥόδινον ἔλαιον, ἐν εἰρίῳ ἐνειλίξας. (*Mul*. I, 77 = Li 8.170.2–172.11)
>
> Quick-birther: terebinth resin, with honey, twice this amount of olive oil, sweet-smelling wine, as pleasant as possible, mix these things together, heat, and give to drink often. This will also calm the womb if it is inflamed. Another quick-birther: plaster on wax the seed of wild cucumber (*sikuos agrios*), which is already white, then wrap it up in crimson wool, fasten it around her loins. If the parturient is hindered for a long time and is unable to give birth, but is in travail for many days, is young and strong, and full-blooded, one must cut the veins on her ankles and remove blood… make a pessary, apply galbanum, bayberries, and rose oil, wrap it up in wool.

The passage features two recipes for *ōkytokia* that are wrapped in wool, nestled among recipes for potable drugs, as well as instructions for performing phlebotomy. While the second underlined recipe is for a fairly typical pessary, held together and applied in wool, the first should raise some red flags. Instead of functioning as a pessary or applied as a salve, the wild cucumber is wrapped in wax, covered with crimson wool, and attached to the genitals (εἰρίῳ ἐνελίξας φοινικέῳ, περίαψον περὶ τὴν ὀσφύν). The fact that the wool is *red* – unlike the wool of unspecified color in the pessary recipe – is noteworthy, and so is the instruction to *wear* the *ōkytokion*, presumably during labor. Both Hanson and Totelin have recognized this *ōkytokion* as an amulet, identifiable by its specified color and attachment (to the outside of the body).[89] Certain remedies are prescribed both for oral consumption and as an amulet, and *sikuos agrios* is definitely part of that group.[90]

[89] Hanson 1995, 287–88; 1998, 83; 2004, 276–77; Totelin 2008, 123–24, n. 54.
[90] Gaillard-Seux 1998, 80. As an example (n. 48), she cites Pliny, *HN* 20.226, a prescription for a quick-birther consisting of mallow leaves spread under a parturient. I

The redness of the wool in which the wild cucumber is applied suggests an affinity with blood. The wool is also evocative of a passage from the beginning of *Diseases of Women* I, where the author argues that female flesh is spongier and more absorbent than the male counterpart; indeed, female flesh absorbs moisture "like wool" (εἴριον), which has been stretched over a water jug for two days.[91] Thus the female body was thought to be more permeable than the male.[92] The connection suggests an analogical relationship between the remedy itself and the female body.

This amuletic recipe has been understood to employ the property of "like cures like," as opposed to the more frequently employed strategy in the Hippocratic sources that "opposites cure opposites" (e.g., cooling, rather than heating agents, mitigate fever).[93] The redness of the wool promotes the flow of blood, drawing out the fetus and afterbirth,

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discuss this passage further below. A similar point is made by Stannard 1982, 22: "In the case of some plants that were said to possess such a property, probably there was originally some magical or ritualistic reason for believing in their capacity to avert sickness, misfortune or potential danger. But whether that reason is obvious or not, a large number of common plants were thought to provide security by being carried or worn on one's person as a pendant, knot, or amulet, or indeed, even planted by one's house."

[91] *Mul*. I, 1 = Li 8.12.6ff. "I say that a woman's flesh is more spongelike and softer than a man's: since this is so, the woman's body draws moisture both with more speed and in greater quantity from the belly than does the body of a man. For if anyone should set clean wool and a piece of cloth which is clean, thickly-woven, and equal in weight to the wool, over water or on top of a damp place for two days and two nights, when he takes them off and weighs them, he will discover that the wool is much heavier than the cloth. The reason this happens is that water in a wide-mouthed jar always escapes in an upward direction. Now the wool, on the one hand, because it is both porous and soft, receives more of the escaping water, while the cloth, because it is solid and thickly woven, will be filled up, although it does not take on much of the escaping water. It is in this way, then, that a woman, because she is more porous, draws more moisture and draws it with greater speed from her belly to her body than does a man." Trans., Hanson 1975, 572.

[92] Cf., Richlin 2014, 231. On the enduring notion of the permeability of the female body, see Kukla 2005.

[93] Hanson 1998, 83.

which are, in turn, both constituted of blood. But beyond tying the redness of the fleece to drawing blood and purging, the plant itself was considered an expulsive *par excellence*, especially for menstrual blood in gynecological contexts. The context of this recipe shows how close the relationship was between remedies applied in wool/cloth (e.g., pessaries) and amulets worn on the body. They are participating in the same fluid economy, functioning based on the same set of principles.

Pliny observes that the wild cucumber, when ripe, shoots out its seeds with remarkable force, endangering one's eyes (*semen exilit oculorum etiam periculo*).[94] Dioscorides' description of the process of synthesizing *elatērion* from *sikuos agrios* features a directive to choose the fruits that "leap back when squeezed" (τοὺς ἅμα τῷ ἅψασθαι ἀποπηδῶντας σικύους ἐκλεγόμενος).[95] It is my contention that the plant's ability to "leap," shooting liquid and seeds, is precisely what invested it with expulsive properties and made it such a powerful *ekbolion*. This quality is evocative of uterine expulsion – of babies at term, retained menses, or unwanted fetuses, all part of the fluid economy.[96] This expulsive property is also what makes the plant and its compounds seem especially "potent" and "masculine," investing them with the power to mediate between mother and fetus, but also pointing to the male role in conception, evoked by the plant's expulsion of liquid and seeds. We can see, then, how the plant participated in a birth and the procreative process more generally, disrupting or promoting the expulsion of fluids, while also evoking the power and importance of male seed.

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[94] Pliny, *HN* 20.3.
[95] *Mat. Med.* 4.150.3. Adapted from Beck, trans., 2005.
[96] Cf. King 1998, 152. She discusses the plant's "homeopathic" quality as a challenge to Riddle's argument that the plant was actually an abortive.

I.3. *Soranus' Adaptation*

Attesting to the enduring nature of this particular *ōkytokion*, a similar recipe appears in Soranus' *Gynecology*, written about six hundred years after *Diseases of Women* I. Soranus rejected amulets, as noted above, but also approved of their use for psychological reasons: they may help women feel hopeful in moments of danger. He presents this view in an excursus on the treatment of uterine hemorrhage, in which he also suggests a popular explanation for the amulets' efficacy: some people (ἔνιοι) believe "magnet and the Assian stone and hare's rennet and certain other amulets (ἄλλα τινὰ τῶν περιάπτων)" are able to staunch bleeding "by antipathy" (κατὰ ἀντιπάθειαν).[97] Despite recourse to sympathy as an explanation for certain affections, Soranus will have no part in promoting this type of remedy, nor antipathy as a concept.[98] But this does not keep him from occasionally including amulets in his treatise, only to reject them.

In the same section in which Soranus discusses embryotomy and extraction by hooks, he provides a list of *ōkytokia* as alternative means to remove an impacted fetus during a difficult birth, all of which he dismisses in his typical fashion in favor of his own recommendations. Despite rejecting the Hippocratic remedies, this section is a testament to the importance of *ōkytokia* in the management of dystocia. While there is no way to know how frequently these remedies were used, Soranus would not have wasted time criticizing them had they been entirely obsolete. Yet we also must take into account how

[97] Sor., *Gyn*. 3.12.107–13 = Ilb. 3.42.3.
[98] The only passage in which Soranus seems to accept antipathy as an explanation for a remedy's efficacy is *Gyn*. 2.18.9–10 = Ilb. 2.49.2, which Temkin finds deeply troubling, as did Ermerins (who excluded it from his text). See Temkin 1991, xxxii, 120 (n. 74). Brugière et al. (1990, 114, n. 262) do not discuss antipathy in their note on the passage, but they do remark upon the sentence's textual problems.

profoundly authoritative the Hippocratic texts were during his lifetime, and it would behoove any serious medical writer to have a clear knowledge of Hippocratic theory, and even know (parts of) the treatises by memory.[99]

In the following passage, Soranus reproduces a number of the recipes from *Diseases of Women* I ,77, with some modifications:

> Τὰ δὲ ὠκυτόκια προσαναγράφειν, ὡς ἄλλοι καὶ οἱ περὶ τὸν Ἱπποκράτην ἐποίησαν, σχεδιάζοντός ἐστιν· οὔτε γὰρ δάφνης φύλλα ξηρὰ μετὰ θερμοῦ ὕδατος, οὔτε δίκταμνον ἢ ἀβρότονον καὶ κεδρία καὶ ἄνισον μετὰ γλυκέος καὶ παλαιοῦ ἐλαίου, οὔτε καρπὸς ἀγρίου σικύου κηρωτῇ προσπλασσόμενος φοινικίνῃ καὶ ὀσφύι περιαπτόμενος ὠκυτοκίαν παρασκευάζει· (*Gyn*., 4.5.149–57 = IIb. 4.13.2)
>
> But to prescribe in addition quick-birthers (*ōkytokia*), as did the followers of Hippocrates among others, is without foundation. For neither dried leaves of sweet bay in warm water, nor dittany or southernwood and cedar resin, and anise with sweet old olive oil, nor the fruit of the wild cucumber added to a date salve and fastened upon the loins effect quick birth.[100]

Hanson suggests that Soranus was quoting from memory, "as was often his habit, and the redness of the material, crucial to the Hippocratic prescription…slipped his mind."[101] This is plausible, but we might also explore the 'rationalizing' impulses in the medical tradition with regard to the efficacy of the amulet's constituent parts. The details of

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[99] We also might look to the commentary tradition in Galen's works, with its intense focus on the Hippocratics and their canonicity. Flemming observes that while Galen does go above and beyond his predecessors, "He builds on, but extends and exceeds, previous patterns. Still, it is in the more traditional areas that he had the most success: it is his internal, loyal, Hippocratic commentaries that have survived, and were to prove so immensely influential in shaping future understandings of Hippocratic thought" (Flemming 2008, 331). Put another way, Galen's focus the Hippocatics and the longevity of his Hippocratic commentaries speaks to their contemporary – and sustained – centrality in medical learning.

[100] Adapted from Temkin, trans., 1991. It is interested that dittany was also singled out as a quick-birther by the Euripidean scholiast, as noted above.

[101] Hanson 2004, 277; cf., Hanson 1998, 83–84.

Soranus' particular deviations from the Hippocratic text yield further insight:

Hippocratic Recipe	*Soranus' Adaptation*
…τοῦ σικύου τοῦ ἀγρίου, ὅστις ἂν ἥδη λευκὸς ᾖ, τὸν καρπὸν ἐμπλάσας κηρῷ, εἶτα εἰρίῳ ἐνελίξας φοινικέῳ, περίαψον περὶ τὴν ὀσφύν	…οὔτε καρπὸς ἀγρίου σικύου κηρωτῇ προσπλασσόμενος φοινικίνῃ καὶ ὀσφύι περιαπτόμενος ὠκυτοκίαν παρασκευάζει

Table 4.1: Comparing *Mul*. I, 77 = Li 8.172.2–4 and Sor., *Gyn*. 4.5.153–55 = Ilb. 4.13.2.

Both passages clearly invoke the language of "quick-birthers," *ōkytokia*. Soranus' phrase, καρπὸς ἀγρίου σικύου, echoes τοῦ σικύου τοῦ ἀγρίου… καρπὸς in the *Diseases of Women* I. Likewise, προσπλασσόμενος and ἐμπλάσας are both compounds of πλάσσω ("to plaster"). Both texts also locate the amulet on the loins, using the same vocabulary (περὶ τὴν ὀσφύν, ὀσφύι). The noteworthy divergence involves the "crimson wool," εἰρίῳ…φοινικέῳ, in the Hippocratic text, which does not appear in Soranus' version. Instead, Soranus describes mixing in a "date salve," κηρωτῇ… φοινικίνῃ.[102] This seems to combine two elements in the Hippocratic recipe, κηρῷ ("wax") and εἰρίῳ φοινικέῳ. It is not a big leap from κηρῷ to κηρωτῇ, and φοινικέῳ to φοινικίνῃ. Thus, in the *Gynecology*, the wool is lost; the word for the color (φοινικέῳ) appears to have been transferred to a description of the salve (κηρωτῇ φοινικίνῃ) – and "date salve" makes more sense in a recipe than "crimson salve."

It is also possible that the divergence is the result of a copying error somewhere in the long history of these texts' transmission. Our earliest manuscript of the *Gynecology*,

[102] Galen describes preparing a date "plaster" at *Comp. Med. Gen*. 13.375K ff.; Temkin 1991, 196, n. 55.

the fifteenth-century *Parisinus Graecus* 2153, supplies the word φύνικίνῳ (unattested elsewhere), which the nineteenth-century editor, Valentin Rose, corrected to the φοινικίνῃ.[103] Regardless of the textual issues in this passage, the close connection between κηρῷ and κηρωτῇ, and φοινικέῳ and φοινικίνῃ, is patent.

It is clear that somewhere along the line – unconsciously or not – either the original author or a copyist found "date salve" preferable to "crimson wool," privileging a more rationalizing ingredient over the symbolic one found in the Hippocratic recipe. This is also reflected in Soranus' treatment of the amulet in a list of remedies which were presumably meant to be applied topically or ingested; elsewhere, when Soranus mentions amulets, he groups them together to emphasize their difference and ineffectiveness.[104] The most important ingredient, *sikuos agrios*, however, stands firm in both the Hippocratic and Soranian versions. Whether wrapped in crimson wool or a date paste, two elements constituted common perceptions of the amulet's efficacy: the presence of wild cucumber and its placement on the parturient's genitals.

Soranus recognizes the logic behind others people's belief in the efficacy of amulets, which he ascribes at one point to antipathy – a clear indication that sympathy/antipathy was an operating framework for explaining their efficacy.[105] He

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[103] Burguière, Gourevitch, and Malinas 2003, 22, crit., ln. 154. On the textual tradition, see ibid., vol. 1: xlvii–lvx.
[104] E.g., Sor., *Gyn*. 1.20. 95–99 = Ilb. 1.63.3; 3.12.107–13 = Ilb. 3.42.3.
[105] Sor., *Gyn*. 3.12.107–13 = Ilb. 3.42.3 Also see n. 98 above, which casts doubt on the one sentence in which Soranus seems to appeal to the concept of antipathy without scorning it (*Gyn*. 2.18.9–10 = Ilb. 2.49.2). Soranus' view of sympathy has not received much treatment in scholarship (Dickson 1997 is one attempt to unravel its meaning). This is too big a subject to tackle in this chapter, but the relationship between his Methodism – especially the principle of commonalities – and sympathy deserves serious attention. Temkin 1991, xxxi–xxxii, suggests that the Stoic and Neoplatonic concept of sympathy is

appears to eschew this idea, while accepting sympathy as a concept, which he acknowledges to govern the affective relationship between breasts and uterus (and among body parts in general).[106] For him, sympathy is rendered visible in ways that do not preclude its assimilation into a Methodist approach to diagnosis and healing. As Temkin explains, sympathy means for Soranus "… that physiological or pathological processes in one part of the body may lead to reactions in another part."[107] Soranus freely uses sympathy as a concept when talking about affections *within* the body (that is, among its parts), but expresses skepticism about sympathy *between* or *among* bodies. He casts doubt, for instance, on the notion that the moon affects conception ("For things on the earth are believed to be in sympathy with those up above"), noting that he has observed human conception to take place at all points in the lunar cycle.[108]

Amulets have their place in Soranian medicine, as tools to improve morale among credulous, suffering patients. In this sense, they still can be seen as actors within the network of relations that help a woman give birth or overcome a pathological episode (such as uterine hemorrhage) – they have a capacity to affect an outcome. Amulets still fall under the category of "superstitious" for Soranus – and superstition is precisely one

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foreign to Soranus. There is no doubt, however, that it was a popular concept during his lifetime.

[106] Sor., *Gyn*. 1.13.135–37 = Ilb. 1.15.2.

[107] Temkin 1991, xxxi. Temkin seems all too eager to identify Soranus with a kind of modern scientism, noting that his view of sympathy more or less "reflects our own use of such terms as 'sympathetic ophthalmia," rather than "[t]he somewhat mysterious concept of a universal sympathy, favored by Stoics and Neoplatonists" (xxxi-xxxii).

[108] Sor., *Gyn*. 1.12.146 = 1.41.1.

of the qualities that precludes a midwife from qualifying among the "best midwives."[109] Wild cucumber is not understood to be ineffective overall, rather, his problem is with the application of the plant as an amulet.

The question remains: did he include particular amulets in the *Gynecology* because parturients and their midwives were indeed using them, and he wanted to encourage the careful *paterfamilias* not to hire superstitious practitioners to tend his wife? Or is Soranus rather participating in a long, complex textual tradition – an echo chamber, of sorts – that entailed critique of remedies from his precedents? It is a matter for debate whether "date salve" represents a corruption in the long tradition of copying subsequent to Soranus' original publication, or if it was in fact a slip of the tongue, as it were, or failure of memory by the author himself, one that privileged a less symbolically charged version of the Hippocratic recipe. Either way, Soranus was definitely positioning himself within a robust tradition of textual interpretation and transmission. Because the *Gynecology* is pitched as a practicum of sorts, it also seems plausible that the author might choose to mention amulets in common circulation at the time of composition. At present, however, this notion cannot advance beyond conjecture.

I.4. *Pliny's Amulets and the Logic of* Ōkytokia *in the* Natural History

Throughout his books on medicine, Pliny includes amulets alongside other types of remedies, many of which are in fact drawn from Greek medical sources.[110] Unlike the

[109] Sor., *Gyn*. 1.3.29–31 = Ilb. 1.4.4: the "best midwife" (ἀρίστη μαῖα) "…will be free from superstition (ἀδεισιδαίμονα) so as not to overlook salutary measures on account of a dream or omen or some customary rite or vulgar superstition."

Hippocratic texts, which rarely feature amulets, and the *Gynecology*, in which they are scorned but sometimes tolerated, Pliny has no qualms about amulets as such. For Pliny, amulets simply represent one way to harness the inherent sympathies and antipathies of various materials. This interpretation of amulets' efficacy is flexible and can easily encompass the conceptualizations of bodily fluid dynamics elaborated in Hippocratic medicine. The encyclopedic genre of the *Natural History* encourages precisely the kind of eclecticism we find in Pliny's medical books; yet it certainly seems possible that the work is also, in a general sense, representative of the diverse, heterogeneous approaches to healing taken by Romans with access to resources.

Pliny favors simple medicines found in the Italian countryside or "kitchen garden."[111] In his own terms, he would not have referred to these amulets as magical. Magic, Pliny explains at the opening of book thirty, is a blend of medicine (*medicina*), superstition (*religio*), and astrology (*artes mathematicae*), and it originated in Persia with Zoroaster, before spreading to Greece and beyond.[112] These three elements form magic's

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[110] French 1994, 218–23. He explains, "…medicine for Pliny was what it had been to the old Romans, simply a knowledge of what remedies were suitable to which disease. At such a simple level even Greek authors could be used – and Pliny keeps it at this level, pouring scorn on the complexity of the two famous Greek remedies... as we have seen the great bulk of Pliny's medical authors were indeed Greek..." (225).

[111] See Flemming 2000, 133–34.

[112] Plin., *HN* 30.1–11. Without belaboring the point, the Latin word *religio* is notoriously difficult to render in English. Translating it as "religion" would be misleading, in that it would not suggest the Latin word's normative valance. Here, I try to express what seems to be the term's negative connotation in the passage: *natam primum e medicina nemo dubitabit ac specie salutari inrepsisse velut altiorem sanctioremque medicinam, ita blandissimis desideratissimisque promissis addidisse vires religionis, ad quas maxime etiamnunc caligat humanum genus, atque, ut hoc quoque successerit, miscuisse artes mathematicas, nullo non avido futura de sese sciendi atque ea e caelo verissime peti credente*. Cf. *HN* 30.6, where the city of Telmesus is called *religiosissima*, meaning "most superstitious."

"triple bond" (*triplex vinculum*) over humankind. From Pliny's genealogy of magic, we can observe several important qualities that separate it from healing practices he endorses. Magic is foreign, a quality exemplified both by the origins and current popularity of magic among non-Roman populations; furthermore, it is characterized by some of the exotic ingredients and complex recipes peddled by the magi. This is not a far cry from his famous critique of Greek medicine, which emerges from his genealogy of the medical arts in book twenty-nine. Indeed, the openings of books twenty-nine and thirty cover the *ars medendi* and *ars magica*, respectively, underscoring their parallelisms and overlap.

In his critique of Greek medicine, Pliny is especially hostile to complex drugs, such as the "Mithradatic antidote," composed of fifty-four ingredients.[113] He favors simples precisely because he believes in Nature's providence, the *parens illa ac divina rerum artifex* ("that parent and divine fashioner of things"), who has created substances complete (*perfecta*) for human consumption.[114] There is no need for compounds, a sign of human impudence (*opus… impudentiae*), luxury, and avarice.[115] For Pliny, the best remedies are in fact the cheapest, those of the "illiterate rustics" (*agrestes litterarumque ignari*), made from readily available ingredients.[116] The *Natural History* provides access to precisely this knowledge – and a whole lot more.

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[113] Plin., *HN* 29.24.
[114] Plin., *HN* 22.117. See Holmes 2017a.
[115] Plin., *HN* 22.118. See Lao 2011 on Pliny's animosity towards profiteering, knowledge-hoarding, and avarice, which, she argues, the *Natural History* is specifically designed to challenge.
[116] Plin., *HN* 25.16.

Despite Pliny's strong rhetoric, it has been observed – and rightly so – that his recipes often have much in common with those he attributes to the magi.[117] While Pliny might polemically decry their art as "empty," his disdain for their remedies sometimes shades into credulity, and he is willing to pick and choose among remedies he believes are more or less effective, selecting those he deems probable (*verisimilia*).[118] At one point, for instance, he notes that regular "bedside" medicine (*clinice*) is useless in treating quartan fevers, for which reason he includes magical remedies, particularly amulets, in the hope they might be of more use.[119] Furthermore, at another point, Pliny makes a curious statement: while impugning magic as "detestable, ineffectual, and empty," he concedes that it also has "certain shadows of the truth (*quasdam veritatis umbas*), but in them the art of the poisoner (*artes veneficas*) prevails, not that of the magi (*magicas*)."[120] In this confusing passage, Pliny seems to be suggesting that the remedies of the magi work precisely because they draw on the same tools as poisoners, and poisons (and antidotes) are examples of antipathy *par excellence*.[121] Thus, the "shadows of the truth" in the magi's practices might be understood to comprise their remedies' sympathetic and

[117] French 1994, 227: "Although Pliny professed to be amazed that something so obviously fraudulent [as magic] should have become so widespread, there is often little to choose between Pliny's own remedies and those of the Magi." Cf. Conte 1994, 97: Pliny "furnishes formulas that are just as much superstitious exorcisms as are the *magi*'s (beginning with the uses of human saliva and the viscera of horned animals)."
[118] Plin., *HN* 30.1 (*magicas vanitates*…), 30.97 (*verisimilia*).
[119] Plin., *HN* 30.98.
[120] Plin., *HN* 30.17.
[121] Gaide 2003, 134–36. *Veneficium* is a hard word to translate: it can also mean "sorcery"; For instance, with a malevolent set of intentions, *medicina* shades into *veneficium*, which one can loosely translate as "poisoning," but which deserves a baggier definition, a "violation of a person's integrity by secret means." Graf 2003, 54. Thus *veneficium* could include spells, cursing, etc. Here, by invoking *veneficium*, he imputes some sort of malice. On poison and antidotes as examples of sympathy and antipathy, see Gaillard-Seux 2010.

antipathetic qualities, not the ritualistic and astrological components (although Pliny, likewise, is not necessarily averse to these either). In short, what matters is a kind of material essence or force that can be deployed in different way.

Book twenty of the *Natural History* opens with Pliny's most sweeping statement on sympathy and antipathy in the natural world.[122] Promising to discuss marvelous phenomena in their "proper place," he turns to simple medicinal plants from the kitchen garden (*ab hortensiis*).[123] Then he immediately jumps in to the details, and the very first plant he discusses is wild cucumber, which combines both the marvelously potent and absolutely mundane.[124] The implication is that the fruits of a modest Roman garden are in fact marvelous, from so modest an origin comes so great a capacity to heal. This kitchen garden is a kind of microcosmic instantiation of Roman virtue and imperialism, embodying both salt-of-the-earth, Roman farmer self-sufficiency, as well as the abundance and variety of imperial reach. We must remember that wild cucumber is embedded in a highly political framework, as an exemplar within Pliny's larger, Roman imperial vision.

There are sixty-four gynecological and obstetrical recipes in book twenty alone, the first of eight books on medicinal plants: twenty remedies for womb-related problems, twenty-one for menstrual problems (seventeen of which are emmenagogues), and twenty-three for childbirth (of which six are for expelling dead fetuses).[125] Among the recipes related to childbirth are a number of *ōkytokia*, including several amulets – two of which

[122] Plin., *HN* 20.1–2.
[123] Plin., *HN* 20.2.
[124] On the logic of Pliny's structure, see Murphy 2004, 30–48.
[125] Gaillard-Seux 1998, 75, n. 32.

are fashioned from the wild cucumber.[126] Pliny heaps praise on wild cucumber and *elaterium*, remarking upon the plant's usefulness for a range of physical problems. The plant is most useful "for purging"; among its antipathetic properties is its use as an antidote for scorpion stings. He reports that *elaterium* may even keep for two hundred years, according to Theophrastus, a sign of its well-known potency.[127] In the midst of these remarks, he describes the fabric and usage of two amulets:

> *Putant conceptus adiuvari adalligato semine, si terram non adtigerit, partus vero, si in arietis lana alligatum inscientis lumbis fuerit, ita ut protinus ab enixu rapiatur extra domum*. (Plin., *HN* 20.6)
>
> People think that conception is aided by tying the seed to the body, if it does not touch the ground; childbirth too is aided if, wrapped in ram's wool, the seed is tied to her loins, without her knowing, but it should be quickly taken outside the house right after the birth.

The wild cucumber seeds are certainly being used as amulets in this passage – first, to aid "conception" by preventing miscarriage (or more simply, evacuation of the "seed" that is becoming a fetus), and second, to facilitate childbirth. The passage combines a number of elements worth exploring.

To unravel the logic of these amulets and to compare them to similar recipes, we must show how they interact with other actors in the birth process and how they project certain fundamental ideas about physiology. Let us consider the mechanics of using a seed (or seeds) from this plant as an amulet – they are tiny, only slightly larger in size

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[126] Plin., *HN* 20.6 (wild cucumber), 20.184 (*melanthium/melasporum*, Roman coriander, seeds wrapped in linen), 20.226 (mallow leaves spread under parturient). Amuletic *ōkytokia* are not confined to book twenty, and notable examples include: *HN* 24.171 (plant growing inside a sieve), 26.161 (cyclamen root), 28.33 (stone/missile used to kill a human, bear, and boar), 28.103 (hyena body parts; Pliny reports this as a recommendation from the magi, whom he does not trust, cf. 28.94), 30.124 (dog's afterbirth).

[127] See Plin., *HN* 20.5 on the longevity of *elaterium*, 20.8 on scorpion stings.

than sesame seeds. How could something so small be thought powerful enough to prevent or induce miscarriage and childbirth? Archeologists and art historians have examined precisely this issue in studies of uterine amulets. Drawing on Bailey's work on miniatures, Marino has argued that the tiny size of uterine amulets was in fact central to people's view of their efficacy: by holding a very small talisman – and possessing it – people gained a sense of mastery over the problem the object was meant to remedy. The amulet "abstracted and compressed" whatever was at stake.[128] In short, "The theoretical stance toward miniaturization of objects also holds that the smaller something is the more manageable and less scary it becomes."[129] This, of course, entails a certain type of analogical thinking that connects the amulet with a problem or body part. To return to Lloyd's summation, analogy helps "to provide explanation and to control reality."[130] While Pliny's cucumber seed amulet is not representational in the same way as engraved gems (i.e., the gems bear a representation of the uterus and particular gods), it is no doubt symbolic.

Turning to the logic of Pliny's prescriptions with this theory in mind, the passage becomes easier to interpret. The plant's seed (*semen*) is bound and held to the pregnant woman's body as the (human) "seed" that becomes a fetus is held inside the uterus. In this context, the fact that the Latin word *semen* (like *sperma* in Greek) has a range of meanings, referring both to vegetal and human generation, is no accident. Likewise, the analogical relationship of these different types of *semen* taps in to the long tradition whereby a fetus is analogized to a seed or small plant.

[128] Marino 2010, 334; Bailey 2005.
[129] Marino 2010, 339.
[130] Lloyd 1992, 178.

If the wild cucumber seed were to touch the ground, contrary to Pliny's instructions, a miscarriage might occur, as the seed/fetus would be expelled prematurely. Pliny was very aware of the plant's ability to shoot out its seeds. By binding the seed to the body, a woman could suppress the plant's power of expulsion – that is, suppress the agency of the plant by binding it to the body. Dropping the seed, alternatively, would activate its expulsive property, and the seed/fetus would likewise be expelled from the uterus.[131] The smaller the seed, the easier it is to control.

The notion of "binding" to contain the power of a person or animal is familiar from cursing and binding spells (*katadesmoi*) in the ancient world. Take an erotic binding spell from second- or third-century CE Egypt, for example. Inscribed on a tablet, it conveys a man's attempts to bind a woman to himself: "I bind you, Theodotis, daughter of Eus... so that you may never be able to sleep with any other man…".[132] Binding and loosening, furthermore, are central to ancient views of the birthing process, as in the story of Alcmene's difficult birth of Hercules.[133] In Ovid's version of the myth, Juno is angered by Jupiter's infidelity with Alcmene, who then becomes pregnant. Juno punishes Alcmene by instructing Lucina, goddess of childbirth, to sit outside the birthing chamber on an altar, with her fingers and legs crossed, uttering chants quietly (*carmina*).[134] This

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[131] Faraone 2009, 218, notes a similar formula in an amuletic recipe to *stop* the flow of blood found in the so-called *Additamenta Pseudo-Theodori*: the amulet is a message written on papyrus and affixed to the sufferer's body, which includes instructions not to let it touch the ground.
[132] Ed., trans., Gager 1992, 108–110, #34. Gager's book also provides an excellent introduction to curse tablets and binding spells (3–41). Also see Graf 2003, 118–74.
[133] For Hercules and Alcmene, see Bettini 2013. Also see, e.g., King 1998, 85–86; Dasen 2015a, 137. Kotansky 1991 discusses binding more generally in amuletic use (e.g., Cato, *Agr*. 160).
[134] Ov., *Met*. 9.297–301.

effectively impedes the birth, until a servant observes Lucina's behavior and tricks the goddess into unclasping her hands and legs, allowing the child to be born.[135] Pliny cites this story and the Romans' pervasive belief in the power of hand-clasping, which affects behavior among the highest echelons of society:

> It is *veneficium* to sit with fingers interlaced like a comb (*pectinatim*) in the presence of pregnant women or when a remedy is being administered to someone. People say this was revealed when Alcmene was giving birth (*pariens*) to Hercules, and that the *veneficium* is worse if the hands are placed around one or both knees, or one knee is placed over the other and then switched. For this reason our forefathers forbid these postures in councils of military leaders and civil magistrates, as they impede all business…[136]

Pliny makes it very clear that there is a widespread belief in the connection between undoing knots – knotted hands, clothing – and childbirth. In another passage from book twenty-eight, Pliny explains that the man who impregnated a woman in labor "speeds up childbirth (*partus accelerat*) if he takes off his own girdle and ties it around her waist, and then removes it, uttering a prayer, 'I have bound, and I too will loosen (*se vinxisse,*

[135] Ov., *Met*. 9.273ff. Cf. Hom., *Il*. 19.95ff., Paus., 9.11.3. This is a basic outline of the story, which has many interesting details, such as the transformation of Galanthis, the servant, into a weasel. This aspect is examined in detail by Bettini 2013, who tracks and elucidates this fascinating tradition.

[136] Plin., *HN* 28.59: *Adsidere gravidis, vel cum remedium alicui adhibeatur, digitis pectinatim inter se inplexis veneficium est, idque conpertum tradunt Alcmena Herculem pariente, peius, si circa unum ambove genua, item poplites alternis genibus inponi. ideo haec in consiliis ducum potestatiumve fieri vetuere maiores velut omnem actum inpedientia…* On the valance of the term *veneficium*, see n. 121 above.

eundem et soluturum),' and leaves."[137] Pliny could not be clearer about this conceptualization of binding/loosening as integral to childbirth.[138]

To return to the wild cucumber amulet, the notion that the plant's seed can help a woman conceive, prevent miscarriage, *and* bring about birth is rather confusing. On the surface, conception, understood as retention of the *semen*/*sperma* ("seed"), would seem to be the opposite of purging or expulsion. Totelin argues, however, that purging was also seen as intrinsically related to conception, since they both are mechanisms for dealing with blood in the female body. Menstruation was understood as a necessary prerequisite for childbearing, and in Hippocratic terms, both were 'healthy' ways to deal with the excess blood. Menstruation evacuates excess blood from the non-pregnant body, while a pregnant body uses that blood to nourish a fetus (and later that blood is concocted into breast milk to feed the child). In Hippocratic medicine, pregnancy and especially birth were understood to *be* a purge.[139] Based on Hippocratic theory, then, it is not surprising that Pliny's two similar amulets from wild cucumber seeds offer protection for both conception and parturition. The integration of these ideas into Pliny's implicit understanding of female physiology and procreation underscores how Hippocratic fluid dynamics can lend themselves well to a view of the body rooted in the principle of sympathy. Add to this the analogical relationship of the plant's ejection of seeds to male

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[137] Plin., *HN* 28.42. Cf. Gaillard-Seux 1998. In her words, "Le nouement de la ceinture est une sorte de mime symbolique de la conception, le dénouement mimant la délivrance à la fin de la grossesse" (67).
[138] Soranus also echoes this notion at *Gyn*. 2.1.115–21 = Ilb. 2.6.1, in which he rationalizes the custom of loosening a woman's hair during a birth.
[139] Totelin 2008, 216; King 1998, 89. Soranus criticizes the idea (exemplified by the Hippocratics, among others) that pregnancy and childbirth make a women healthier by breaking down the flesh, allowing menstrual fluid to flow more freely.

ejaculation, and the plant's association with conception becomes intuitive.

The logic of Pliny's wild cucumber seed amulet provides a framework for understanding a range of amulets in his own work and that of others. Dioscorides and Pliny drew on common sources, and in the former's *Materia Medica* we find this interesting information on cyclamen:[140] "They say that should a pregnant woman step over its root, she miscarries; it also promotes quick birthing when worn."[141] Stepping over the root activates the plant's expulsive property, which may also be harnessed for quick-birthing when worn as an amulet (similar to Pliny's wild cucumber, the plant is said to have purgative qualities).[142] In the case of wild cucumber, binding the seed to the body is a way to conceptualize holding onto the fetus and protecting both maternal and fetal bodies from miscarriage. Dropping the amulet activates and mimics the expulsion of the fetus, which, during difficult labor, becomes desirable.

It is noteworthy that Pliny lists a snake's slough as a quick-birther "when tied to the loins" (*anguium senectus adalligata lumbis faciliores partus facit*), which suggests an

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[140] Flemming 2000, 138. Dioscorides receives the fullest treatment in Riddle 1985. Also see Scarborough 1986.

[141] *Mat. Med.* 2.164.1: φασὶ δὲ ὅτι, κὰν ὑπερβῇ τὴν ῥίζαν ἐγκύμων γυνή, ἐξαμβλώσκειν αὐτήν· ἔστι δὲ καὶ ὠκυτόκιον περιαπτομένη. Cf. Theophrastus, *Hist. Pl.* 9.9.3, in which he reports that cyclamen worn on the body is a quick-birthing amulet and charm (ἀγαθὴν δὲ τὴν ῥίζαν καὶ ὠκυτόκιον περίαπτον καὶ εἰς φίλτρα). On Dioscorides' treatment of amulets, Flemming (2000, 139) explains, "For, items of the same kind as those that Dioscorides tends not to commit himself to – mainly amulets – are also sometimes fully and unconditionally incorporated into the text, and he articulates no concept of 'nature' or 'the natural' (and thus of anything contrasting to it), using the term *physis* solely to denote the individual essence of a thing, and then only rarely."

[142] Dioscorides describes the plant as a purgative and softener/loosener, e.g., "Their juice is instilled into the nostrils with honey to purge the head and it is applied with a wad of wool to the anus for the removal of excrements. Rubbed on the navel, on the lower part of the belly, and on the hip joint, it softens the bowel and it causes miscarriages…" (*Mat. Med.* 2.164.2).

analogy between the snake freeing itself from its old skin and the child from the uterus.[143] This suggests a similar type of analogical relationship to the desired outcome (smooth childbirth) that we have been examining.[144] Based on this logic, a voided bladder stone is also a quick-birther when held close to the genitals.[145] In this case, it is analogically related to the fetus (rather than the uterus, as with the snake skin): it represents the desired outcome of expulsion, albeit an especially painful one, which no doubt contributes to the affinity between fetus and stone. By having made the voyage out of the bladder, the stone can now sympathetically work to extract a child from a similar part of the body whence it came.

Dropping an amulet on the earth – like stepping over a magical plant – can inhibit gestation and birth.[146] Pliny mentions the belief that "little worms" (*vermiculi*), used as an amulet around then neck (*adalligati colo*), "hold in the fetus (*continent partum*)," but they must be removed during labor because they prevent birth (*alias eniti non patiuntur*).[147] This conforms to the binding/loosening model. Based on the grammar of the passage, the worms are the subject of the action of containment. Pliny also cautions the user not to place the amulet on the ground (*in terra*). The worm-amulet prevents

[143] Plin., *HN* 30.129. I find this amulet especially evocative since it raises questions about how closely intertwined the fetus and the uterus are, like the snake and its skin.
[144] A similar observation is made by French 1994, 245.
[145] Plin., *HN* 28.42.
[146] In later traditions, a quick-birther might also be placed at the foot of a woman. One such example is found in "Paradise of Wisdom," by the ninth-century Persian scholar/physician Ali ibn Rabban Tabari (teacher of the famous Muhammad ibn Zakarīya Rāzi), who recommended "placing a shard – upon which a magical square and two verses of a psalm had been inscribed – under the foot of a woman in labor to facilitate delivery" (Grmek and Fantini 1998, 150). A terracotta potsherd *ōkytokion* is also recommended by the fifth-century CE *PGM* 123a.50–51 (*P. Cazzaniga*, no. 1; not in Preisendanz, see Betz 1986, 319). Cf. Hanson 2004, 278.
[147] Plin., *HN* 30.125.

miscarriage by restraining/containing the fetus in the womb, and dropping it on the earth activates expulsion. Pliny also notes that *vermiculi* draw out pus from the breasts, increase the flow of milk, and can help expel the afterbirth, so they have a purgative quality, much like the plants explored above.[148] From this angle, the worms have an expulsive property, which can be suppressed through binding them to the body as an amulet. Dropping the worms on the earth activates the expulsive, loosening property, much like dropping the wild cucumber seeds on the ground.

In the second half of Pliny's wild cucumber prescription, in which he indicates the plant's quick-birthing properties, he suggests wrapping the seed in ram's wool (*in arietis lana*) to help women in childbirth: *partus vero, si in arietis lana alligatum inscientis lumbis fuerit, ita ut protinus ab enixu rapiatur extra domum* ("childbirth too is aided if, wrapped in ram's wool, the seed is tied to her loins, without her knowing, but it should be quickly taken outside the house right after the birth").[149] This part of the passage echoes the amuletic recipe in *Diseases of Women* I, 77 in its inclusion of the wool, as well as the amulet's placement on the body. The notion that the wool must come from a ram is most likely drawn from another similar (and related) prescription. It is possible that wool from a ram (vs. a female sheep) was thought to increase the ability of the amulet to act on the

[148] Plin., *HN* 30.125. Other amulets have caveats about stepping over them at particular stages in pregnancy. Cf. *HN* 26.256 on an amulet of ewe's afterbirth; *HN* 30.128 on the amphishaena, which causes women to miscarry (a passage with textual problems, but nonetheless relevant); see 7.85 on the amphisbaena's two heads (*geminum caput*). It is possible that the amphisbaena's association with things gynecological relates to the notion that a woman has two mouths: the mouth on her face and her vaginal opening. These mouths are at either end of a passageway thought to connect the orifices of the head to the genitals, a central concept in odor therapy, practiced by the Hippocratics (among others). This connection is confirmed by gynecological terminology (e.g., *stoma*, *cervix*, etc.).

[149] Plin., *HN* 20.6.

body, perhaps as "wild" plants (*silvestris*/*agrios*) were considered more potent and masculine than their cultivated counterparts.[150] Unlike the Hippocratic passage, however, there is no mention of the color of the wool, even though Pliny does sometimes specify wool's color in other amuletic recipes.[151] While Pliny was acquainted with the Hippocratic corpus, given the divergence between the two passages, it is more likely that his version is simply the product of a tradition to which the Hippocratic recipe and Soranus' version belong.[152] His treatment represents one branch of the tree that constitutes this recipe's transmission.

Pliny's wild cucumber amulet requires the involvement of actors beyond the maternal-fetal pair, drawing more people into the birth process. In the first part of Pliny's prescription, a woman binds the seeds to herself, controlling the expulsive/purgative quality of the plant. In the latter half, someone else binds the seed to her body – specifically, to her genitals (*lumbis*) – harnessing precisely the expulsive property that was previously suppressed. Placing the amulet locally suggests that it exerts force on the fetus. When the wild cucumber is "ripe" – or a woman is ready to give birth – the seeds

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[150] See Foxhall 1998.

[151] For instance, Plin., *HN* 28.82 features a prescription for an amulet that cures tertian and quartan fever, as well as rabid dog bites: menstrual blood is placed in black ram's wool and enclosed in a silver bracelet.

[152] On Pliny's scientific sources, see Healy 1999, 42–62. Specifically on pharmacy, see Scarborough 1986, 65–67. He suggests that Pliny used the Hippocratic corpus for names of plants (along with Diocles, Apollodorus, and the poetry of Aristophanes, Menander, Callimachus, and Nicander), and for medical botany, Xenocrates' *Useful Things from Plants*, Bolus' *Physika*, the "magi" (Ostanes and Zoroaster), and Agathocles' *On Regimen*. Scarborough also argues that he consulted a collection that summarized medical botany written by Sextius Niger. For a comprehensive treatment of Pliny's sources, see French and Greenaway 1986. On Pliny's method, also see Nass 1996.

are ready to spring out.[153] Logically, then, the seeds' casing (the flesh of the cucumber), is symbolically aligned with the uterus, which is not such a far-fetched idea: the cavity of the squirting cucumber is oval, wet, and filled with seeds. Again, this taps into the seed/plant-fetus relationship explored in chapter two. Perhaps wrapping the seed in wool suggests a connection to female flesh and also dampens the violence of the plant's ecbolic property: the seeds can inflict harm if they spring out too quickly or unexpectedly (*periculo*). Care is required to direct the power of the amulet.

Why should the amulet be quickly removed from the house after the birth (*ita ut protinus ab enixu rapiatur extra domum*)? There is good evidence for a strong identification between the female body and the house, "the house being a well-known maternal symbol."[154] This is borne out by the symbolism on many "uterine" amulets (inscribed gems, discussed below). On the gems, a uterus is pictured in the shape of a pot, beneath which is a key, symbolizing opening and closing of the 'mouth' of uterus, presumably to let fluids in and out. The cervix, then, is the 'door' to the womb.[155] Removing the amulet from the house prevents it from continuing to act on the parturient's body/womb. Likewise, a number of recommendations suggest that simply bringing certain objects into the house make birth easier, such as a fish called the torpedo,

[153] Plin., *HN* 20.3. Also note that at *Mul*. I, 77 = 170.2–172.11, the author specifies that the wild cucumber should be white, which most likely indicates that it should be ripe. Contemporary squirting cucumber turns yellowish (from green) when it is ripe and is thus prone to eject its seeds. The language of "ripening" is a common cross-cultural metaphor for women at term. Notably, in contemporary obstetrics, the cervix is said to "ripen" when it becomes softer and more malleable during labor.

[154] Citing precisely this passage in Pliny, Gaillard-Seux 1998 explains, "Toutefois, il est possible que soit sous-jacente dans ces circonstances une identification entre l'accouchée ou son utérus et la maison, la maison étant un symbôle maternel bien connu" (83). Also see, Gaillard-Seux 2008, 63, 71ff.

[155] Gaillard-Seux 1998, 83. Also see Dasen 2015a, 68.

which, caught when the moon is in Libra and then kept outside for three days, "afterwards makes birth easy, whenever it is brought in the room" (…*faciles partus facere postea, quotiens inferatur*).[156]

The instructions about removing the wild cucumber amulet from the house are most likely meant to prevent postpartum uterine prolapse, a well-known risk for multiparous women.[157] Women who give birth multiple times are more prone to prolapse, which occurs when the pelvic floor is weakened and the ligaments loosen that hold the uterus in place, allowing the organ to slip down, sometimes becoming visible outside the body.[158] An amulet that remained on the mother's body after the birth would continue to exert its sympathetic influence, drawing the uterus out of the body. In one sense, prolapse is a kind of pathological loosening.

Pliny's instructions, meant to guard against prolapse, are further elaborated in book twenty of the *Natural History*. He suggests spreading mallow (*malva*) leaves under a woman in labor, but to remove them right away "so that her womb does not follow."[159]

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[156] Plin., *HN* 32.133; cf. 26.153: dittany is so powerful that it draws out impacted/dead fetuses, but because of its marvelous strength, it must be kept outside the birth chamber. Cf. *HN* 28.34 on aiding parturition by throwing a javelin over the laboring woman's house during labor; the javelin must have killed a man, boar, and bear!

[157] Soranus, in fact, has a long section on precisely this affliction: *Gyn*. 4.6 = Ilb. 4.35. As Gaillard-Seux 1998 put it, "Ces précautions ne sont pas sans évoquer les risques réels, dans antiquité, de ptose de la matrice à la suite d'un avortement ou d'un accouchement, dont *Maladies des femmes* notamment évoque assez longuement le traitement" (83).

[158] It remains a relatively common ailment in childbearing women. "Globally up to half of all parous women have some degree of clinical prolapse and 10–20% are symptomatic." Gyhagen *et al*. 2013.

[159] Plin., *HN* 20.226: *utique constat parturientes foliis substratis celerius solvi; protinus a partu revocanda, ne vulva sequatur*. See Gaillard-Seux 1998, 83, n. 78. She cites a similar passage in Pseudo-Priscian that preserves the concern about the womb "following" the fetus outside the body, *Artemisia ad inguinem suspensa statim pariet et cito illam solve, ne sequatur matrix*. It is worth noting that mallow is also viewed as

Like wild cucumber, mallow is a relatively common plant that is recommended as a therapeutic food, as well as an amulet. If mallow simply opened the womb to facilitate birth, why would it also cause the womb to "follow"? This passage indicates that the plant is capable of drawing an organ out of the body, while the language also suggests the uterus has a capacity to move under mallow's influence.[160] It is worth adding that Pliny notes a wild variety of mallow is evocatively called *plistolochia*, suggesting its usefulness for childbirth.[161] The "Theban Olympias" (one of the female practitioners Pliny cites) recommends mallow ingested with goose grease to bring on abortions, and the leaves with oil and wine are helpful for menstruation.[162]

From textual evidence, stones that have quick-birthing properties seem to function based on a set of principles identical those governing amulets fashioned from plant and animal matter. Aside from *iaspis*, "the stone found in Samian earth" and the frequently cited "eagle-stone" (*aëtites*, ἀιτίτης) appear as *ōkytokia*.[163] A variety of *aëtitae lapides*

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possessing cleansing properties (e.g., *Nat. Mul.* 32.63 = Li 7.358.9–10: ἀγαθὰ καὶ καθαρτικά...). Cf., Dioscorides, *Mat. Med.* 2.118.

[160] Cf. Dioscorides, *Mat. Med.* 3.150.2; *Euporista* 2.98 (a collection of simples dubiously attributed to Dioscorides): leaves of anagyrus are useful for women who are having trouble giving birth, but "the amulet must be removed straightaway after the birth" (πρὸς δὲ τὰς δυστοκούσας περιάπτεσθαί φασιν ὠφελίμως ἀναγύρου φύλλα· δεῖ δὲ μετὰ τὸ τεκεῖν εὐθέως ἀφαιρεῖν τὸ περίαπτον).

[161] A Greek term, from πλεῖστος (superlative of πόλυς, "many, much") and λόχια ("childbirth/discharge after childbirth"). Although *plistolochia* appears several times in Pliny's *Natural History*, the term is unattested elsewhere in Latin or Greek.

[162] Plin., *HN* 20.226. On the female physician Olympias and her treatment in Pliny, see Flemming 2007. Also see Flemming 2000, 134–35.

[163] Pliny explains that eagles keep eagle-stones in their nests (*HN* 36.152–53); without them, they are unable to reproduce. The strange name *aetites* is the result of a mistranslation from Akkadian, in which the word for 'eagle' and 'pregnant' are similar (Faraone forthcoming, 89–90). Eagle-stone was thought to prevent miscarriage and serve as a quick-birther. Damigeron-Evax describes the stone as "most suitable for the hastening of childbirth" (*ad velocitatem partus aptissimus*) when a woman is in travail (*periclitante*

contains another smaller stone inside a cavity "as if in a womb" (*velut in alvo*).[164] With eagle-stone, the analogical relationship between amulet and fetus is especially explicit. Birth will not occur unless the amulet is removed during labor, but leaving it too long will cause prolapse (*volvae excidunt*). The interaction between the female body and the amulet *requires* certain interventions from human actors. An amulet, improperly handled, can hold an infant hostage in the womb; it can also affect the dissolution of a body's inside-outside boundary by causing prolapse.[165]

The relationship between *ōkytokia* and prolapse appears to be rather common, suggesting a widespread belief in the sympathetic power of such amulets to act on a fetus in addition to the surrounding internal organs. The fourth-century *Herbarius* attributed to Pseudo-Apuleius, (which relies heavily on Pliny's *Natural History* and Dioscorides'

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muliere). Pliny notes that the stone is also referred to as *gagites*, and in Pseudo-Dioscorides a stone called *gagatēs* is a quick-birther. This stone also appears in a fragment from the *Kestoi*, attributed to the second/third-century author Sextus Julius Africanus, which describes *gagatēs* as an *ōkytokion* for women struggling in labor (ταῖς δυστοκούσαις). Cf. Aëtius, 2.24, who also describes it as an *okytokion*, held in the hand of the birthing woman (…εἶναι δὲ καὶ ὠκυτόκιον ἐπὶ τῶν δυστοκουσῶν γυναικῶν κατεχόμενον τῇ χειρὶ τῆς τικτούσης). On this tradition, also see Dasen 2015a, 42–47.

[164] Plin., *HN* 36.149.

[165] Cf. Philostr., *VA* 3.39. In India, Apollonius learns of a man who visited a sage on behalf of his pregnant wife. She was seeking an easier birth after having already struggled seven times in labor (γυνὴ δέ τις ἑπτὰ ἤδη γαστέρας δυστοκοῦσα). The sage ordered the man to take a living hare into her birth chamber while she was in labor, walk around her, and then release it, with the caveat that uterine prolapse would occur if the animal were not taken outside immediately after its release (συνεκδοθῆναι γὰρ ἂν τῷ ἐμβρύῳ τὴν μήτραν, εἰ μὴ ὁ λαγὼς αὐτίκα ἐξενεχθείη θύραζε). The hare, also a symbol of fertility, affects expulsion, perhaps evoked by its ability to leap and hop. In a sense, the animal becomes the amulet – or rather, it is not just animal *parts* that can constitute amulets but animals themselves.

Materia Medica) contains this striking prescription involving coriander (*coriandrum*) seeds[166]:

> *coriandri grana XI vel XIII in linteo novo obligato puer aut puella investis ad inguinem sinistrum teneat, et dum enixa fuerit, tolles, ne intestina sequantur*.[167]
>
> An unclothed boy or girl should hold eleven or thirteen coriander seeds bound up in fresh linen to the left side of [the parturient's] groin for as long as she is in labor, then remove them, so that her internal organs do not follow.

The author ascribes to the amulet the capacity to draw out a fetus along with the parturient's internal organs (*intestina*), which presumably include her uterus. The phrase *ne intestina sequantur* ("so that her internal organs do not follow") dramatically evokes the notion of the uterus 'following' the fetus and afterbirth, as if it were an animal of some sort.[168] The uterus itself is an actor, separating itself from the rest of the female body.

In the *Herbarius* example, the sympathetic power of the amulet seems to animate the uterus. The instructions to hold the amulet on the parturient's groin are similar to those regarding other *ōkytokia* (though here, the level of specificity is increased by the prescription that it must be held on the left side).[169] The prescription about an unclothed boy or girl is probably connected to the state in which the neonate emerges – that is, naked. More importantly, though, this amulet actually requires the ministrations of actors

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[166] Pliny discusses the medicinal properties of coriander at *HN* 20.217–18, Dioscorides at *Mat. Med*.3.63. Pliny notes its power to suppress menstruation, and both he and Dioscorides discusses the plant's ability to expel intestinal worms when drunk (Pliny: mixed in pomegranate juice and oil; Dioscorides: mixed in grape syrup). Dioscorides also mentions that the same recipes for worms can stimulate the production of semen.
[167] Pseudo-Apuleius 103.2 = Pseudo-Priscian, ed., Rose 1894, 341.
[168] On this notion, see chapter two, pp. 138ff.
[169] On the significance of left vs. right, see Gaillard-Seux 2008.

beyond the maternal-fetal pair – it pulls more participants into the orbit of the birth. Again, we see the network of actors widening.

When it comes to drawing out retained placenta, these amulets can also do the trick. The amulet from the *Herbarius* is probably related to a recipe found in Pliny, in which he explains that thirty grains of Roman/black coriander (*melanthium/melasporum*), wrapped in linen and held on the body, are helpful for drawing out retained afterbirth (*quin immo linteolo deligatis tantum granis XXX secundas trahi reperio*).[170] The placenta, of course, must be expelled after the child is born, and based on the logic of the amulets examined here, it makes sense that the same objects and substances that draw out a fetus would also work on the afterbirth, as well as the uterus itself.

In all these amulets, different strands of sympathy are at work – or are blended together. There is a basic affinity between blood, the uterus, placenta, and fetus that operates such that an amulet affecting one must affect the others. From another angle, there also appears to be some kind of sympathetic relationship between the amulets and blood, which means that they will act on bloody matter. In this latter sense, the amulets operate through their power to attract a particular quality or material, not unlike an organ that attracts certain types of bodily fluids or matter in Galen's *On the Natural Faculties* (as the bladder sympathetically attracts urine).

The idea that removal of the amulet is necessary after the birth was persistent in antiquity and well beyond, attesting to the embeddedness of this kind of thinking. A list of *ekbolē* and *ōkytokia* from the *Iatricon* of the thirteenth-century Byzantine physician Demetrius Pepagomenos reveals the reach of the wild cucumber textual tradition (1.149):

[170] Plin., *HN* 20.184.

"Take the seed of the wild cucumber which first springs spontaneously from the fruit's casing (ἐκ τῶν βαλάνων τοῦ καρποῦ), put it in wool from between a ram's horns, tie it up and hold it, keep it bound to her loins in her time of need and remove it when she has given birth."[171] This passage seems to fall in the same tradition as Pliny's wild cucumber amulet, given the ram's wool and instructions for removing the amulet after the birth. But there are also differences, such as the specification about the necessary location of the ram's wool from between the horns. These similarities and differences point to the remarkable strength and malleability of this amuletic tradition in medical discourse, whether or not such amulets were actually represented in contemporary practice.[172]

All the texts discussed here either adhere to or acknowledge the view that wild cucumber facilitates the evacuation of blood in various forms – of a fetus, afterbirth, lochia, and menstrual blood. Dioscorides supplies an alternative name for the wild cucumber: he explains that "some call [wild cucumber] *pherombron*" (σίκυς ἄγριος, ὃν φέρομβρόν τινες καλοῦσι).[173] This term, a *hapax legomenon*, seems to mean "moisture/storm/inundation-bringer."[174] Two interpretations are plausible: first, the plant acquired this name because it shoots liquid forcefully, and second, because it releases liquid in the body when ingested or applied. A combination of these two explanations

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[171] Demetrius Pepagomenos, *Iatricon* 1.149: λαβὼν τοῦ ἀγρίου σικύου τὸ ἐκπηδῆσας πρῶτον σπέρμα αὐτομάτως ἐκ τῶν βαλάνων τοῦ καρποῦ ἔμβαλε ἔριον ἐκ τῶν μεσοκεράτων κριοῦ, καὶ ἀποδήσας ἔχε, ἐπὶ δὲ τῆς χρείας περίδησον ἐν τοῖς ἰσχίοις καὶ ὅταν τέξῃ ἄφελε.

[172] With regard to the plant's abortive properties in Islamic and Arabic medicine, as well as in Europe during the Renaissance, see Riddle 1992, 132, 147, 150, 152.

[173] Dioscorides, *Mat. Med.* 4.150.1.

[174] It combines φέρω ("bring, carry") and ὄμβρος ("water, storm, inundation"). The term ὄμβρος recalls the choral ode from Soph., *OC* discussed above (pp. 252–53): ἀκηράτῳ ξὺν ὄμβρῳ.

makes sense in light of an analysis of the plant's sympathetic qualities. It is a plant that brings a rush of liquid, whether projecting its seeds when ripe or acting on other bodies as a drug. Combined with the knowledge of the plant's properties as an *ōkytokion*, this notion brings us back to Sophocles' river Cephisus and Plutarch's moon – their status as quick-birthing is a function of their watery nature, which affects the fluid dynamics of humans, plants, and animals.

To conclude, let us briefly turn to the relationship between *ōkytokia* and menstruation, miscarriage, and abortion. As noted above, a number of authors comment on the wild cucumber's power to reverse amenorrhea (unsurprising for a drug also known as *pherombron*) and to induce abortion. Both *Nature of Women* and *Diseases of Women* feature recipes to draw out suppressed menses, as well as "expulsive remedies" (*ekbolia*) for the womb.[175] Dioscorides mentions that *elatērion* "sets menstruation in motion and kills fetuses when used in a pessary."[176] This is similar to his description of *anagyus*, as well as Pliny's account of mallow's properties, discussed above.[177] Dioscorides also describes the preparation of an "abortifacient wine" (φθόριος ἐμβρύων οἶνος) from grapes planted along with wild cucumber; the grapes then take on the faculty (δύναμις) of the wild cucumber, and the resulting wine becomes abortifacient.[178] Pliny makes a very

[175] *Mul*. I, 78 = Li 8.176.5–6, 2.129 = Li 8.276.15–16; *Nat. Mul*. 32.81 = Li 7.362.4–6, 38 = Li 7.380.23–382.3; 40 = Li 7.384.9–10, 109 = Li 7.424.9–11.
[176] Adapted from Beck, trans., 2005. *Mat Med*. 4.150.7: κινεῖ δὲ τὸ ἐλατήριον καὶ ἔμμηνα, καὶ ἔμβρυα κτείνει ἐν προσθέτῳ.
[177] *Mat. Med*. 3.150.2; *HN* 20.226.
[178] *Mat. Med*. 5.67 (καὶ ὁ ἐξ αὐτῆς οἶνος γίνεται φθόριος…); wine with the same abortive property can be prepared with hellebore (ἑλλέβορος) or scammony (σκαμμωνία). Cf. Sor., *Gyn*. 3.2.204 = Ilb. 3.12.2; Soranus, cautions against using blood-drawing suppositories made of substances such as *elatērion*, "which among the ancients had a reputation for bringing blood"; such drugs are very irritating, he explains,

similar claim: "Elaterium is beneficial for menstruation, but brings on an abortion in pregnant women."[179]

The blurriness between 'drawing down' a suppressed menstrual period and inducing an abortion has been emphasized in discussions of abortion in the ancient world.[180] I tend to agree with those who have argued that translating *ekbolion* as "uterine abortifacient" is a misreading of the term, which is more aptly described as an "expulsive remedy."[181] *Ekbolion* may indicate an abortive in certain contexts, but it encompasses other remedies as well. Taking a narrower approach to the term minimizes the importance of menstruation in views of female physiology (especially the Hippocratics'), in which retained menstrual blood is seen as the main cause of disease.[182] In other words, sometimes "bringing on a period may simply be bringing on a period" rather than diplomatic abortion advice.[183]

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and have often been used by women who want to abort (πρὸς τὸ φθεῖραι). Celsus, *Med*. 5.21b suggests pulp of *cucumis silverstis* mixed with breast milk to induce menstruation.

[179] Plin., *HN* 20.9 (…*purgat eas elaterium, sed gravidis abortum facit*). A related notion is expressed by Galen (*SMT* 9.18 = 12.122K), who has none of Soranus' distrust of the product when he bluntly explains that *elatērion* "summons the menses and, as a pessary, destroys fetuses" (τὸ μὲν οὖν ἐλατήριον ἔμμηνα προκαλεῖται καὶ τὰ κυούμενα διαφθείρει προστιθέμενον). Oribasius also notes *elatērion* has emmenagogic and abortive properties: e.g., *Eunapius* [*Euporites*], 2.1.Σ.13–17: τὸ μὲν οὖν ἐλατήριον ἔμμηνά τε προκαλεῖται καὶ τὰ κυούμενα διαφθείρει προστιθέμενον.

[180] As in Riddle 1999; cf. Kapparis 2002. A reconsideration of abortion in the Hippocratic can be found in Congourdeau 1997. On confusion between abortion and contraception, see Hopkins 1965.

[181] I am in agreement with King 1998, 145. See e.g., Riddle 1992, 77. A related example of the slipperiness of these terms and ideas is also found in Hopkins 1965.

[182] This view is not a universal one. Soranus (and surely many physicians with overlapping views) would likely take issue with the idea, emphasizing rather the Methodist concept of "commonalities."

[183] King 1998, 145. "By reducing all of Hippocratic gynaecology to abortion advice, Riddle fails to appreciate the importance of menstruation in its model of the female body. The most common disorder in Hippocratic gynaecology is indeed a late period, so what

The long history of the wild cucumber in medical and pharmacological literature reveals much overlap among the recipes for speeding childbirth, expelling dead fetuses, afterbirth, and lochia, inducing abortion, bringing on menstruation, and generally purging the uterus of its contents. All these processes are fundamentally about expelling blood from the body, whether framed through sympathy or not. It makes sense that wild cucumber quick-birther remedies, like those of other, similar plants and materials, might also be employed in emmenagogic and abortifacient recipes. An abortion was seen as the (intentional) expulsion of a fetus before maturity, and the physiological mechanism and remedies that cause abortions operated on the same set of principles as those facilitating a birth at term.

The amulets examined here are visible, tangible representations of bodily processes, and they provide a means to understand, disrupt, and promote the very physiology they mimic. They can draw other actors into the birth process, widening the network that brings about an outcome. It can be difficult to pin down the precise valence of terms such as *ekbolion* because all of these physiological processes, ranging from menstruation to childbirth, were viewed as manifestations of the same bodily mechanisms, subject to the same sympathies and antipathies, and thus affected by a similar network of actors. This clustering of bodily functions blends older, Hippocratic views of the body's fluid dynamics – as an explanation for the connection among parts – into a sympathetic framework.

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was envisaged as action to bring on a delayed period could in our terms have been an early abortion. But the Hippocratics insist that women's diseases are caused by retained menstrual blood; for them, bringing on a period may simply be bringing on a period." In agreement on this point is Totelin 2008, 223.

II. Birthing Amulets in the Material Record

II.1. *Uterine Amulets*

In the foregoing section, I was concerned with an intertwined set of written traditions that produce a largely coherent view of the fluid dynamics of procreation and birth, which could be smoothly incorporated into an understanding of sympathy, operating within and among bodies. The conceptual power of sympathy lends itself well to an understanding of the birth process as affected by a web of actors, made up of humans, animals, organs, and diverse materials. But how does this picture match up (or contrast) with the material record? Numerous inscribed amulets fashioned from semi-precious stones have survived, a large group of which seems to encompass healing and protection for the female body, principally (but by no means exclusively) fashioned from the stone hematite. Of particular interest to the present study is the corpus of so-called 'uterine amulets', named for their depiction of the uterus.[184] The two 'octopus-uterus' amulets (figs. 2.4–5) featured in chapter two fall into this category.

Uterine amulets resonate in complex ways with several other bodies of evidence, including Greek magical papyri, gynecological theory, and Greco-Roman/Egyptian myth.[185] Paired with the foregoing discussion of amulets in the written record, uterine amulets provide a worthwhile – if challenging – comparison. We shall be asking: what precisely can be learned about perceptions of birth and birth risk from the fabric,

[184] A landmark scholarly work on the topic is Faraone forthcoming. These gems are also the subject of the dissertation by Marino 2010. See also Michel 2004; 2001; Hanson 2004; 1995; Faraone 2011; 2010; Dasen 2015a; 2015b; 2014; 2011; Entwistle and Adams 2011.

[185] Faraone 2011; Hanson 2004; 1995; Marino 2010, 260–63. The same goes for spells and recipes in papyrological sources; e.g., King 1998, 229; Marino 2010, 285–86; Ritner 1984.

iconography, and inscriptions on amuletic gems? How can we integrate them with or nuance our textual sources on birthing amulets?

Regarding their use – and quick-birthing, specifically – no documented uterine amulet is labeled in a clear way to indicate its status as an *ōkytokion*, but that does not mean we ought to exclude the possibility that they were put to such a use. As with the amulets described in the previous section, uterine amulets display a preoccupation with fluid dynamics in the body that blurs the boundaries between the various functions of the uterus. It can sometimes be difficult to determine which aspects of the female body are targeted by the gems. Other times, however, we are spared the ambiguity when the target is stated. Overall, the amuletic gems evoke a set of associations about the uterus and its role in childbirth that emphasize both its animate, agentic qualities, and conversely, its vessel-like status, as a staging area for the collection and expulsion of bloody matter.

Although I provided a brief discussion of uterine amulets in chapter two, we must now dig a bit deeper. Uterine amulets became popular in the Hellenistic period, and proliferated in the Roman empire, though their geographical and temporal distributions are hard to determine. The amulets examined here bear witness to an amalgam of cultural influences, including Semitic, Egyptian, Babylonian, and Greek sources. They exemplify a range of Egyptian imagery (including symbols and gods, such as Isis, Osiris, Harpocrates, Bes, Khnoum, and Seth), and have been found as far afield as Welwyn, England – a testament to the wide reach of this iconographic vocabulary.[186] The extant amulets combine Greek language invocations with both Egyptian and Greek imagery

[186] A uterine amulet, made from haemetite, was unearthed in Welwyn, which shares all the common features of the "Greco-Egyptian" uterine amulets (Wilson and Wright 1964). See also Jackson 1988, 106; Marino 2010, 14.

(hence they are often called 'Greco-Egyptian'); the current consensus supports the claim that they represent a Hellenized Egyptian magical vocabulary and iconography that was not confined to Egypt. Haemetite amulets – the stone from which most uterine amulets are fashioned – were used very widely in the Roman empire, but because of the brittle nature of the stone, they likely decayed in the wetter climates of the Mediterranean, leaving Egypt as the main source for our record, much like papyri.[187]

These amulets were meant to protect and heal the uterus, and were probably worn on women's bodies, under their clothes, or mounted on rings.[188] There is evidence from magical papyri that some amulets required 'activation' through rituals that could be elaborate and time-consuming; however, it is also possible that many amulets did not require any ritual activity to make them efficacious.[189] Rather, their power was inherent in the fabric, iconography, and *voces magicae* on the gem. My analysis focuses on the latter three qualities (especially the iconography), given the overall lack of evidence for ritual practice associated with this type of amulet.

A provocative argument has been advanced that uterine amulets functioned as curses or binding spells (*katadesmoi*, *defixiones*) targeting the uterus, which seems

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[187] Faraone, forthcoming 95, notes that hematite amulets were most commonly employed for gynecological and birthing issues. Also see Hanson 1995, 290. The significance of hematite is explored in detail below. On the rise of the gems in the Roman empire, Hanson explains, "Use of carved gemstones, in fact, coincides with the time when the upper classes among the urbanized populations of the eastern Mediterranean were increasingly speakers of Greek, in addition to their native languages, in the wake of conquests first by Alexander and later by the Romans. In all likelihood, the amulets' messages, written in Greek characters, intended to appeal to the womenfolk of these city-dwellers" (283).

[188] Hanson 1995; Nagy 2011.

[189] E.g., *PGM* V. 213–303, VII. 628–642. Betz 1986, 104, 136; Marino 2010, 285–87; Schwartz and Schwartz 1979.

credible based on comparative evidence from other forms of magic, as well as the binding/loosening associations examined in the previous section. Marino explains, "Binding could also be directed at specific organs and body parts in a bid to prevent their proper functioning. Having such a specific target as the uterus then would not be alien to the larger class" of binding spells.[190] Drawing on the work of Graf and Faraone, Marino compares the language of curses to magical formulae that appear on the amulets, as well as generic representations (such as dolls) used in magical practice that resonate with the amulets' uterine imagery.[191]

Binding spells were used in uncertain, risky situations, and childbirth certainly qualifies as such. As noted above, curse tablets and binding spells can be interpreted as ways of coping with and managing *risks* in a community.[192] The binding spell theory of uterine amulets evokes the logic of Pliny's amulets examined above: binding a wild cucumber seed to the body is a way of containing or controlling its expulsive force. This view implies an understanding of the uterus as a somewhat separate entity in the female body that can be *bound* and thus controlled, a notion which speaks to my arguments above on the agency of amulets and organs. Indeed, if viewed in the context of binding spells, the uterus takes on the stature of an actor whose will must be suppressed. The amulet is an actor, which mediates between the owner's desires and those of a wayward organ.

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[190] Marino 2010, 218. Marino also set out this argument in her paper, "I curse…myself?: Understanding Graeco-Egyptian Uterine Amulets as a Medical Means to Control the Female Body in Light of Contemporary Curse Technologies," delivered at the American Association for the History of Medicine, May 1, 2015.
[191] Graf 2003, 139; Faraone 1991; Marino 2010, 216.
[192] Eidinow 2007.



Figure 4.1: Simple hematite uterine amulet (CBd-731), third century CE.

The generic iconographic representation of the uterus on amulets is significant for the present study. Fig. 4.1 features an example of a simple uterine amulet, featuring on the observe an image of the uterus and key, surrounded by an *ouroboros*.[193] On the reverse is an invocation of a god/daemon of womb-protection, *Orōriouth*, a magical name that appears throughout the corpus of uterine amulets.[194] The depiction of the uterus on the amulet's obverse is relatively typical: the organ is depicted as an ovoid vessel,

[193] The *ouroboros*, a snake swallowing its own tail, is an Egyptian symbol, as well as a very common feature on uterine amulets. The *ouroboros* is protective, separating and insulating the uterus from hostile forces. See Ritner 1984, 219–20. He argues, "Far from being a mere conventionalized border, the ouroboros retains its symbolism upon Hellenistic Egyptian gems as an image of protection and containment" (20).

[194] For an interpretation of the meaning of Orōriouth, see Marino 2010, 95ff.; Hanson 1995, 293. Hanson argues it could be translated, "Pudendatrix," "the naked one." Information and transcription for the amulet in fig. 4.1 is drawn from Michel 2001, 223, no. 354. This volume dates the gem to the third century and considers it as part of a group of amulets that may have been used as birthing amulets: "Die Bilder einiger Amulette beziehen sich schließlich auf die Geburt. Geburtswehen, wobei Unterleibsschmerzen auch mit Kolik und Incubus-Vorstellungen vermischt werden. Neben Hämatit kommt auch der rote Jaspis vor, den man ebenfalls für ein wirksames Material gegen Blutungen hielt" (220). The gem and commentary from Michel are also available online (http://www2.szepmuveszeti.hu/talismans/pandecta/581).

perhaps meant to evoke a pot, jar, or medical cupping glass, with fallopian tubes (on top), and ligaments (projecting from the lower sides of the uterine vessel).[195]

The significance of this representation has been much discussed. The Hippocratic corpus features a number of well-known analogies between the womb and a jar, and the notion of the uterine jar/pot also recalls Pandora's jar (*pithos*) fashioned from water and earth (just like her), from which she releases evils into the world.[196] Afterwards, only hope (*elpis*) is left inside.[197] In a structuralist reading of the Hesiodic Pandora myth, King suggests, "The womb, too, contains this *elpis*, since in pregnancy it is impossible to know whether it contains a child or a shapeless mass of flesh."[198] Or put another way, the womb's hiddenness means that what grows inside will always carry risk (as well as the possibility of a positive outcome), because of humans' inability to directly perceive and control its contents.

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[195] The presence of ligaments and (what we would call) fallopian tubes are credited to the anatomical discoveries of Herophilus. It is important to note, however, that Herophilus misidentified the fallopian tubes as terminating at the bladder. Cf., Galen, *De Sem*. 2.1 = *CMG* 5.3.1, 144.4–16 = 4.593–94K. For a concise history of these developments, Dean-Jones 1994b. Dasen 2015a, 62–63 also discusses these issues vis-à-vis amuletic imagery. On Herophilus and our sources, see von Staden 1989.

[196] E.g., the fetus is compared to a cucumber (σίκυος) growing inside a jar (ἄγγος); the fetus attains the size of the jar povided (*Genit*. 9 = Li 7.482.14ff.). In *Diseases of Women* I, a breach baby is likened to an olive pit lodged in an oil flask (λήκυθος). The pit is difficult to draw out through the flask's narrow neck (*Mul*. I, 33 = Li 8.78.4–7). Marino 2010, 244.

[197] Hesiod, *Op*. 41–105; King 1998, 23–27 Cf., Dean-Jones 1994a, 42–43.

[198] King 1998, 26.



Figure 4.2: Cupping vessel, first century CE, Pompeii.

Another dominant interpretation of the uterine vessel's shape connects it to the cupping instrument, used for both dry cupping (when no incision is made on the skin) and wet cupping (on an incision, also known as scarification).[199] There are numerous depictions of cupping vessels from antiquity, a staple in pre-modern medical practice: they are depicted on coins, graves, and votive monuments.[200] To draw blood with a cupping vessel, one first heats the cup, which then creates a vacuum when applied to the skin, drawing blood from an incision, the purpose being to "extract corrupted blood or matter, or to divert an excess of blood causing a disease or condition."[201] In short, cupping creates a controlled flow of blood. This is why the instrument makes for such a good comparison: as with the cupping vessel, blood is collected inside the uterus for

[199] On cupping, see Bliquez 2015, 57–72. For images of cupping vessels, see pp. 386–87, figs. 4–8. Cupping is still considered medically expedient in many contemporary cultures.
[200] Ibid., 56–57, 56–57. On cupping glass uterine imagery, see Dasen 2015a, 60–67.
[201] Bliquez 2015, 58, 58.

evacuation (or nourishment of a fetus). The analogy permits an invisible process – the collection or attraction of blood to the uterus before expulsion – to be reproduced visually.[202] The vessel's ability to draw blood from the body invests it with a kind of agency.

Soranus explicitly likens the uterus' shape to that of a cupping vessel, *iatrikē sikua* (ἰατρικὴ σικύα).[203] The vessel's shape, as seen in fig. 4.2, is quite similar to the shape of the uterus depicted on the amulet in fig. 4.1. Soranus is essentially analogizing an organ to a tool used in practice. The uterus is then understood as the *female body's tool* for the collection and evacuation of blood, much as a cupping glass is for the excess removed through scarification. The cupping vessel became a convenient way to understand the organ, furnishing a theory, in a sense, for how purgation works within the human body (and specifically, through the uterine cavity).[204]

Like the womb, the cupping vessel is also described as having a "mouth," *stoma* and "base," *pythmēn*. The term *stoma*, "mouth," suggests the tool's capacity to remove

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[202] Dasen 2015a, 66: "L'instrument [ventouse] rend visible l'élément le plus impressionnant de cet organe, se force attractive invisible." She also argues that the depiction of the uterus as a cupping glass exemplifies the porousness between "rational" humoral medicine and more "magical" forms of healing. "L'utilisation par les magiciens d'un object issu de la pratique médicale témoigne à sa manière des interactions entre deux mondes longtemps jugés antagonistes."

[203] *Gyn*. 1.4..43–44 = IIb. 1.9.1: σχῆμα δὲ μήτρας· οὐχ ὡς ἐπὶ τῶν ἀλόγων ζῴων ἑλικοειδής,
ἰατρικῇ δὲ σικύᾳ παραπλήσιος. Cf. Rufus, *De corp. hum. Part. Appel*. 64.3, Oribasius, *Coll. Med*. 24.31.7, Juvenal, 14.58. Bliquez 2015, 56.

[204] This brings up a set of issues in the history of technology; particularly Gigerenzer's concept of "tools-to-theories," whereby "scientists' tools shape theories of mind" or even *become* "metaphors of mind." This can be extended to tools and theories outside the mind sciences. See Gigerenzer 1991. I thank Colin Webster for bringing to my attention the relevance of these ideas to the present study (also see Webster 2014, which hinges on the tools-to-theories concept).

blood from the body and collect it in a vessel. This view of the uterus is clearly evoked by a diagram from a tenth-century manuscript of Mustio's *Gynaecia* (fig. 4.3), a sixth-century treatise that draws heavily on Soranus' *Gynecology*. In the diagram, the Latin labels convey an understanding of the womb as both vessel-like and creature-like. The uterus has an *orificium* and *fundus*, but it also has a neck (*collum*), a nape (*cervix*), and flanks (*latera*). From this perspective, the animal-like conceptualization of the womb, as discussed in chapter two, merges with the vessel-like view.

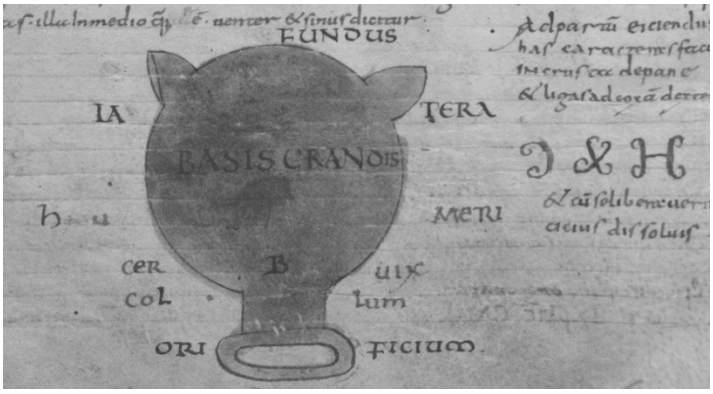

Figure 4.3: Schematic illustration of a uterus from a manuscript of Mustio's *Gynaecia*.

This discussion of the *iatrikē sikua* brings us almost full circle – back to the rather surprising conceptual and therapeutic importance of cucumbers (and gourds). The Greek term for cupping vessel, *sikua*, seems to have emerged from its resemblance in shape to the gourd of the same name, hence the use of the modifier *iatrikē* to distinguish the fruit from the instrument. In Latin, the term is *cucurbita* or *cucurbitula*.[205] The gourd, known as *sikua* in Greek, is of course a close relative of *sikuos*/*sikus*, cucumber

[205] See, e.g., Celsus, 2.11 on the different kinds of cupping instruments (*cucurbitulae*) and their use; Plin., *HN* 32.123 uses the term *cucurbita medicinalis*.

(similarly, the Latin *cucurbita* and *cucumis*, from which the English word derives).[206] Dioscorides notes that a plant called *kolokyntha agria* (κολόκυνθα ἀγρία, "wild gourd") also goes by the name *sikua pikra* (σικύα πικρά, "bitter gourd,"), which, much like wild cucumber, is beneficial for purging "bloody matter," and can "destroy (φθείρουσι) fetuses when inserted as a pessary."[207] On uterine amulets, as in the diagram (fig. 4.3), the shape of the *iatrikē sikua* is evocatively adopted for the uterus. Both the uterus and the cupping glass collect and evacuate blood, which dovetails with the power of the *sikuos agrios*, all of which affect and participate in the fluid economy explored above.[208] These *siku-* terms thus all denote a similar, expulsive set of properties for bloody matter, exemplified not only by the uterine amulets, but through wild cucumber's power as an amulet and medicament, as well as the purging potential of the wild gourd.

Beneath the uterine vessel on the amulet in fig. 4.1 is a seven-bitted Greek key with a handle, which symbolizes the appropriate opening and closing of the womb for menstruation, pregnancy, and birth. Opening and closing is of course crucial to retention and expulsion. In the epitome of a work by the second century grammarian Festus, *De*

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[206] This fruit is probably what we would call "bottle gourd" or "calabash." It is a green, hollow fruit. Cf. *Nat. Mul.* 61 = Li 7.398.19–20, on the use of the gourd (*sikua*) to treat strangury, unsurprisingly, another condition that involves blockage of fluids inside the body (King 1998, 35).

[207] Adapted from Beck, trans., 2005; σικύα πικρά, *Mat. Med.* 4.176; κολόκυνθα ἀγρία is not to be confused with the "edible gourd," κολόκυνθα ἐδώδιμος, 2.134; the latter, notably, appears just before cultivated cucumber σίκυς ἥμερος in *Mat. Med.*, 2.135. Both are mild diuretics, unlike their stronger (wilder) counterparts.

[208] The uterus never explicitly "draws" blood to itself in the Hippocratic corpus, rather blood "flows" (χορέω) to it. But as Dean-Jones points out, "The frequent use of the verb to flow…does not necessarily preclude the idea of the womb exerting a drawing force at regular intervals on the menstrual blood in the flesh." Aristotle, however, did not think the womb exerts an attractive force on the blood (*Gen. An.* 737b28–34; Dean–Jones 1994a, 64). As I noted above, Galen, alternatively, compares the stomach and the uterus, noting that they both have a retentive and propulsive faculty (pp. 242–43).

significatu verborum, it is noted that keys were given as thanks offerings by women for an easy delivery.[209] The notion of a uterine key also emerges in magical papyri, through a φυσικλείδιον, "pundenda key spell," or more accurately, "uterine key spell."[210] It is ultimately a love spell (ἀγωγή), which involves making a paste of various animal and plant products to be smeared on the genitals, accompanied by a magical utterance, "I say to you, womb of NN, open and receive the seed of NN… Let her, NN, love me for all her time as Isis loved Osiris and let her remain chaste for me as Penelope did for Odysseus. / And do you, womb, remember me for all the time of my life…"[211] The key, thus, seems to bring with it the notion of proper opening and closing, but likewise signifies a powerful form of phallic sexual access to the female body.[212]

Some amulets appear to elide the womb with the stomach, an adjacent cavity, an interesting notion given the sympathetic affinities between stomach, uterus, and the surrounding parts discussed in the previous section. In fact, a third of the gems with the octopus-uterus symbol also feature the Soroor formula, which has been connected to the stomach and alleviation of stomachaches. As in magical papyri, the formula often appears on amulets in abbreviated form.[213] From papyrological evidence, it has been shown that the Soroor formula names a spirit "who opens doors." The formula suggests the need for the proper and timely opening of the womb to receive semen, give birth, and release

[209] Paulus Diaconus, Epitome of *De significatu verborum*, 56.6: *clavim consuetudo erat mulieribus donare ob significandam partus facilitatem*. Bettini 2013, 263; Dasen 2015a, 68.
[210] *PGM* 36.283-95. I follow O'Neil's translation from Betz 1986.
[211] Ibid., 276; Dasen 2015a, 68.
[212] Ritner 1984; Faraone 2012, 45–46. The latter discusses the malleability the key's opening/closing symbolism.
[213] The full form reads, σορροορμερφεργαρβαρμαφιοριγξ. See Ritner 1984, 209; Bonner 1950, 206.

menstrual flux.[214] The Soroor formula is thus intimately connected to the uterine key, pictured on the amulet, but seems specifically to suggest flux/opening, as opposed to retention/closing. Neither of the birthing amulets discussed in chapter two feature the formula, but fig. 2.5b does suggests this connection between stomach and uterus in another way: on the reverse is a scarab, topped by the "colic formula" (*KKK*, also referred to in German as "Kolikcharakteres"), which is meant to heal the stomach; underneath is the octopus-uterus symbol.[215]

The relationship between the uterus and the stomach (*gastēr*) has been explored in numerous studies, and, as suggested by Galen's discussion of their faculties of retention and expulsion, the two organs could be viewed as having similar physiological properties. The uterus is even referred to as *gastēr* at times, much as in Latin the term *alvus* is used flexibly for both organs.[216] The stomach and uterus are hidden, nourishing cavities, which can also become troublesome and appetitive.[217] The womb-stomach pairing also appears to characterize textual accounts of amulets of various kinds, such as one made from "the stone found in Samian earth," which is good for stomach ailments and "seems to speed

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[214] Ritner 1984, 218–19. He cites *PGM* 12.172ff., an ἀγωγή.

[215] King 1998, 25ff.; Marino 2010, 163–67; Dasen 2015a, 50–51. Dasen makes the excellent point that amulets with the Chnoubis feature blur the boundary between the stomach and womb ("venture gravide" and "ventre qui digère"). This can also apply to uterine amulets, which explains why the Chnoubis, as well as the "colic formula" (*KKK*) appear with such frequency alongside the uterus. This would also mean that such amulets were useful for ailments in men.

[216] An example of this usage is found in the c. second-century Pseudo-Galenic tract, Ἐι ζῶον τὸ κατὰ γαστρός, "Whether what is carried in the womb is a living being" (19.158–181K). The treaties argues that life begins at conception. On the Latin side, Cicero uses *alvus* to mean womb at *Div*. 1.20, and stomach, at *ND* 2.54. A similar practice exists among English speakers: 'belly' can also be used to mean (or encompass) the uterus.

[217] On the notion of the cavity, as it specifically relates to the Hippocratic understanding of the uterus, see Holmes 2010, 187–88.

childbirth (ὠκυτόκιος) and to protect pregnant women who wear it."[218] In one Pseudo-Hippocratic text, Samian stone also appears as a quick-birther.[219]

The agency of the uterus has been an issue throughout the dissertation, and with these amulets, it comes to the fore. The notion of the uterus as a jar can be read as indicative of a view that the organ is a passive receptacle.[220] The 'mobile' or 'wandering' womb, as discussed elsewhere in this project, was also an enduring idea in antiquity, beginning with a well-known passage in Plato's *Timaeus*, which describes the uterus as a ζῷον, a "living thing."[221] Some uterine amulets directly call up the uterus with the phrase, στάλητι μήτρα ("contract, womb!"), animating the organ and suggesting its capacity to follow commands. This concept is attested in a wide range of sources, including a plea to an unruly uterus from late antiquity, to be written on tin and worn as an amulet (*PGM* 7.266-70): "do not turn [to one side] into the right part of the ribs, or into the left part of the ribs, and that you do not gnaw into the heart like a dog (ὡς κύων), but contract and remain indeed in your own proper place… (ἀλλὰ στάθητι καὶ μένοις ἐν χώροις ἰδίοις...)."[222] The imperative, στάθητι, directed at the uruly uterus in this command, is closely related to στάλητι, which we find on some uterine amulets. In these examples,

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[218] Dioscorides, *Mat. Med.* 5.153–54.

[219] Pseudo-Hippocrates, *Ἑρμηνεία περὶ ἐνεργῶν λίθων*, 26: Λίθος σάμιος… κρατούμενος δὲ ὠκυτόκιος γίνεται. In this text, it also heals the stomach when ground up and drunk in a potion. For Pliny, "Samian stone" (*lapis Samius*) is helpful for stomach problems, and as an amulet, prevents miscarriage (*HN* 36.152–53).

[220] E.g., this was true of Aristotle's view (Dean-Jones 1994a, 64). King shows how Pandora's womb-jar is appetitive, which combines the concept of a passive receptacle with the wild/animal-like womb.

[221] *Ti.* 91c; in the passage, it is compared with the penis. The idea of animal-like body parts is also grounded in a scientific theory. In *Foet. Form.* (6.8–10 = *CMG* 5.3.3., 94.14–96.2 = 5.690–91K; 6.23 = *CMG* 5.3.3, s100.4–20 = 5.696K), Galen criticizes physicians who believe that parts of the human body, such as muscles, work like individual animals.

[222] Betz 1986, 124, adapted from Scarborough, trans.

the uterus seems to have its own desires and must be tamed or placated. The dog simile perhaps gestures to Pandora's *gastēr* and "mind of a bitch," as Hesiod calls it.[223] Dogs hovered between wild and tame, and are especially associated with procreation, captured by the fact that κύων (*kuōn*) means 'dog' and is also an active participle of the verb κύειν (*kuein*), 'to be pregnant'.[224]

The view of the uterus as an entity that responds to commands, implied by these amulets and spells, taps into ongoing debates about 'odor therapy' in Hippocratic gynecological texts. Soranus was a critic of the technique, a remedy that consisted of introducing foul or sweet smells at a woman's head or genitals, so the uterus, "fleeing the former odors, but pursuing the latter, might move from the upper to the lower parts;" he describes this as a practice employed by "the majority of ancients" (i.e., Hippocratics), as well as his non-Methodic contemporaries.[225] The therapy is predicated on the concept that there is a passageway or tube (*hodos*) connecting the head (or rather, its orifices) to the vagina. Dean-Jones notes that the "belief in the efficacy of this therapy depended upon the womb being assumed to have the sense of smell in some way."[226] The uterus, Soranus asserts, "does not issue forth like a wild animal from the lair, delighted by fragrant odors and fleeing bad odors."[227] The notion of uterine movement was subjected to rationalizing explanations, as in a section in Soranus' *Gynecology* entitled, "On Flexion, Bending, and

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[223] *Op*. 67. King 1998, 24.
[224] Ibid. This verb also appears as κυέω.
[225] *Gyn*. 3.5.111–23 = Ilb. 3.29. Adapted from Temkin, trans., 1991. On the *hodos*, see King 1998, 28; Dean–Jones 1994a, 73–74.
[226] Dean-Jones 1994a, 74. Hanson 1991 emphasizes that the emergence of a less animalistic view of the uterus that can be traced in the Hippocratic gynecologies.
[227] *Gyn*. 3.5.144–47 = Ilb. 3.29.5.

Ascent of the Uterus."[228] The notion that the uterus could "move" was widespread, and the belief in its animal-like qualities endured in many different forms, sometimes assimilated into a framework that portrayed the organ more mechanically.

Like the amulets, the uterus is both an actor in the drama of birth, as well as an intermediary – between the rest of a woman's body and her fetus. The notion that multiple visions of the uterus can coexist on a single amulet is suggestive of the organ's own polymorphy. These renditions, it would seem, invested the amulets with the power to target precisely the bodily properties they evoked. We can discern resonances between ideas projected by these amulets and conceptualizations of female physiology governing wild cucumber amulets (among others). Likewise, uterine amulets were probably understood by some of their users to operate based on principles of sympathy and antipathy. Although we lack precise information about *how* these gems were used, evidence points to their role as coercive mediators – another actor shaping the birth process.

II.2. *Material Matters*

While we have little chance of coordinating our textual sources for mallow or wild cucumber amulets with any sort of archeological evidence, uterine amulets offer a promising set of possibilities. Indeed, pharmacological, medical, and lapidary texts all provide clues about how particular stones were perceived to affect bodies. Although many uterine amulets have survived from the imperial period, we possess no literary accounts of their use. Our best bet, then, is to consider descriptions of the materials from

[228] Sor., *Gyn*. 3.17 = Ilb. 3.50.

which they were fashioned, insofar as we can line up ancient and modern identifications.[229] Here, my focus is hematite, as well as jasper, two minerals used to create uterine amulets.

It is beyond the scope of this study to address fully the problems of mineral classification and the challenges of collating ancient categories with modern.[230] It is worth pointing out, however, that there is a lack of consensus about the identification of hematite with the ancient stone *haematitis*, as well as its relationship to what we now call red jasper (the two minerals from which the birthing amulets in figs. 2.4–5 are fashioned). In *De Lapidibus,* for instance, Theophrastus describes *haematitis* as similar in appearance to "dry congealed blood" (ὡς αἵματος ξηροῦ πεπηγότος).[231] Eichholz suggests that Theophrastus' *haimatitis* might encompass what we now call red jasper.[232] He echoes this connection in the Loeb edition of Pliny's *Natural History*: at one point, Pliny explains, "The best *haematitis* is from Ethiopia, but it is also found in Arabia and Africa, and is the color of blood (*sanguineo colore*)."[233] Eichholz identifies Pliny's *haematitis* as our "red jasper and haematite." He is by no means the first to associate the two: Duffield Osborne also asserted that *haematitis* encompassed red jasper and "a class of iron-stones which run in color from steel-grey to iron black or brownish red."[234] This identification is confusing, however, given that Pliny also discusses *haematites magnes*, a type of *magnes* ("magnet"),

[229] See the treatment of Yébenes 2010, 473–78, on the vexed reading material evidence alongside lapidaries, as well as a history of the issue's treatment in scholarship.
[230] Marino 2010, 296–308, provides a treatment on this issue.
[231] *De Lapidibus* 6.36.
[232] Eichholz 1965, 114. He is commenting on *De Lapidibus* 6.36.
[233] *HN* 37.169: *Haematitis in Aethiopia quidem principalis est, sed et in Arabia et in Africa invenitur, sanguineo colore…*
[234] Osborne 1912, 284–85 He is cited by Marino 2010, 305.

that is "blood red" and produces both blood-red and saffron-colored powder. Eichholz identifies this stone as "possibly red and brown haematite found together; possibly goethite, a species of brown haematite." It should be clear from this brief discussion that the relationship between ancient and modern mineral classifications is not straightforward, and that efforts to seek alignment between the two exposes one to serious methodological problems.

Turning back to the uterine amulets themselves, it is clear that their redness evokes blood. Hematite leaves a red trail if rubbed on another surface or scratched, much like the human body, and red jasper is the bright red color of fresh blood.[235] Our literary accounts confirm this association if we take for granted some overlap between *haematitis* and hematite. Dioscorides mentions that when drunk in pomegranate juice (another red substance), *haematitis* can benefit people who spit blood.[236] Pliny notes that *haematitis* can also check "excessive menstruation" (*profluvium mulierum*) – thus exhibiting an antipathetic effect.[237] Galen attests that, through "experience only" (*empeiria*), as opposed to reason (*logos*), he has observed that hematite checks blood flow from a wound.[238] The *Lithika* of Orpheus connects the stone to the coagulated blood of Uranus.[239] So *haematitis* is a substance that can be dispatched to disrupt the body's fluid dynamics. The stone, furthermore, is related to *magnes*, and fits well in the constellation of themes discussed in

[235] Pliny mentions this quality of *haematitis* at *HN* 36.146.
[236] Dioscorides, *Mat. Med.* 5.126, echoed by Pliny, *HN* 36.145.
[237] Plin., *HN* 36.145.
[238] Gal., *SMT* 9.2 = 12.192. Unexpectedly, though, Galen goes then on to say that it is through reason (εὕρημα λόγου) that we know (ἴσμεν) hematite is helpful for eye problems. See Gourevitch 2016, 266, on this surprising turn in the text.
[239] Dasen 2015a, 35. She uses this to argue that the stone is gendered masculine, and therefore seen as potent. This notion can be related to the discussion of gendered "wild" plants, above.

this chapter.[240] The power of magnet to draw metal substances to itself, an exemplar of sympathy, can be compared to the cupping glass' (and uterus') ability to draw blood: both have the power of attraction.[241] *Magnētis lithos*, furthermore, is listed as the material of amulets to staunch hemorrhage, criticized by Soranus in the *Gynecology*.[242] For Pliny and others, these materials are clearly agents of sympathetic/antipathetic effects on human bodies.



Figure 4.4: Red jasper 'Omphalē' amulet (CBd-1703), second/third century CE.

The history of jasper in Egyptian culture also makes it an interesting stone from which to fashion a birthing amulet. A number of red jasper amulets, known as 'incubus amulets', depict the ithyphallic donkey associated with Seth, a god of chaos and disorder (also called Typhon in Greek), along with a squatting (pregnant?) figure, identified by Dasen as Omphalē (fig. 4.4).[243] These female figures squat in a similar position to the

[240] Dioscorides explains that *magnitēs lithos* (5.130) can be burned and sold as *haematitēs lithos* (5.126). On "magnet" and the uterine gems, see Marino 2010, 304–05.
[241] Orpheus, *Lithika* 21.645–63 = Halleux and Schamp 1985, 117–18. Dasen 2015a, 37.
[242] Sor., *Gyn*. 3.12.108 = Ilb. 3.42.3.
[243] Similar amulets are explored in Dasen 2015a, 87–108: CBd-2338 (obverse: squatting female figure, holding club or sistrum; reverse: ithyphallic donkey); CBd-760 (obverse: Heracles throttling lion; reverse: woman squatting over phallus, probably belonging to an ithyphallic donkey, but missing due to damage).

women pictured in figs. 2.4–5, but the images do not include a birthing chair, and their hair is bound up. The donkey imagery has been connected to the Egyptian myth wherein Seth/Typhon tries to kill the fetal Harpocrates by prematurely opening Isis' womb.[244] When Isis begins to bleed, she stops the flow by inserting a knot to seal off her uterus (knots recall the foregoing discussion of binding/loosening). In Egyptian religion, "[j]asper constitutes the preferred material for making an amulet in the form of a *tit* knot which represents the stopper used by the pregnant goddess to protect" her fetus.[245] It is possible these incubus amulets were meant to protect women from miscarriage and untimely bleeding, as well as more generalized abdominal pain.[246] Several amulets that urge the uterus to "contract," as discussed above, also invoke Typhon: a hematite gem, for example, shows him standing atop a uterus and features the inscription, στάληθι μήτρα μή σε Τυφῶν καταλάβῃ, [ορω]ριουθ ("Contract, uterus, so that Typhon does not seize you. Orōriouth").[247] The menacing figure of Typhon (especially in his ithyphallic form) was perhaps meant to frighten the uterus, as it were, into performing its proper functions.

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[244] Michel explains, "In mythologischer Parallele versuchte Seth die Geburt seines Feindes Horus zu verhindern, so daß er vorzeitig den Uterus der Isis öffnete und Blutungen verursachte, gegen die sich die Göttin mit Schutz-Amuletten (bzw. „Isis-Blut") wehren mußte. Nicht klar ist, ob Seth, der also Macht über das Öffnen und Schließen des Uterus hatte, in diesem Bereich nur negativ wirkte (Anch in seiner Hand?)." Michel 2001, 240, also notes the medicinal use of donkeys.

[245] Dasen 2015a, 41: "…le jaspe et la cornaline rouges sont ainsi associés au sang d'Isis. Le jaspe constitue la matière privilégiée pour le fabrication de l'amulette en forme de noeud *tit* qui représente le tampon utilize par la déesse enceinte pour protéger Horus, l'enfant qu'elle porte…"

[246] Heracles/Nemean lion imagery appears on some of these gems (Heracles pairs with *Omphalē*). These are thought to be connected to the stomach as well. Ibid., 94–96, 94–96. Dasen generally agrees with the interpretation offered by Michel 2001.

[247] CBd750. The inscription has been emended from [.]ταλη[- - - -]υφωνκαιλαβη[- - - -]ριουθ (Michel 2001, 239–40, no. 379).

The ancient stone known as *iaspis* could also effect birth at the proper time, perhaps tapping into the "semantics of matter" we encountered with Isis' *tit* knot. According to Dioscorides:

> ὁ μέν τίς ἐστι σμαραγδίζων, ὁ δὲ κρυσταλλοειδής, ἐοικὼς φλέγματι, ὁ δὲ ἀερίζων, ὁ δὲ καπνίας ὡσπερεὶ κεκαπνισμένος, ὁ δέ τις [καὶ] διαφύσεις ἔχων διαλεύκους <καὶ> ἀποστιλβούσας, ἄστριος καλούμενος, ὁ δέ τις τερεβινθίζων λέγεται, καλλαίνῳ χρώματι προσεοικώς. δοκοῦσι δὲ πάντες εἶναι φυλακτήρια περίαπτα καὶ ὠκυτόκια μηρῷ περιαπτόμενα. (*Mat. Med*. 5.142)
>
> There is a jasper which is emerald green, another like crystal resembling phlegm, another light blue, another smoky as if it were blackened with smoke, one which has cracks that are quite white <and> shining and which is called *astrios*, and there is one called *terebinthizon*, resembling turquoise in color. All seem to guard against evil when hung on a person and to promote a speedy birth when tied around the thigh.

The passage suggests that *iaspis* is endowed with the potential to act as a mediator between a woman and her child during birth, as well as between a woman and forces of ill (this is an evocative pairing, to say the least).[248] The final sentence of this passage is repeated verbatim in Oribasius' *Collectiones Medicae*, and with some alterations, in *De Lapidibus* of Pseudo-Dioscorides.[249] The latter text adds that jasper amulets are also useful for stomach pain, which accords with the interpretation of the womb-stomach connection offered above.

[248] Based on this passage, *pace* Hanson 2004, I see no reason to associate *red* jasper amulets, in particular, with quick-birthing, though I would not rule out that possibility. The terra cotta potsherd quick-birther from late antiquity is intriguing.
[249] Oribasius, *Coll. Med*. 13.20.5. Pseudo-Dioscorides, *De Lapidibus* 12.4: Δοκοῦσι δὲ πάντες εἶναι φυλακτήρια περιαπτόμενοι καὶ ὠκυτοκίαν ἐργαζόμενοι καὶ ἀλγήματα στομάχου ἰώμενοι, καὶ ὀδύνης...

In lapidaries, much as in Dioscorides' *Materia Medica*, various stones are ascribed gynecological and obstetrical properties without any mention of engraving.[250] There is one exception: in a lapidary text known as the *Kerygmata* (of uncertain date), *onyx* is said to be useful for pregnant or breast-feeding women, engraved with a three-headed Chnoubis.[251] The fact that the Chnoubis is mentioned, which is commonly featured on engraved gems, may signify a connection between the textual tradition of the *Kerygmata* and that of the amulets examined here. Relatedly, Galen comments on the helpfulness of green jasper for the stomach, but stops short of endorsing the addition of a serpent engraving, which Nechepso (second century BCE) recommended. This serpent, which Galen describes as "emitting rays," is very likely the Chnoubis.[252] By confirming the efficacy of the amulet without the engraving in this passage, Galen essentially falls in line with his views on *onomata barbara* expressed elsewhere.

We must now ask the question: what was the nature of the overlap (if any) between inscribed amulets in the material record and amulets mentioned in texts? With the exception of the aforementioned Chnoubis talisman, gynecological and obstetrical amulets appear to be discussed in our sources without any mention of inscription or engraving. I see two options. By invoking the adage, 'absence of evidence is not evidence of absence', one can argue that this peculiarity is a function of our sources (and perhaps the stigma associated with certain types of 'magical' practice). It is also plausible, however, that pieces of *iaspis* were thought to possess quick-birthing capacities, and that

[250] Aubert 1989, 442.
[251] *Kerygmata* 36.1–3, Halleux and Schamp 1985, 171. This passage is cited by Aubert 1989, 442.
[252] … γλύφουσιν ἐν αὐτῷ τὸν τὰς ἀκτῖνας ἔχοντα δράκοντα… (*SMT* 9.19 = 12.207K).

they were thus employed *without* any engravings. Dioscorides' *ōkytokia* might then represent a related but different tradition from the engraved gems. This latter view does not preclude the possibility that engraved *and* un-engraved specimens of *iaspis* were both considered viable *ōkytokia*, that is, they could be used for the same purposes. Based on the similarities in how Pliny and Dioscorides discuss the properties of plants and stones, I am more inclined to the latter view.

Stones, in many cases, are subjected to anthropomorphizing treatment, and often described as masculine or feminine – their animate status is underscored by the acquisition of gender.[253] Indeed, as amulets they are both conduits and agents (much like the uterus itself). As devices that were used to heal and protect, these minerals likewise suggest an understanding of birth – and birth risk – based in an economy of fluids and sympathetic conceptualizations of the vast power inherent to objects in the non-human environment. There appear to have been interlocking and overlapping traditions of birthing amulets that could have been deployed separately or together, along with other medicaments or healing strategies, perhaps using the same materials applied as amulets. Healers' priorities – and where they drew the line on efficacy (we must recall again Galen's derision of *onomata barabara*) – no doubt determined what kind of tools they brought to bear during or leading up to a difficult birth.

[253] A chapter title by Dasen evokes this very point, "Sexe et Sexualité des Pierres" (Dasen 2015a, 25–51).

Conclusion: Reflections on Birthing Amulets

Uterine amulets are the closest we can get to the material culture of female self-care surrounding the procreative process, but they come with serious interpretive challenges. Their iconography resonates with the emphasis on retention/expulsion and fluid dynamics evinced in medical and scientific texts, as exemplified here by the tradition of wild cucumber amulets. Tracing the transmission of wild cucumber *ōkytokia*, in turn, reveals a process of continuity and change, highlighting the different ways practitioners might react to such devices given their philosophy and priorities, as well as the longevity of the plant's association with expulsion of matter from the body (embodied so clearly by its ability to shoot out liquid and seeds). This latter notion was well suited to shifting ideas about sympathy (and antipathy) that were understood by Pliny and others to function on a micro and macro scale. And while it can be stated with some certainty that there was a robust tradition of transmission with regard to wild cucumber *ōkytokia*, my analysis attests to the serious gaps in our knowledge when it comes to understanding the relationship between the textual tradition and certain types of practices and material culture.

The studies that comprise this chapter bear witness to different but related modes of representing female physiology – often analogically – and the dualities of retention and expulsion of blood and blood-matter. By using Latour's actor-network theory to ground my analysis, I have tried to show that amulets should be understood as actors in order to construct a more dynamic model of the birthing process. Sympathy, as a structuring framework to understand why particular materials have the power to affect bodies and disrupt physical processes, shares interesting affinities with actor-network

theory and lends itself well to such a frame of analysis. It is not hard to see how hematite and jasper uterine amulets might have been understood to act sympathetically on bodies, effectively classing them, in term of functionality, with the kinds of amulets examined in section I, even if they were originally the product of a parallel tradition and treated as such.

The amulets examined in this chapter are shaped by – and project – a set of ideas about generation and birth. By extension, they also speak to fears about the birth process, including dystocia, miscarriage, uterine hemorrhage, retained afterbirth, and uterine prolapse. Amulets, despite all their difficulties as objects of analysis, are some of our best evidence for female self-care. In a world where women, above all, were valued for their procreative capacity, these amulets are poignant reminders of how strenuously they worked to gain mastery over the birth process. The gold phylactery urging Fabia to "master" her unborn child exemplifies these anxieties and serves as a reminder that amulets represent more than ideas alone.

Chapter Five

Divine Aid and Destiny

Women and their families turned to deities who helped them integrate birth and the conditions of birth into a wider understanding of the life course – its certainties and uncertainties. Which gods were thought to be present during the birth process and why? How were they understood to participate and what was their role in mitigating risk? In what ways were gods and rituals associated with birth also connected to other aspects of the life course? The previous two case studies focused on topics concerning "childbirth and risk." Here I am also concerned with "uncertain beginnings" and, fittingly for the final chapter, their relationship to endings. In this regard, the chapter is very much about birth's role in the life cycle.

For many Romans, anxiety about birth and its risks was connected to *timing*, and accordingly, they attempted to understand, quantify, and create meaning from when and how it took place. Juno Lucina was the most widely revered birth goddess in the Latin west, and along with facilitating (or hindering) the body's loosening for birth, she governed its timeliness. Her lunar associations reveal her embeddedness in the world of environmental metaphors explored earlier in the dissertation and tie her in to what I call 'generative time'. These aspects make her an especially important deity for the purposes of this study.

The Fates were also associated with birth, and this chapter explores how they offer a particular way of seeing its date and time as part of a broader cosmic script, determining various aspects of the life course, especially the time of death, as well as

assigning blame. As the pivotal process in which the maternal and fetal body are disentangled, birth also begins the process of a kind of *settling* in the life of the child. From a deterministic standpoint, this 'settling' can be expressed as 'fate'. Birth constitutes the moment when a new set of risks emerge around the child as it begins to interact with the environment and become embedded in a family and community. Birth effects the most extreme bifurcation in risk for the mother and her offspring.

The tension between perceptions of agency and determinism lies at the heart of this case study. It is divided into two parts, (I) "Lunar Lucina," concerned primarily with the identity and ritual significance of Juno Lucina and her lunar nature, and (II) "Fate(s), Timing, and Corporeality," which examines conceptualizations and representations of the Fates at (or just after) birth. The first half of the chapter engages with actors participating actively in shaping their future, insofar as individuals chose to engage in prayer, sacrifice, and votive offering to Juno Lucina, the three ways to achieve a "personal relationship" with a god.[1] The second section centers on a view of the world that foregrounds its deterministic aspects, populated with individuals generating and interpreting signs. The conditions of birth – including but not limited to its timing – were understood to play an outsized role in the determination of particular aspects of the life cycle, over which the Fates presided. These signs and their ultimate significance reflect a certainty that contrasts with human perceptions of uncertainty and the future's unknowability.

The concept of 'risk' and the mitigation of risk are slippery in this context, raising questions concerning the extent to which humans can shape their destinies in a deterministic universe. From the perspective of the Fates, uncertainty is a function of

[1] van Straten 1981, 65.

human ignorance, but that does not reflect the reality of the fixity of one's day of death, for example. Essentially, there were aspects of the life course that were seen to be determined at birth, but clearly other aspects could be influenced by particular behaviors and one's relationship the gods. This is where things get complicated, messy, and sometimes contradictory. These two ways of thinking about the future coexisted in the Roman world, though not without tension, testing the limits of human agency.

While I have chosen to focus on a selection of gods who were viewed as present, in some fashion, at birth, I must emphasize that there were numerous gods thought to preside over pregnancy, birth, and infancy in the Roman empire – far too many to examine in one chapter. These deities received offerings and prayers at shrines, but might also be represented and invoked in a number of less visible ways – on physical adornments or objects that provided some sort of protection or through prayers in a moment of crisis.

Almost certainly drawing on Varro, Augustine skewers this multiplicity of deities in *The City of God*, emphasizing the absurdity, in his view, of assigning each step in the process to a particular god (he includes the names of nine such *indigitamenta*, from conception to the cradle).[2] Augustine's list, while a rich source if taken in the context of his polemic, rather misleadingly gives the impression that there were fixed *non-overlapping* deities assigned to protect women and their offspring throughout pregnancy, birth, and infancy. Ultimately, this oft-cited passage glosses over a much richer and

[2] August., *De Civ. Dei* 4.11: *Ipse praesit nomine Liberi virorum seminibus et nomine Liberae feminarum, ipse sit Diespater, qui partum perducat ad diem; ipse sit dea Mena, quam praefecerunt menstruis feminarum, ipse Lucina, quae a parturientibus invocetur; ipse opem ferat nascentibus excipiendo eos sinu tenae et vocetur Opis; ipse in vagita os aperiat et vocetur deus Vaticanus; ipse levet de terra et vocetur dea Levana, ipse cunas tueatur et vocatur <dea> Cunina...*

multi-dimensional network of divine support upon which women and their families relied throughout the Roman empire. Augustine assigns birth protection to the goddess Lucina (*quae a parturientibus invocetur*), reflecting the fact that she was the most widely acknowledged deity associated with parturition. Lucina appears in our sources in many forms. Sometimes she is a goddess in her own right, sometimes she is blended with the more powerful goddesses Juno and Diana, Juno Lucina and Diana Lucina.

Robert Parker's interpretation of cultic double names – essentially, that sometimes a 'major' god can take on a 'minor' god's name as an epithet – helps us to understand the relationship between Diana/Juno and Lucina.[3] To illustrate his point, he uses the example of Artemis who adopts Eileithyia's sphere of concern (childbirth) in Artemis' "mode" – her defined "core" or "unifying principle" – a term borrowed from Dumézil.[4] Parker explains that "Gods are not…differentiated by spheres of activity, because spheres of activity such as the agricultural or political are common to many. *They are differentiated by the mode or modes of activity that they bring to the various spheres in which they are involved*."[5] This structuralist approach to modes, likewise, has influenced my own approach. For our purposes, Juno's mode (as Lucina) involves measurement and regulation of birth and the family more generally.[6] In terms of measurement and regulation, she is very much a product of views of the female body's relationship to the non-human environment and cycles of growth and decay.

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[3] Parker 2011, 69.
[4] Dumézil 1970, 179–80, 229. His concept is elaborated by Parker 2011, 84–98.
[5] The italics are mine. Parker 2011, 88. He offers Vernant's remarkable essay on Artemis ("The Figure and Function of Artemis in Greek Myth and Cult") as an example of the subtlety of an approach that hinges on teasing out a god's mode (Vernant 1991, 195–206).
[6] Pironti and Pirenne-Delforge 2013 discuss the 'modes' of Hera Eiliethyia and Artemis Eileithyia in similar terms.

Lucina serves a function similar to the Greek Eileithyia, who appears with frequency in Greek sources, both in literary and epigraphic contexts, and also in some Latin sources as Ilithyia/Ilithia; similar to Juno/Diana Lucina, there are numerous references to Artemis Eileithyia and occasionally Hera Eileithyia. Other times, Eileithyia (singular) or Eileithyai (plural) are invoked, as are the Fates, who are the subject of the second half of this chapter. Across space and time, this constellation of deities is quite persistent. I should hedge this claim, however, by noting that while these gods may be ubiquitous in our historical record, there were also profound local and regional variations, which are far too complex and numerous to tackle in the context of this dissertation. For the sake of space and consistency, I focus here on sources primarily (but not exclusively) from the city of Rome and Italy in the imperial period.

We begin with a study of the lunar aspects of generation in Greco-Roman thought (section I.1), which lays the groundwork for a study of Juno Lucina. The moon, viewed by many as a divinity in itself, is very important to this story as a widely regarded source of moisture that can promote easy childbirth, guide cycles of vegetal growth, and moderate the flow of liquids – ranging from the tides to menstrual fluids. It exemplifies generative time, and the interconnectedness of terrestrial activities and celestial bodies, which were associated – and sometimes equated – with divinities.

We then turn to Lucina, especially Juno Lucina, in her role of 'celestial midwife' and generative time-keeper (I.2), and analyze her visual representations and their significance (I.3). Juno Lucina is a goddess who might receive offerings before and after a birth; throughout our literary sources – from comedy to elegy to the novel – she is invoked by women during labor in moments of acute distress. This section examines

portrayals of her identity in literary and epigraphic sources, as well visual art, and how her role in promoting timely and easy birth, in bringing children "into the light," is entangled with medical and scientific conceptualizations of generative time.

The role of the Fates, the Parcae/Fata/Moirai (II.1), as well as the related Carmentes (II.2), provides the focus in the final part of the chapter. The Fates are frequently pictured in scenes associated with birth and present a complex perspective on (un)certainty and determinism. In Italy (and beyond) under the empire, The Fates served an important role in explaining untimely death. They set individuals' 'fate' at birth, most of all, the length of their life. The Fates' knowledge of a person's future contrasts with the uncertainty perceived by human actors. This tension between the Fates' knowledge and human ignorance is played out on Roman sarcophagi from the high empire, where the Fates lurk in the background of scenes depicting the deceased as a newborn receiving his first bath in the aftermath of birth – a scene dramatizing his separation from his mother. These sarcophagi provide a range of visual clues that deepen our understanding of the Fates in literary and epigraphic sources, as well as our evidence for rituals such as the *dies lustricus*. Their presence in these scenes projects a deterministic outlook on the life course, where the birth and the events surrounding the child's emergence play a key role in shaping, reflecting, and explaining an individual's future.

I. Lunar Lucina

I.1. *"Lunar Influences on Living Things"*

Calendars were subject to local variation throughout the Roman empire, and in a domestic setting, the observance and interpretation of other non-calendrical cycles took

precedence in many matters.[7] Greek city states, furthermore, continued to adhere to their own calendars rather than adopting the Roman civil calendar. With such a multiplicity of cycles to follow, each with its own value and significance, Greeks and Romans developed effective methods for collating different systems, using instruments known as *parapegmata* (sg., *parapegma*).[8] These devices could take a literary form, but some of our best known (and evocative) examples are epigraphic, such as the *parapegma* of the Thermae Traiani or the Latium *parapegma*.[9] The latter, for instance, was used to track the days of the hebdomadal week, the lunar days, the nundinal days (an eight-day cycle of market days), and the four seasons.[10] The passage of time was marked by moving pegs into holes that were drilled beside the various time markers. This made it easy to locate oneself at the juncture of several cycles, in this case, by viewing them all on the same plane. Essentially, *parapegmata* were tools that could help individuals coordinate multiple cycles, which might have important astrological and ominous implications. The *parapegma* is an important reminder of the many ways Greeks and Romans tracked time, and how systems were juxtaposed, layered, and coordinated.

Parapegmata offer us a way to think about the many different cycles that preoccupied Romans and affected their behavior, plans for the future, and interpretation

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[7] Lehoux 2007.

[8] Regarding the Caesarean calendar reform, Feeney 2007 points out, "The new calendar's remarkable success in aligning the civil and solar years did not, then, preempt the need for any other mechanisms for tracking cycles of time but provided a basis for a symbiotic relationship with the *parapegmata*, which very probably impinged more directly on most people's daily experience" (198).

[9] The most thorough and thought-provoking account of these devices is found in Lehoux 2007. For the Thermae Traiani *parapegma*, see ibid., 16, fig. 1.4; on the Latium *parapegma*, ibid., 32–35, figs. 2.2–3. These inscribed *parapegmata* are collated in Degrassi 1963.

[10] We would call the nundinal cycle an eight-day cycle, but the Romans, who counted inclusively, thought of it as a nine-day cycle.

of events, ranging from the planting of crops to religious and economic activity to the conception and birth of children. They also show how cycles were, quite literally, layered together on a single, shared plane. Lunar cycles, in particular, feature heavily in agricultural texts; the phase, day of the moon, and lunar position relative to the horizon were very influential in farming practices.[11] But we also find lunar cycles tracked in *parapegmata* from urban environments, such as the Thermae Traiani. When we think about the importance of these cycles in the context of this dissertation's central theme, menstruation and especially gestational time come to mind. Achieving a suitable gestational time, or giving birth at an auspicious time, was of course understood as closely bound up with the mother and child's chances of survival. The moon, it turns out, was heavily implicated in Romans' understanding of the female body, generation, and birth – and the timing and nature of these latter two processes. Let us now turn to the effects and meaning of these associations.

There has been debate about the precise meaning of the tight relationship between the moon and the months in Roman sources, interpreted by some as "fossilized remnants of an archaic Roman lunar calendar." Recent work, however, suggests that at its inception, the (pre-republican) calendar was most likely luni-solar.[12] The tendency to imagine a pre-republican lunar calendar is supported by the assertion by Varro and Macrobius that the Kalends, Nones, and Ides, the important time-markers dividing the Roman month, were, once upon a time, feast days corresponding to growth of the new moon: the Kalends as the first appearance of the new moon, the Nones the half moon, and

[11] Lehoux 2007, 43–46.
[12] Ibid., 46–50; Rüpke 2011, 23–24. Lehoux, in particular, provides a good deal of bibliography on this debate and its history.

the Ides the full moon.[13] Without going into detail, suffice it to say that Latin authors – and a number of modern scholars in their wake – treat the lunar month (and lunar calendars) as an especially 'primitive' way of measuring time. For this reason, while the lunar cycle was tracked as an 'extra-calendrical' cycle in extant *parapegmata*, it also shades into the history of the civil calendar as Romans perceived it. The notion of a lunar month conveys a sense of rusticity and harmony with rhythms of the environment.[14]

While the republican and Caesarean calendar month did not correspond to lunar phases, the month, *mensis*, nevertheless maintained lunar associations. As we can tell from *parapegmata*, the lunar month – its own, independent unit of time – also remained important. Essentially, there were different types of "months," but despite these differences, the month, conceptually, continued to be associated with the moon and its cycle. Menstruation, understood as a process of accumulation of excess and then purgation, furthermore, was associated with the lunar cycle and (predictably) maintained an association with the month. The lunar cycle was deeply gendered, and in this regard, is a feature of *generative time*. As I will demonstrate below, (Juno) Lucina was representative of this notion.

In the Roman world, the moon was thought to impact human affairs, especially processes of growth and decay and, for our purposes, the cycles of accumulation and purgation in the female body. The moon's constant state of transformation offered a potent visual metaphor for the changeability and cyclicality of life. It was also thought to regulate moisture on earth and in the atmosphere. As a celestial body – or embodied by

[13] Macrob., *Sat*. 1.15.9–12, Varro, *Ling*. 6.27. Lehoux 2007, 47, n. 53; Lunais 1979, 24–26.
[14] Rüpke 2011, 23.

various lunar deities – the moon was implicated in the process of generation, birth, and decay.[15] It was also understood to affect the tides, most precisely elaborated by Hellenistic astronomers.[16] But more broadly, it was understood to impart moisture and to govern the ebb and flow of fluids inside and outside living bodies, its waxing and waning affecting a wide range of earthly phenomena – women's menstrual cycles, the ocean's tides, agricultural growth, the rotting of organic matter.[17] This is the same complex of connections analyzed in chapter two. The moon's effects were observed at the micro and macro level. Aristotle observes its influence on the procreative cycle of sea urchins, reporting that their ovaries swell at the full moon; Pliny reports that shellfish grow and shrink along with the moon, as do the entrails of the shrew-mouse (*sorex*).[18] Ptolemy described the moon as the "heavenly body closest to the earth," whose cycles sympathetically govern (συμπαθούντων αὐτῇ) the dynamics of rivers and oceans, the life course of plants and animals.[19]

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[15] For the most exhaustive studies of the moon in Greco-Roman thought, two French monographs are still unparalleled: Préaux 1973 and Lunais 1979.
[16] Seleucus' findings, for example, are discussed by Strabo, 3.5.9. Préaux 1973, 105ff.; Barton 1994a, 102. The notion that the moon affects the tides, however, was observed much earlier (e.g., Hdt. 2.2).
[17] On the moon and menstruation, see Préaux 1973, 88–89.
[18] Arist., *Hist. An.* 544a18–20; Plin., *HN* 2.109. Cf. Beagon 2005, 181.
[19] Ptol., *Tetr.* 1.2.3–4, quoted and discussed by Barton 1994a, 103. ἥ τε σελήνη πλείστην ὡς περιγειοτάτη διαδίδωσιν ἡμῖν ἐπὶ τὴν γῆν τὴν ἀπόρροιαν, συμπαθούντων αὐτῇ καὶ συντρεπομένων τῶν πλείστων καὶ ἀψύχων καὶ ἐμψύχων καὶ ποταμῶν μὲν συναυξόντων καὶ συμμειούντων τοῖς φωσὶν αὐτῆς τὰ ῥεύματα, θαλασσῶν δὲ συντρεπουσῶν ταῖς ἀνατολαῖς καὶ ταῖς δύσεσι τὰς ἰδίας ὁρμάς, φυτῶν δὲ καὶ ζῴων ἢ ὅλων ἢ κατά τινα μέρη συμπληρουμένων τε αὐτῇ καὶ συμμειουμένων. Sympathy and birth outcomes are discussed in chapter four; a full treatment of sympathy in Greco-Roman thought will be provided in Holmes, *The Tissue of the World*, forthcoming.

In terms of human generation, many believed the moon held sway over the timing and duration of menstruation and gestation.[20] It was the time-keeper, the guardian of the female generative clock, as it were, a "chronomètre," to borrow the term from Lunais.[21] Aristotle and Diocles asserted that women menstruate at the end of the lunar month.[22] Their view is criticized by Soranus who observed that not all women menstruate at the same time. He censures Empedocles too, who also argued that women menstruate with the waning moon. "…Some women menstruate when the light of the moon is waxing," Soranus counters, "some when it is waning…."[23] Yet Soranus is careful to explain that menstruation is closely related to the 'month,' as a duration of time, and an etymology he provides serves as a not-so-subtle reminder of how lunar influences were engrained in the language of menstruation: "The menstrual flux, since it occurs monthly (ἀπὸ τοῦ κατὰ μῆνα), is also called *katamēnion*; and *epimēnion* as well because it becomes food for the fetus, jut as we call the food prepared for seafarers *epimēnia*."[24] Despite Soranus' skepticism, his response to Diocles and Empedocles should remind us that lunar influences on the female body were hotly debated in elite medical discourses of the Roman empire (and continued to be debated in millennia to come). This observation

[20] For the connection between lunar months and (human) generation, see, e.g., Stat., *Silv*. 1.2.268; Cic., *Nat. D*. 2.68; Varro, *Ling*. 5.69. Catullus connects the moon's role in procreation with agricultural cycles (34.17–20).
[21] Lunais 1979, 173.
[22] Arist., *Hist. An*. 582a, also *Gen. An*. 738a: "The period is not precisely fixed in women, but it suitably tends to occur in the waning moon; for the bodies of animals are colder when the environment is colder, as the end of the month is cold because of the moon's disappearance: the same thing explains why these times are stormier than the middle of the month [i.e., when the moon is full and thus warmer]." Cf. Préaux 1973, 88; Barton 1994a, 103.
[23] Trans., Temkin 1991. Soranus, *Gyn*. 1.6.40–47 = Ilb. 1.21.2.
[24] Soranus, *Gyn*. 1.6.1–5 = Ilb. 1.19.1. Adapted from Temkin, trans., 1991. This passage is also examined in chapter two.

encompasses Galen, whose views on celestial influences on the body were inconsistent, but who nevertheless argues for a connection between the moon and menstrual cycles ("…[the moon] maintains the timing of the menses in women….").[25]

The impulse behind relating the moon to menstruation is persistent. In a famous essay by George Sarton, "Lunar Influences on Living Things," we find a similar impulse to connect lunar time to a more 'primitive' age when the human body was harmonized with environmental cycles: "The length of [the menstrual] cycle is astonishingly close to that of the lunar cycle. Charles Darwin pondered on that and suggested that the menstrual period might be a vestige of a time when our distant ancestors were more immediately submitted to tidal influences."[26] Darwin seems to connect lunar time and menstruation to a distant past in which biological cycles – that now govern our own reproductive life cycle – were more integrated into the non-human environment, a notion that speaks to the construction of 'generative time' in Greco-Roman sources. Indeed, men, in Greco-Roman sources, are not entangled in or reflective of these cycles in the same way (with the exception of werewolves!).[27] Male bodies still may be affected by the phases of the

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[25] Gal., *Di. Dec*. 9.903K: …τὰς τῶν καταμηνίων ταῖς γυναιξὶ προθεσμίας διαφυλάττει…). See Barton 1994a, 187, and more generally pp. 185–91 on astrology and medicine. Pharmacopeia reflects this connection too: in Dioscorides' *Mat. Med*., certain emmenagogues have clear lunar associations, such as the herb *selēnion*, derived from the Greek word, *selēnē* (moon) also known as *Artemisia* (3.113); see Préaux 1973, 88. Artemis (as in *Artemisia*) was a lunar goddess.

[26] Sarton 1939, 501. He cites *Descent of Man* (1871) end of chapter 6; see especially p. 212, n. 27, where Darwin notes that lunar cycles in Vertebrata makes sense if they descended from aquatic creatures whose habits were governed by the tides, hence following "regular lunar intervals."

[27] In Petronius' *Satyricon* (first century CE), a freedman named Niceros recounts the time he accompanied a soldier on a short journey, only to witness his transformation into a werewolf under the light of a bright full moon: "the moon shone as if it were midday" (*luna lucebat tanquam meridie*, 62). This all occurs in a graveyard, conjuring associations with infernal forces and witchcraft. Just before the soldier transforms into a werewolf, he

moon, but they do not perform a function such as menstruation that is bound up with extra-terrestrial cycles. In the twentieth century, questions of the lunar influence on menstruation continued to attract the interest of scientists. The association is so culturally entrenched that it resists contemporary scientific interventions, which have shown that while the lunar cycle is similar in duration to the average female menstrual cycle (~28 days), the former does not affect the latter in modern humans, including contemporary natural fertility populations.[28] In contemporary western culture, the moon is still perceived as feminine in some sense, based on persistent belief in its effect on the menstrual cycle.[29]

At its essence, the moon was widely understood in antiquity to be feminine (moister, cooler) while the sun was masculine (hotter, drier) – a concept that makes sense given the common belief that females were constitutionally wetter and colder than males.[30] Seneca the Younger discusses the moon's moistening qualities, remarking upon its indispensability for the ripening of crops, which he connects to its role in childbearing. "Is there any doubt that human fertility responds to its course?" (*Num dubium est… quin*

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sheds his clothing – the trappings of his civilized form. The word Petronius uses for werewolf, *versipellis*, derived form *vertere* ("to turn") and *pellis* ("skin, hide"), meaning "shape-shifter," in a sense, one who crosses the boundary between the human and non-human – and then back again.

[28] E.g., Dogon of Mali. Strassmann 1997 (a study that also casts serious doubt on hypotheses supporting menstrual synchrony among co-habiting women, as well as lunar synchrony).

[29] On the moon's persistent association with menstruation in modern America, consider the popular "Luna Bar®" marketed as "Whole Nutrition for Women®," or the popular menstrual cup, the "Moon cup®."

[30] This is not to say that the moon does not emit its own heat – it certainly does, in the estimation of various natural philosophers. The moon's heat is rather different from that of the sun, it is not as strong or drying, but rather soft and moistening. It is precisely the moon's heat that helps crops ripen (Sen., *Ben*. 4.23.1).

ad huius cursum fecunditas humana respondeat?).[31] If the timing is right, the moon even has the capacity to diminish birth risk by releasing moisture, easing childbirth for women by loosening the passageways of their bodies. For this reason, Plutarch and Macrobius call the moon "quick-birthing," and in this sense, it is linked to the plants and amulets examined in the previous chapter.[32]

While the moon was thought to affect all sorts of living bodies through its capacity to impart moisture and facilitate growth and decay, women's bodies – and especially the processes of menstruation, generation, and birth – clearly had a unique relationship to the lunar cycle.[33] In this regard, women's bodies had a special relationship not only with the earth, but also with a particular celestial body and its waxing and waning. I want to suggest that by their association with the lunar cycle, female generative patterns represented a particular way of thinking about time, with their own set of rhythms that had little to do with the official organization of time under the empire. In this regard, the moon complements but also stands in opposition to the sun (a relationship not without political ramifications in the early empire, as Augustus carefully cultivated an

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[31] Sen., *Ben*. 4.23.1. Préaux 1973, 65. Also see Johnston 1989, who argues that the moon was much more important in the Roman pantheon than the Greek, which is why Hekate, who does not have particularly strong lunar aspects in Greek culture, assumed a strong association with the moon in the Roman context.

[32] Macrobius is clearly drawing on Plutarch regarding the quick-birthing moon. See Plut., *Mor*. 658e–659a and Macrob., *Sat*. 7.16.26–29 (in his words, *…ad celerandos partus salutare*).

[33] The lunar aspect of generative time also extends to infants. *CIL* VI, 10764 = *CLE* 1535 mourns a little Roman boy named Publius Aelius Pius, who died at sixth months of age, commemorated with a simple but carefully-wrought grave stele, in which his parents report he completed only six "horns" of the moon (*complentem menses sextae per cornua lunae*), a not uncommon poetic phraseology, but nonetheless significant. Likewise, an inscription honoring the baby daughter of an imperial slave under Domitian (*servus peculiaris*; *CIL* VI, 34114b = *CLE* 397) states that she was "snatched from her mother's bosom" before reaching her ninth full moon (*ante novem plenos lunae… orbes*). On the (unusual) title of *servus peculiaris*, see Weaver 1972, 200, n. 5.

association with the solar god Apollo).[34] This makes the moon all the more significant as both partner and alternative to the sun's primacy, and offers one explanation why Diana receives the names Lucina (often reserved for Juno), Lucifera, or Noctiluca – all lunar epithets – as Apollo's sister and counterpart.[35] We will return to Diana's identity as Lucina below.

I.2. *Juno Lucina*

In Terence's comedy *Adelphoe*, a young woman named Pamphila, in labor off stage, cries out, "…Juno Lucina, help! Save me, I'm begging you."[36] Throughout our sources, Juno Lucina is the deity to whom women cry out in travail, birth goddess *par excellence*. One might go so far as to characterize Juno Lucina as a 'household name' for protection. Men and women actively sought her help in a variety of ways, hoping to secure and maintain her favor. How exactly were individuals engaging with Juno Lucina? And who were they? And how was the goddess understood to intervene in the birth process? There are a variety of ways men and women engaged with Juno Lucina, through vows, votives, and other religious activities. She was understood to be a lunar goddess, implicated in – and representative of – the cycles just discussed above. This links her to the environment and time-measurement, that is, generative time, as well as timely birth. Indeed, her dominion over timely birth is exemplified by her association with light (including the light of the moon).

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[34] On the complex and rich relationship between Apollo and Augustus, see Miller 2009.
[35] Varro, *Ling*. 5.68 refers to *Luna… Noctiluca* in connection with Luna's worship on the Palatine. Cf. ibid., 296, n. 88. Miller observes the "carefully aligned figures of Luna and Diana," both bearing torches, on the cuirass of Augustus Prima Porta.
[36] Ter., *Ad*. 486–87: *Miseram me! differor doloribus. Iuno Lucina, fer opem. Serva me, obsecro*. A strikingly similar cry is also heard at Ter., *An*. 473.

We find invocations of both 'Juno Lucina' and 'Lucina' in literary and epigraphic sources, much like Eileithyia, who sometimes is a goddess in her own right, and other times operates as a manifestation of Artemis in her capacity as a goddess of birth, Artemis Eileithyia. Psyche beseeches her in Apuleius' *Metamorphoses*, "All the west calls you Lucina!… I know you are accustomed, of your own accord, to support pregnant women in danger (*praegnatibus periclitantibus*)."[37] Juno Lucina's relationship to Diana also complicates her identity, likely a by-product of her functional assimilation with Artemis Eileithyia, as a goddess of birth.

Juno Lucina is a deity who can promote conception and loosen a woman's body for parturition, and in this regard, she is associated with the moon. In myth, Juno is also famously responsible for *preventing* women from giving birth at the proper time, as in the case of Alcmene's protracted labor – exemplifying the goddess' role in policing the boundaries of marriage, and thus who can and cannot become a mother.[38] Writ large, one of Juno's primary 'modes' was boundary work or regulation of marriage and legitimacy. Thus Juno, in her capacity as Lucina, can protect women from the risks of a long, difficult labor, but may also embody the very forces that complicate birth; by withholding aid, she can punish women (and their children) who transgress certain boundaries. In this regard, she both prevents and embodies the risks of untimely birth, especially those adhering to the maternal body.

In Italy, there is material evidence attesting to the goddess' popularity beginning in the republican period. An altar, dating to the early second century BCE, was found in

[37] Apul., *Met*. 6.4. Perhaps Psyche refers specifically to the west here becuase in the east she is called Eileithyia.
[38] See Pironti and Pirenne-Delforge 2013. The episode may be compared with the difficult birth of Leto, mother of Artemis and Apollo.

Capua, honoring the Juno Lucina.[39] We find her name inscribed on a republican era cippus from Pisaurum (*Iunon*(*ne*) *Loucina*), dating to the third century BCE, and bronze plaques from Norba, where there was a sanctuary in her honor, and where women and men left dedications until the temple's destruction in the late republic.[40] Many ceramic vessels have been found around the temple site, in addition to female figurines in terracotta and metal, as well as a number of votive uteri – objects that suggest a preoccupation with fertility and childbearing – and may be thanks-offerings for a safe birth or dedications to ensure fertility and positive birth outcomes.[41]

Juno's power and importance to the Romans can be discerned in the range of temples dedicated to her throughout the city of Rome, demonstrating her many manifestations (e.g., Juno Moneta, Juno Sospita, Juno Regina). In her capacity as the guardian of women in childbirth, she was honored in the temple of Juno Lucina on the Esquiline, probably near the *lucus Mefitis*.[42] Pliny asserts that the temple to Juno Lucina was consecrated in 375 BCE (*HN* 16.235), but there is no other evidence to back up this precise date.[43] A republican foundation is most likely, but we know little concretely about

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[39] *CIL* I^2, 1581 = *CIL* X, 3807 = *ILS* 3099 = *ILLRP* 165 (*Iunone* / *Loucina* / *Tuscolana*).
[40] Cippus: *CIL* I^2, 271 = *CIL* XI, 6293 = *ILLRP* 16. Plaques: *CIL* I^2, 360 = *ILS* 9230a = *ILLRP* 163 (Norba. Similar inscriptions are found elsewhere, e.g., *CIL* I^2, 362 = *CIL* X, 6484 = *ILS* 3100 = *ILLRP* 164 (Ulubrae, third century BCE); *CIL* I^2, 361 = *CIL* VI, 357 = *ILS* 3101 = *ILLRP* 161 (Norba? Early third century BCE). The remains of an early republican temple to Juno Lucina have been excavated in Norba, near Rome. We do not know if the temple continued to function after Sulla destroyed the town in the early first century BCE (Dolansky 2011, 196, n. 16). The archeological features of the temple are examined in Rescigno 2003.
[41] Perrone 2003; also see Rescigno 2003.
[42] See *LTUR* 3, 122–3. Varro places the temple near the *lucus Mefitis,* on the Cespian (*Ling*. 5.49–50); modern scholars put the temple on the hill's southern slope. Cf. Ov., *Fast*. 2.435–436, 3.245–248.
[43] In a passage discussed below, Dionysius of Halicarnassus mentions a temple to Juno Lucina in Rome that existed at the time of Servius Tullius (4.15.5). Following the *Fasti*

the circumstances of its genesis, although some details are tantalizing. The *Fasti Praenestini* marks the temple's birthday as March 1, when it was dedicated by *matronae*, and vowed by the "daughter or wife of Albinus" to ensure the goddess' goodwill in childbirth (*si puerum* / [*parientem*]*que ipsa*[*m fovisset*]).[44] Ovid, who almost certainly consulted the calendrical research of Verrius Flaccus, the compiler of the *Fasti Praenestini*, echoes the notion of a foundation by *matronae*, but does so in a way that suggests the haziness of the temple's early history.[45]

While there are serious reasons to doubt the veracity of claims about its foundation by women, what matters for our purposes is that the political, economic, and religious authority of women was central to Roman perceptions of the temple's history.[46]

Consulares, there is also an argument to be made for 370 BCE as the date of founding. Ziolkowski 1992, 67; Robinson 2011, 282; *LTUR* 3.122–3.

[44] The festival is marked *NP* on the calendar. The precise meaning of *NP* is unknown, possibly *nefastus publicus*. The designation was used for important festivals, and on these days, activities in courts and assemblies were suspended. The full entry reads: *Iun[o]ni Lucinae Esquiliis, / quod eo die aedis ei d[edica]ta est per matronas / quam voverat Albin[i filia] vel uxor, si puerum / [parientem]que ipsa[m fovisset]*. Degrassi 1963, 121. The *Fasti Antiates Maiores* (Degrassi 1963, 6) simply marks the day "for Juno." See Scullard 1981, 85; Ziolkowski 1992, 67–71. Ziolkowski argues that the female relation of Albinus is most likely his daughter; Albinus was famous for having escorted the Vestals and Roman *sacra* to Caere in 390 BCE. Also see Paulus-Festus 131 Lindsay: *Martias Kalendas – matronae celebrant, quod eo die Iunonis Lucinae aedes coli coepta erat* ("Kalends of March – the matrons have a celebration, because on this day the temple of Juno Lucina began to be cultivated [i.e., was dedicated]").

[45] Fantham 2002, 23. The way Ovid describes this temple foundation (*illic a nuribus Iunoni templa Latinis / hac sunt, si memini, publica facta die*; *Fast*. 3.247–48) suggests it was founded by the Sabine women to celebrate the reconciliation of their husbands and fathers.

[46] Fantham 2002, 31. The temple's foundation is also examined by Schultz 2006, 41–42, who notes that the "matronal dedication… would stand as the sole instance in which a temple was vowed and dedicated by an individual who never held an official magistracy… Because there is no firm evidence that, in the republican period, a woman or a group of women was permitted to found a public temple, it is perhaps best to understand female involvement in the temple of Juno Lucina, a goddess whose cult was

Indeed, the goddess and her temple are associated with women's deliberate effort to secure fertility and safe birth. The temple's birthday was known as the "women's Kalends" or the "women's Saturnalia," described by Plutarch as the *Matronalia* (ἥ [ἑορτή] τε τῶν Ματρωναλίων, *Rom*. 21.1), the term commonly employed in modern scholarship. We know that in 41 BCE, Quintus Pedius, a quaestor, built a new wall around the temple, as attested in an inscription he set up, and that the goddess' precinct continued to be used into the imperial period.[47] The timing of the Matronalia on the Kalends of March also emphasizes *beginnings*, the 'birth' of the new year. If we look to the history of official time-keeping in Rome, before 153 BCE, March 1 was the official New Year, and it was on that day consuls entered office.

(Juno) Lucina protected not just women but their children too, perhaps signaling the intertwined nature of maternal and infant protection. Several inscriptions suggest that mothers made dedications to Juno Lucina on behalf of their children at or near the Esquiline temple, activating and cultivating their 'personal' relationship with the goddess. One early imperial inscription, found in the vicinity, shows a woman, Bassa, the wife of Quintus Vitellius, fulfilling a vow on behalf of their son, also called Quintus Vitellius. This possibly references the Quintus Vitellius mentioned by Tacitus (*Ann*. 2.48), one of the senators expelled by Tiberius for profligate habits:

> *Bassa Vitelli / [p]ro Q(uinto) Vitellio Q(uinti) f(ilio) filio suo / [Iu]noni Lucinae v(otum) s(olvit) l(ibens) m(erito).* (*CIL* VI, 359 = *ILS* 3104)
>
> Bassa, wife of Vitellius, on behalf of her son Quintus Vitellius, son of Quintus, fulfilled her vow to Juno Lucina willingly and with just cause.

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traditionally thought to have been established in the regal period, as financial involvement in the refurbishment or expansion of an already existing site."

[47] *CIL* VI, 358 = *ILS* 3102 = *ILLRP* 160; cf. Richardson 1992, 215.

This inscription is rather similar to another from Rome, dating to the late republic/early empire, left by a woman named Sulpicia:[48]

> *Iunoni Lucin(ae) / Sulpicia Ser(vi) f(ilia) pro / Paulla Cassia / f(ilia) s(ua) / d(onum) d(edit) l(ibens) m(erito).* (*CIL* I^2, 987 = *CIL* VI, 361 = *ILS* 3103)
>
> To Juno Lucina, Sulpicia, daughter of Servius, gave this gift on behalf of her daughter, Paulla Cassia, willingly and with just cause.

Schultz interprets this second dedication as "a thanks or request for a return to good health."[49] This is a capacious reading and offers the possibility that Sulpicia is either requesting or giving thanks for her daughter's fertility or safe passage through childbirth, or giving thanks for her own safe birth of a daughter at some point in the past. In this light, we might also read Bassa's dedication as thanks for safe passage through a hazardous time, such as her son's survival in infancy or recovery from an illness.

The dedication of votives offered a way individuals might deliberately cultivate divine favor or acknowledge their debt to a god for the fulfillment of a vow. While the practice of leaving anatomical and infant votives drops off in Italy during the imperial period, we are left to wonder if altars to Juno Lucina and inscriptions such as Bassa and Sulpicia's might have served a function similar to thanksgiving votives elsewhere in the empire, where the votive tradition persisted.[50] There is, of course, the possibility that people began making votives from perishable materials, leaving no trace in the Italian

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[48] Unfortunately, there is no further information on the find-spot of this inscription; it may well be from the Esquiline as well, but we cannot be certain.
[49] Schultz 2006, 52–53.
[50] E.g., mid-second century altar from Rome dedicated to Lucina (*Lucinae*), *CIL* VI, 30918 = *CIL* VI, 3695; also see *CIL* X, 124 = *Inscr. It.* I 1, 2 (Salernum) and *CIL* X, 555 = *AE* 1993, 491 (Cales), dating to c. 45 CE (or shortly after): *[Augus]talis, triumphalibus / ornamentis, quinq(uennalis) / Iunoni Lucinae.*

archeological record.[51] It appears that under Roman influence, thanks to the presence of the army, individuals in Gaul and Germany, for example, began leaving infant votives of stone, wood, or metal as thanks offerings to mark a child's passage through particular milestones, probably the removal of swaddling bands or weaning.[52] Indeed, Derks has convincingly argued that these Gallic infant votives represent thanksgiving offerings. Some of these votives, furthermore, rather closely resemble those of republican Italy, particularly those from a sanctuary near the source of the Seine.[53]

Juno Lucina's power extended out to encompass childbearing and fertility more broadly, and families made offerings at her temples in the hope of begetting children, as well as protecting them. On a funerary monument for a woman named Matura, who died at age forty-two, the deceased addresses passersby in hexametric verse, lamenting that no one, henceforth, will perform rites at the shrine of Lucina on her behalf, in the hopes she will bear more children. The verse, then, is a lamentation about the close of her childbearing years, in addition to her death.[54] The epitaph also serves as a reminder that a woman's procreative capacity was a primary measure of her value, and thus of the importance of goddesses such as (Juno) Lucina to women pursuing fertility and safe

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[51] Glinister 2006 offers some tentative suggestions on the reasons for their disappearance in Italy (see especially pp. 30–31). My thinking has been influenced by Flemming's talk, "Anatomical votives in republican/hellenistic Italy: How popular and how medical?" (April 18, 2014, Columbia University). Also see Flemming 2016.

[52] Interestingly enough, the votives are *not* terracotta, as they were in republican Italy. See Derks 2014, 52, table 1. "Three main types of [swaddled infant] votive can be distinguished with respect to the child's bodily attitude: a standing infant wrapped up tightly, a standing infant with swaddling bands partly opened to show its sex, and an infant lying in a cradle."

[53] Ibid., 56. Cf. Ammerman 2007.

[54] *CIL* VI, 12845 = *CLE* 387: *…[rap]ta meis fatis, superi sic namque iubebant, / [null]a penetrali Lucinae sacra petenti.*

birth. From this epitaph, it would seem that Lucina's sphere of influence extends out from birth to include childbearing in a more general sense.

Outside Rome, there is evidence of a longer history for dedications such as those of Bassa and Sulpicia, attesting to a wider array of individuals engaging with the goddess. The Bassa and Sulpicia dedications are worth comparing to two republican-period bronze plaques, found with the votive deposit at Norba associated with the temple of Juno Lucina, as they show that men also made dedications to Juno Lucina on behalf of their children. These examples suggest that men, too, were part of the network that worked to gain and maintain the deity's favor. One inscription has been dated to the mid-third century BCE (based on morphology), and is a gift from a man named Publius Rutilius' to Juno Lucina on behalf of his son, Gaius Rutilius.[55] The other, which has been dated to a slightly later period (late third, early second century BCE), is also dedicated to Juno Lucina by a man named Publius Rutilius, and attests to its dedicator's adherence to mysterious restrictions associated with Jupiter (*meretod* / *Diovos castud*), which perhaps has something to do with abstention from particular foods or behaviors during a pregnancy, although the evidence for either is sparse).[56] If the dating of these inscriptions

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[55] Perrone 2003, 356, n. 9. *CIL* I^{2,} 359 = *ILS* 9230 = *ILLRP* 162: *Iunonii Lo(u)cina(e)* / *dono pro* / *C(aio) Rutilio* / *P(ubli) f(ilio)* ("To Juno Lucina, [given] as a gift for Gaius Rutilius, son of Publius").

[56] *CIL* I^2, 360 = *ILS* 9230a = *ILLRP* 163: *P(ublius) Rutilius M(arci) f(ilius)* / *Iunonei Loucina* / *dedit meretod* / *Diovos castud* ("Publius Rutilius, son of Marcus, gives [this] to Juno Lucina, in accordance with Jupiter's restriction"). I follow the reading and translation of the odd phrase *meretod* / *Diovos castud* provided by Schultz 2006, 55–56, who is not inclined to read the phrase as pertaining to a prohibition on sexual activity, but rather to dietary restrictions similar to those of Ceres. Perrone 2003 (356, n. 9), however, adheres to the pregnancy-related interpretation, ("…una castità rituale che, per il suo riferimento a Giove e il legame con Giunone Lucina, viene interpretata in connessione alla gravidanza e al parto…"). The only other reference to this restriction is found on a similar republican-era plaque dedicated to Juno Lucina, *CIL* I^2, 361 = *ILS* 3101 = *ILLRP*

is correct, however, we are prevented from reading the two as a dedication before and after the birth of Gaius Rutilius.[57] Regardless, the plaques attest to the pursuit of a relationship with the goddess by a more varied range of individuals in a family unit.

Juno Lucina is invoked in imperial iconography (discussed below), and given her popularity, it is no surprise that she was thought to preside over the fertility and good health of the imperial family. In this sense, she also binds together the 'personal' and 'political'. An altar to Juno Lucina from Rome, dedicated by a man named Fortunatus in 166 CE, has been interpreted as a thanks offering for the safe birth of Lucilla (whose fertility was also celebrated in imperial coinage), daughter of Marcus Aurelius, as well as a general pledge for the health of the family (*pro salute domus Augustorum*).[58] Although these epigraphic dedications to Juno Lucina present ambiguities, they show men and women actively pursuing the protection and goodwill of the goddess in a variety of different circumstances.[59] In the case of the imperial family, we can see the network of actors working towards a positive outcome expanding well beyond any particular domestic or kinship group.

How was Juno Lucina thought to affect birth outcomes? While Ovid's poetic program in the *Fasti* should by no means be taken as a reflection of historical reality, as it were, his treatment of Juno Lucina links up with – and articulates – important themes in

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161, which, though unprovenanced, probably comes from Norba too, given the similarities.

[57] Cf. Schultz 2006, 56–57.

[58] *CIL* VI, 360 = *ILS* 366. Cf. Várhelyi 2010, 100; also see Varner 2004, 248, n. 117. For Lucilla/Juno Lucina coins, see *RIC* 3.275, no. 770–71, also discussed below.

[59] I have found one example of a town dedicating to the goddess, associating the goddess with the imperial family as Juno Lucina Augusta. The dedication is from Thugga in Africa Proconsularis (*CIL* VIII, 27357 = *AE* 1912, 160): *Iunoni Lucinae August (ustae) / sacrum / pagus et civitas Thuggensis / [fecerunt et] dedic(averunt).*

this study, especially Juno Lucina's lunar associations and relationship to generative time. This aspect of the *Fasti* is worth investigating. To return to the precinct of Juno Lucina on the Esquiline, Ovid associates two pivotal events in Rome's foundation myths with the grove (*lucus*), which, in his re-imagining of events, existed prior to the foundation of the temple.[60] First, the *lucus* is the site of Juno's oracle that remedied the Sabine women's infertility, associated with the Lupercalia (February 15). This festival, celebrated well into late antiquity, was the staging ground for Antony's famous attempt to crown Caesar in 44 BCE.[61] Secondly, Ovid links the temple's foundation to the Sabine women's reconciliation of their husbands and fathers, which he associates with the Matronalia (March 1). His description of this festival features Roman women thronging Juno Lucina's Esquiline precinct (*turba frequentat*).[62] The poet encourages them to wreath their heads with flowers, a sign of the fertile season, and then utter a prayer:

> *dicite "tu nobis lucem, Lucina, dedisti":*
> *dicite "tu voto parturientis ades."*
> *si qua tamen gravida est, resoluto crine precatur*
> *ut solvat partus molliter illa suos*. (*Fast*. 3.255–58)
>
> Say, "you gave us light, Lucina";
> say, "May you be present at the prayers of laboring women."
> If any woman is pregnant, she should pray with hair unbound
> that the goddess may gently loosen her birth.

This prayer echoes Ovid's description of the Sabine episode earlier in the poem, where he tells brides to leave off "strong herbs" (*pollentibus herbis*), "prayer" (*prece*), and "magical spells" (*magico carmine*) in pursuit of fertility (*Fast*. 2.425–26), but to wait for

[60] By Varro's time, the surrounding area was apparently built up, and the grove itself had grown rather narrow (*angusti fines*; *Ling*. 5.49).
[61] Pope Gelasius I preserved the date as the Feast of Purification of the Virgin Mary (Scullard 1981, 76). There is a vast bibliography on the Lupercalia. Important contributions include North 2008a; 2008b; Wiseman 1995a, 77ff.; 1995b.
[62] Ov., *Fast*. 3.251.

the lash of the *Luperci*. In his telling, after receiving their goatskin lashing, the Sabine women become pregnant right away:

> *luna resumebat decimo nova cornua motu,*
> *virque pater subito nuptaque mater erat.*
> *gratia Lucinae! dedit haec tibi nomina lucus,*
> *aut quia principium tu, dea, lucis habes.*
> *parce, precor, gravidis, facilis Lucina, puellis*
> *maturumque utero molliter aufer onus*. (*Fast*. 2.447–52)

> The new moon (*luna*) renewed her horns with a tenth cycle,
> the husband was suddenly a father, the bride a mother.
> Thanks be to Lucina! This grove (*lucus*) gave its name to you,
> or because you, goddess, are the origin of light (*lux*).
> Spare the pregnant girls, gentle Lucina, I pray, and
> tenderly remove from the womb their ripe burden.

Note Ovid's emphasis on Juno Lucina's association with *timely* birth, as implied by *maturum… onus*. This passage, furthermore, stresses the phonetic similarity of *lucus* (grove), *lux* (light), *luna* (moon), which, in turn, are all linked to Juno Lucina in Greek and Latin etymologies, tying her both to the space (her *lucus*) and time (through *lux* and *luna*).

An inquiry into these etymologies can take us a step further in elucidating the deity's associations. Etymologies, while potentially misleading from a modern linguistic standpoint, have the potential to elucidate what authors believe to be the core essence of a term, name, ritual, etc., providing some insight into a contemporary understanding. Etymologies can be a vehicle for authors to signal their view about a deep, historical meaning behind a name – they represent an effort to make sense of sometimes confusing social practices and terminology.

Lucina's first etymology from the *Fasti* (2.447–52), *lucus,* is found only in one other text, Pliny's *Natural History* (16.235), but encounters the problem that many gods

preside over a *lucus*, so why would Juno, in particular, receive this name?[63] *Lux* and *luna* are more popular, and receive treatment in a wider variety of sources, including epigraphic ones. They also tie in to theories about birth and birth risk – about what makes the process difficult or easy. Although Ovid does not explicitly present *luna* as an etymology for Lucina, the proximity of the words emphasizes their phonetic similarities. In Ovid's telling, the Sabine women produced children after the ideal gestational period, measured here as ten (inclusive) lunar months. The phrase, "The new moon renewed her horns with a tenth cycle" (2.477), also quite literally associates the Sabine women's births with the beginning of the lunar month, again highlighting the link between the lunar cycle and gestational time.[64]

Lucina's associations with the moon and light (*lux*) are related to one another. As discussed above, Romans believed the moon to be intimately involved in the duration of pregnancy and birth, as well as conception. In an etymology of the name 'Juno Lucina', Varro explains that Diana was called Juno Lucina by the Latins – perhaps a startling equation to modern sensibilities, but a logical one, examined below – and that Lucina is derived from the verb *lucere* ("to shine"), just as Ovid connects the name to *lux*. Varro continues:

> *… luna iuvat, donec mensibus actis produxit in lucem, ficta ab iuvando et luce Iuno Lucina. A quo parientes eam invocant: luna enim nascentium dux quod menses huius.* (*Ling*. 5.59)
>
> … the moon brings aid, until she has led forth into the light after the months have passed, so the name *Iuno Lucina* was created from 'helping' (*ab iuvando*) and from 'light' (*ab… luce*). Because of this, women in labor

[63] Cf. Robinson 2011, 285; Porte 1973.
[64] While Ovid uses similar phrases elsewhere to describe the passage of months (e.g., Ov., *Met*. 1.11), in the context of gestation, it is also worth considering what the phrase actually implies.

> call upon her; for the moon guides those being born since the months belong to her.

The moon is a source of guiding light that helps ease childbirth by drawing out the child at the proper time and providing the name for the goddess who undertakes precisely this feat. The moon, furthermore, might offer a clear visual sign of the manifestation – or absence – of the salvific goddess. The etymology highlights the moon's importance in the measurement of time – as he puts it, the months "belong" to the moon (*menses huius*), and by extension, they also belong to Juno Lucina.[65]

The moon is a potent metaphor, but it was also thought to have a profound biological impact. Varro notes that the moon "brings aid" during the period of pregnancy, but it also guides the child (*nascentium dux*) out of the mother's body into the light, presiding over the transition from the dark hiddenness of the womb, the "silent recess" (as Statius put it), to the outside world.[66] Varro's language emphasizes the agency of the moon (*dux*) over the woman giving birth. The obvious corollary of this view is that the absence of moonlight may impede labor, in essence, that giving birth at certain phases of the moon may endanger mother and child.[67] The moon oversees the transition and metamorphosis of pregnant woman and fetus, it is a celestial midwife – and it is wise for pregnant woman and her family thus to secure her favor.

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[65] Ovid's *Fasti* (3.883) echoes this claim, *luna regit menses* ("The moon rules the months"). The connection to Juno Lucina is made explicit at *Fast*. 6.39–40.
[66] *tacito… recessu*, Stat., *Silv*. 1.2.271.
[67] This is articulated by Plut., *Quaest. Conv*. 658e ff.; Macrob., *Sat*. 4.25.

Over a century after Varro, Plutarch contemplates these connections in *Roman Questions*, asking, why do the Romans "believe that the year belongs to Zeus [i.e., Jupiter], but the months to Hera [i.e. Juno]?"[68] His answer is worth quoting in full:

> δεῖ δὲ μὴ νομίζειν ἁπλῶς εἰκόνας ἐκείνων τούτους, ἀλλ᾽ αὐτὸν ἐν ὕλῃ Δία τὸν ἥλιον, καὶ αὐτὴν τὴν Ἥραν ἐν ὕλῃ τὴν σελήνην. διὸ καὶ Ἰουνῶνεμ ἐπονομάζουσι τὴν Ἥραν, τὸ νέον ἢ τὸ νεώτερον ἐμφαίνοντος τοῦ ὀνόματος ἀπὸ τῆς σελήνης· καὶ Λουκῖναν Ἥραν καλοῦσιν οἷον φωτεινὴν ἢ φωτίζουσαν· καὶ νομίζουσιν ἐν ταῖς λοχείαις καὶ ὠδῖσι βοηθεῖν, ὥσπερ καὶ τὴν σελήνην,
>
> διὰ κυάνεον πόλον ἄστρων
> διά τ᾽ ὠκυτόκοιο σελάνας·
>
> εὐτοκεῖν γὰρ ἐν ταῖς πανσελήνοις μάλιστα δοκοῦσιν. (*Quaest. Rom.* 282c–d)
>
> One must not believe [the sun and moon] are simply images of the gods, but that in substance the sun is Zeus, and that likewise Hera is the moon. For this reason [Romans] also use the name *Iuno* for our Hera, from their word for the moon as it becomes visible, that is, "young" (*iuvenis*) or "younger" (*iunior*); and they call their Hera *Lucina*, as in "bright" or "shining" (*lucens*); and they believe that she helps during childbirth and labor pangs, just like the moon:
>
> through the dark axis of stars,
> through the quick-birthing moon.[69]
>
> For women seem to give birth most easily during a full moon.

In this fascinating statement, the sun and moon are *materially* (ἐν ὕλῃ, i.e., in substance) the gods themselves.[70] Regarding the matter at hand, however, Plutarch articulates the concept that the year is masculine and the months feminine.[71] He also suggests that Juno

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[68] I use this double terminology to reflect Plutarch's own language. He makes it clear that he is talking about the Roman gods, i.e., Jupiter and Juno; his convention is to use the Greek names (here, Zeus and Hera) unless he is talking explicitly about their Latin names from a linguistic/etymological standpoint.

[69] This is a fragment from the Greek lyric poet Timotheus (also discussed in chapter four). Plutarch uses the same quotation at *Mor.* 659a.

[70] In *De Fac.* 927b, Plutarch describes Zeus as the creator, the supreme god. There is a wide bibliography on Plutarch's Platonism and theology. See, e.g., Dillon 1996; 2002.

[71] Juno is associated with the Kalends, Jupiter with the Ides – the former a dark sky, the latter a bright one. Lunais 1979, 25. Fantham (2002, 30, n. 26) suggests Plutarch pulled this set of connections from Verrius Flaccus, a very important source for Ovid's *Fasti*.

is actually named for the new moon, which constitutes the beginning of a new lunar month. This makes sense based on the antiquarian notion that the Kalends was once a feast day celebrating the new moon. We know that the Kalends remained sacred to Juno well into the imperial period. Plutarch then pairs this etymology with his etymology of the name Lucina (*lucens*/*lucere*), which echoes Varro's contention about its relationship to *lux* or *lucere*, also supplied by Ovid. Ultimately, all these answers relate the goddess to ideas about the moon's sway over the birth process and its role in measuring time. The moon measures out the duration of pregnancy and is also able to diminish the duration of labor. In essence, the moon can effect timely birth. It is both an agent and explanatory mechanism.

The name Lucina, as a label for a lunar and birth-related deity, is not unique to Juno. It is also applied to Diana, another important lunar goddess, especially when she is associated with the Greek Artemis Eileithyia. In a treatise from the *Moralia* known as *Table-Talk*, Plutarch doubles down on his characterization of the moon, once again quoting the same lines from the poet Timotheus ("through the dark axis of stars…"), but instead he now characterizes Artemis as the moon, who sends out "streams of moisture." This moisture eases birth, which is why she takes the epithet Lochia ("of childbirth") and Eileithyia.[72] It would seem that both Artemis, in her capacity as Eileithyia/Lochia, and Juno, in her capacity as Lucina, may in fact *be* the moon. This makes statements of the equivalency between Juno Lucina and Diana much easier to understand. Regarding birth-assistance, Lucina is parallel to Eileithyia, which then provokes a juxtaposition of the

[72] Plut., *Mor*. 658e–659a. Some take Eileithyia to be a participial form derived from *erchomai*, as in "she who comes," i.e., in the moment of travail. Others – most notably, Bettini – have coalesced around the verb *eileō* as an etymology, "to roll, bind," although admittedly, the name's origin are very much up for debate (Bettini 2013, 68).

Roman Juno and Greek Artemis, the traditional recipients of these names. For Romans, Artemis is of course none other than Diana, and thus we arrive at the odd equivalency presented by Varro, Catullus, Cicero, and Festus: that Diana *is* or *is called* Juno Lucina.[73] This also explains the close iconographic relationship between Juno Lucina and Diana Lucifera that will be discussed below. Several centuries later, Macrobius adapts the passage from Plutarch's *Roman Questions* quoted above, explaining that Diana Lucina (his translation of Artemis Eileithyia/Lochia) is summoned by women "because it is her job to expand the openings of the body and to give a passageway for motion, which is helpful for speeding up childbirth."[74] Catullus too draws on these connections and equivalencies in his hymn to Diana, where she is hailed as Lucina, Juno Puerperis ("of childbirth"), and the Moon (*Luna*), he explains, from the word for "light," *lumen*: *…es / dicta lumine Luna* (34.13–16).

When we put all this evidence together, we arrive at a composite image of Juno (and to a certain extent, Diana) Lucina. She is the moon in its multifaceted capacity as time-keeper, light-bringer, moistener, and widener of the body's pathways, characterizations that dovetail with medical views on the optimal conditions for parturition. A range of poets and intellectuals suggest these ideas are also baked into the *name* of the

[73] Catull. 34.13–14; Varro, *Ling*. 5.69; Cic., *Nat. D*. 2.68–69, cf. Festus 396 Lindsay. This clarification is provided by Moyaers and Renard 1972, 150ff., who focus on the deities' equivalency from the angle of their role in birth. From my perspective, this is the clearest explanation for the "oddities" observed by Richlin (2014, 228), regarding Varro's etymology of Lucina ("The strangeness of it lies beyond our asking").
[74] Macrob., *Sat*. 7.16.27: *… quia proprium eius munus est distendere rimas corporis et meatibus viam dare, quod est ad celerandos partus salutare*. He quotes Timotheus at 7.16.26. There are many interesting overlaps with and departures from Plutarch's version, not least of all Macrobius' replacement of κυάνεον ("dark-blue") for the more cheerful λαμπρόν ("gleaming"). On the relationship between Plutarch and Macrobius' passages, see Setaioli 2015, who examines them in significant detail.

god in question, reinforcing the centrality of these generative associations to her identity. Her regulation of moisture in the female body – in concert with the movement of fluids in the landscape/waterscape – again indicates the unique configuration of female body and environment explored elsewhere in the dissertation. Thus in her capacity as a lunar deity, Juno Lucina offers the promise of *timely birth*, what we could call birth "at term," and a quick, easy labor. Studying Juno Lucina shows us how both women and men engaged actively in cultivating their relationships with her and sought her help at moments of crisis or to ensure future health and wellbeing. She was an agent and embodiment of the forces that can guarantee safe and timely birth, while her lunar nature – her predictable waxing and waning – suggest fixedness and regularity.

1.3. *Light and Lustration*

The associations articulated in the previous section can deepen our understanding of Juno Lucina's presence in other media, as well as elucidate a range of birth and fertility-related iconography. Engagement with Juno Lucina, in the hope of a positive outcome, extended into the aftermath of the birth itself. Indeed, while the child's emergence was a crucial milestone, traces of birth were dispersed into the perinatal period. The *dies lustricus* – seven days after birth for girls and eight for boys, or as Romans reckoned, eight and nine days, respectively – represented a turning point in the newborn's acquisition of a formal social and familial identity. It was also an extension of the post-partum process of cleansing the child of traces of uterine life and overseeing the transition from the darkness of the womb to the light of day. As we shall see, the social conventions directly following a birth show a wider community actively engaging in

efforts to purify and protect the neonate from risks that encompass jealousy and the evil eye, as well as childhood disease. This builds on the picture I began to develop in the previous section.

Juno Lucina embodies help, as well as the purification and protection the mother and neonate require. She is sometimes pictured holding a torch, a polyvalent symbol. The goddess was seen to bring light, *lumen* or *lux*, at the moment of birth – the first light the newborn perceives – which may also be construed as the salvific light of a torch, that is, of someone bringing aid during the night.[75] The torch and the moon are not unrelated, since both offer the means of illumination at night. While this may seem to be an obvious statement, it is important to keep in mind that in antiquity, especially in more rural regions, a night with a bright moon would have been perceived and experienced quite differently from a cloudy or moonless night; a bright moon could significantly change conditions.

The torch signifies Juno Lucina's status as the savior goddess who helps bring the child 'into the light.' Indeed, light is persistently associated with birth, a notion that also exists in modern Italian, as "dare alla luce," ("to bring to light") means "to give birth." Juno Lucina is responsible for the infant's opportunity to perceive the light with its own eyes – and eyes, in turn, are sometimes described as "lights" (*lumina*).[76] The salvific torch leads to an important observation. Despite her presence in a variety of media, to the best of my knowledge, she is conspicuously absent from the inscriptions honoring women

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[75] *CIL* VI, 20674 = *CLE* 436, column 2, lines 18 (*cum primum Lucina daret / lucemq(ue) animamque*), also discussed below.

[76] Often in poetic usage, but not always. E.g., Ov., *Her*. 21.113 (*luminaque in gremio veluti defixa tenebam*); Cic., *Tusc*. 5.29.114 (*Democritus luminibus amissis…*). See *TLL* s.v. *lux*, vol. VII.2, p. 1904., ln. 83ff.

who died in childbirth. This may suggest the belief that such deaths were linked precisely to the goddess' *absence* in a moment of crisis or a woman and her family's failure to secure her goodwill.[77] Indeed, it is Fate or the Fates, explored in the next section, rather than Lucina, who are mentioned in conjunction with premature deaths.[78] Perhaps we should consider Lucina's absence as one way of making sense of a bad birth outcome.

The torch iconography also appears on a silver denarius of Faustina the Elder, spouse of Antoninus Pius, invoking Juno Lucina (IVNONI LVCINAE) on the reverse, where the goddess is pictured holding a scepter and torch.[79] Indeed, Juno Lucina, it seems, was closely associated with the imperial family's fertility in this period, as suggested by Fortunatus' dedication, discussed above.[80] On a number of other coins for Lucilla and Faustina the Younger, Juno Lucina is also pictured on the reverse holding an infant and/or a flower, symbolizing fecundity, evoking the metaphorical/analogical

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[77] Hug 2014, 273–280. *CIL* I^2, 1215 = *CIL* VI, 25369 = *CLE* 59; *CIL* VIII, 24734 = *CLE* 2115; *AE* 1995, 1793; *CILA* III.2, 362 = *AE* 1991, 1076; *CIL* XIV, 2737 = *CLE* 1297; *CIL* IX, 3968 = *CLE* 498; *CIL* III, 272 = *CIL* III, 6759 = *ILS* 1914 = *GLIA* I, 44; *CIL* III, 2267; *CIL* X, 1112; *CIL* VI, 3499; *CIL* VI, 28753 = *CLE* 108; *ILN* IV, 32 = *AE* 1976, 326; *CIL* III, 9632 = *CLE* 1438a–b = *CLE* 2133a; *CIL* III, 13529 = *CLE* 1992; *CIL*, VIII 20288 = *ILCV* 3436 = *CLE* 1834; *CIL* XI, 4631 = *CLE* 1846; *AE* 2001, 1168. She also includes *CIL* VI, 5534 = *CLE* 1035, but I present a different reading of that inscription, discussed below.

[78] The Fates serve this kind of explanatory purpose in *CIL* I^2, 1215 = *CIL* VI, 25369 = *CLE* 59; *CIL* VIII, 24734 = *CLE* 2115; *CIL* III, 13529 = *CLE* 1992; *CIL* VIII, 20288 = *ILCV* 3436 = *CLE* 1834; F/fates are also mentioned in *CIL* XI, 4631 = *CLE* 1846; *AE* 2001, 1168, but not explicitly in relation to a woman named Pontia's death in childbirth.

[79] *RIC* 3.73, no. 391a (this coin dates to the period after her death in 141 CE). Cf. *LIMC* s.v. *Iuno Lucina*, no. 136. Also see *RIC* 3.94, no. 505, 3.192, 1377 (Faustina the Younger).

[80] Cf. Hekster 2015, 147, who points to a persistent association between Julia Domna and Juno Lucina in numismatic evidence: "Even when Domna must have been past childbearing years, she was still associated with Juno Lucina" on centrally issued coin types (Hekster points to *RIC* 4.1.201, no. 878; 4.1.208, no. 857; ibid., n. 83).

relationship between vegetal and human life.[81] The torch imagery and the connection between Juno Lucina and Diana is evident on coins from the high empire – for example, on a coin of Faustina the Younger (145–46 CE), celebrated for her fertility, the reverse features Diana Lucina (DIANA LVCINA S. C.), who holds a torch in one hand, while holding her robe with the other.[82] The connection between Diana and Juno, elucidated above, makes it unsurprising that they should be pictured similarly. Diana Lucifera, literally, "light-bringer," also appears on coins from the same period, honoring Faustina the Younger and Crispina (wife of Commodus), where the goddess is depicted with torches.[83] It is likely that these coins, too, were meant to promote the fertility of the imperial house, and thus served a similar function to the invocations of Juno Lucina.

The relationship between Juno Lucina and Diana Lucifera is surprisingly close, especially for Greek authors writing about Roman culture. Dionysius of Halicarnassus, for instance, reports that under the (mythical) Roman king Servius Tullius, every time a child was born, the family was required to pay a coin (νόμισμα) into the Juno Lucina's treasury, presumably located within her temple. Dionysius explains: "…he ordered how much money their kin had to donate on behalf of each, into the treasury of Eileithyia, whom the Romans call Hera 'Light-Bringer' (*Hera Phosphoros*) [i.e., Juno Lucina], on

[81] One might also link Lucilla's name to *lux*, connecting her to Juno Lucina on a linguistic level, as well as through her association with fertility. Lucilla/Juno Lucina coinage: *RIC* 3.275, no. 770; 3.353, no. 1747–49 (where Juno Lucina is pictured seated with an infant [1747] and veiled with infant [1748–49]). Faustina the Younger: *RIC* 3.94, no. 505a–b; 3.192, no. 1377; 3.194, no. 1400.
[82] *RIC* 3.193, no. 1394.
[83] *RIC* 3.344, no. 1628–1633 (coins of Faustina the Younger; Diana Lucifera stands holding two torches on reverse); *RIC* 3.442, no. 666 (coin of Crispina; similar configuration of Diana Lucifera on reverse). Cf. Ov., *Her*. 20.191–96.

behalf of those who were born" (4.15.5).[84] Hera Phosphoros, which also quite literally means "Hera light-bringer," is Dionysius' attempt to translate the Latin Juno Lucina into Greek. *Phosphoros*, however, could also be translated, perhaps more felicitously, as *Lucifera*, a name only applied to Diana. Indeed, *Phosphoros* is actually an epithet for Artemis. Dionysius' use of *Phosphoros* as the translation of *Lucina* (rather than *Lucifera*) points to the entanglement of Eileithyia, Lucina, Phosphoros, and Lucifera in the bilingual world of the Roman empire.

The torch iconography also clearly links Lucina and Eileithyia, both as individual goddesses and as manifestations of Juno and Artemis.[85] Pausanias (7.23.5) discusses a late Hellenistic cult statue of Eileithyia in a sanctuary to the goddess at Aigion where she was depicted holding a torch. Pausanias muses on the meaning of the imagery, suggesting that it could symbolize the fiery pains of childbirth or the fact that she leads children "to the light," recalling the Roman etymologies for Lucina:

> Αἰγιεῦσι δὲ Εἰλειθυίας ἱερόν ἐστιν ἀρχαῖον, καὶ ἡ Εἰλείθυια ἐς ἄκρους ἐκ κεφαλῆς τοὺς πόδας ὑφάσματι κεκάλυπται λεπτῷ, ξόανον πλὴν προσώπου τε καὶ χειρῶν ἄκρων καὶ ποδῶν, ταῦτα δὲ τοῦ Πεντελησίου λίθου πεποίηται· καὶ ταῖς χερσὶ τῇ μὲν ἐς εὐθὺ ἐκτέταται, τῇ δὲ ἀνέχει δᾷδα. Εἰλειθυίᾳ δὲ εἰκάσαι τις ἂν εἶναι δᾷδας, ὅτι γυναιξὶν ἐν ἴσῳ καὶ πῦρ εἰσιν αἱ ὠδῖνες· ἔχοιεν δ᾽ ἂν λόγον καὶ ἐπὶ τοιῷδε αἱ δᾷδες, ὅτι Εἰλείθυια ἐστιν ἡ ἐς φῶς ἄγουσα τοὺς παῖδας. ἔργον δὲ τοῦ Μεσσηνίου Δαμοφῶντός ἐστι τὸ ἄγαλμα. (7.23.5–6)
>
> At Aegium is an ancient sanctuary of Eileithyia, and her image is covered from head to foot with finely-woven drapery; it is of wood except the face, hands and feet, which are made of Pentelic marble. One hand is stretched out straight; the other holds up a torch. One might conjecture that torches

[84] : …ἔταξεν ὅσον ἔδει νόμισμα καταφέρειν ὑπὲρ ἑκάστου τοὺς προσήκοντας, εἰς μὲν τὸν τῆς Εἰλειθυίας θησαυρόν, ἣν Ῥωμαῖοι καλοῦσιν Ἥραν φωσφόρον, ὑπὲρ τῶν γεννωμένων. Dionysius notes that a similar payment was required upon reaching manhood (treasury of Iuventas) and at death (treasury of Venus Libitina).
[85] On Eileithyia with a torch, see *LIMC* s.v. *Eileithyia*. Also see Pingiatoglou 1981.

> are an attribute of Eileithyia because the pangs of women are just like fire. The torches might also be explained by the fact that it is Eileithyia who brings children to the light. The image is a work of Damophon the Messenian.[86]

By offering another interpretation for the torch, centering on the pain of labor, Pausanias complicates the purely positive, salvific associations of the torch seen elsewhere. It also brings to mind the Homeric description of Artemis, herself the product of Leto's difficult birth, "lion among women."[87] The Greek iconography of Eileithyia with the torch surely influenced the imagery of Juno Lucina in the Roman world, further emphasizing her polyvalent connection to light, as well as more sinister connections with labor pain and death in childbirth.

The signification of the torch's light and its connection to Juno Lucina may extend beyond the birth itself to the first days of the child's existence, leading to the *dies lustricus*. The celebration marked the child's entrance into the community, as it was on that day the newborn received a name (hence its other terminology, *dies nominis* or *nominalia*). One might think of the birth – and the liminality of the birth process – as extending to the days following the child's emergence, leading up to the *dies lustricus*, itself a purificatory celebration.[88] The *dies lustricus* was a way of demarcating and concluding that period by conferring to a freeborn child a more concrete social identity,

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[86] Interestingly enough, Pausanias notes that a Messenian sanctuary to Asclepius also houses sculptures of Tyche and Artemis Phosphoros, attributed to the very same Damophon (Paus. 4.31.10).
[87] Hom., *Il*. 21.483–84; cf. Paus. 4.30.5.
[88] Macrob., *Sat*. 1.36: *est etiam Nundina Romanorum dea a nono die nascentium nuncupata, qui lustricus dicitur. est autem dies lustricus quo infantes lustrantur et nomen accipiunt; sed is maribus nonus, octavus est feminis*. ("The Romans also have a goddess Nundina, named from the ninth day [*nonus dies*] after a baby's birth: that is the lustral day, when infants are purified and named [it's the ninth day for males, but the eighth for females]," trans., Kaster 2011). Cf. Plut., *Quaest. Rom*. 288b–e.

exemplified by the bestowal of a *praenomen*. The intervening days between the birth and *dies lustricus* was likely a fitness test too, as the span of time after the birth allowed the family a period to observe if the child was robust enough to survive beyond a week. The naming and the rituals that accompanied it provided an important, culturally enforced terminus for the period of liminality after the birth. It remains unclear, however, how precisely these practices mapped onto the naming of children who were not citizens, especially slaves; Dasen has suggested that the dearth of inscriptions for infants of any status who died before the ninth day is evidence for the social importance of the rite, and that perhaps it extended to slave children in some form.[89]

We learn from several sources that the birth of a baby was greeted with a series of ritual acts, some sort of celebration, and by decorating one's doorposts.[90] Pompeian graffiti attests to the practice of families painting notices on walls fronting the street, alerting neighbors and passersby to the birth of a child, including the day and hour of the birth.[91] In the atrium, families may have set up a table with offerings for Hercules and Juno, probably Juno Lucina.[92] It appears that both family and friends performed

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[89] Dasen 2009, 207–08; cf. Lewis 2015. Dasen points to one inscription for a boy who died at nine days, the son of Lucius Cassius Tacitus (*CIL* XIII, 8375; cf. *CIL* VI, 10891). The boy is named in the inscription as Vernaculus, a diminutive of *verna*, probably denoting that he was a house-born slave (as the son of Tacitus and a slave woman); if this is the case, then Vernaculus would be a term used to identify and tie the boy to the household, rather than evidence of a similar naming ritual for slaves. However, it could also be a sign that a slave was given a name on the ninth day, the day he also died. As Dasen notes, the little evidence we have is confusing.

[90] Rawson 2003, 108–09; Stat., *Silv*. 4.8.37–40; Juv., *Sat*. 6.78–80, 9.85.

[91] E.g., *CIL* IV, 294, welcoming of a daughter, Iuvenilla, including the hour and day of her birth. The notice is located on the Via Fortunata in Pompeii. The girl's name surrounds a rendering of a baby. *Iu(v)enilla // nata / die Satu(rni) (h)ora secu(nda) v(espertina) / IIII Non(as) Au(gustas)*.

[92] Tertullian explains (*De Anim*. 39.2): … *dum in partu Lucinae et Dianae eiulatur, dum per totam hebdomadem Iunoni mensa proponitur* ("…for in birth, [women] call out to

celebratory tasks.[93] Statius congratulates his friend Julius Menecrates on the birth of a daughter, bringing him the *ius trium liberorum* (*ius… tergeminae… prolis*, 4.8.21), "so often came Lucina, again and again entering your pious home" (*Silv*. 4.8.22–23).[94] He compares Menecrates' sons to "two radiant stars" flanking the moon, his newborn daughter, on a clear night (4.8.30–31) – uniting the themes of birth, light, and the moon's gendered connotations. Lucina, thus, is implicated both in the process of birth, protection of the neonate, as well as the purification entailed by the *dies lustricus*. She both bind together the mother and child and demarcates this period of separation.

There were a number of ways families attempted to protect their children from ills – both in the form of disease, and from jealousy and related forces of ill-will such as the evil eye. It should come as no surprise that infants received apotropaic amulets during the vulnerable first week of life – and that they too were gendered. Male infants received the *bulla*, a locket of sorts that *contained* amuletic substances or text.[95] The *bulla*'s contents

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Lucina and Diana, and for a whole week a table is laid out for Juno…"). Servius (*Aen*. 10.76), citing Varro, also mentions a similar ritual in honor of Pilumnus and Picumnus, "Varro says that Pilumnus and Picumnus are gods of newborn babies, and that a table is set out for them in the atrium on behalf of the laboring woman, while an inquiry is made about whether the infant is healthy." (*Varro Pilumnum et Pitumnum infantium deos esse ait eisque pro puerpera lectum in atrio sterni, dum exploretur an vitalis sit qui natus est*). Köves-Zulauf 1990, 119ff., teases out the implications and evidence for this ritual, especially vis-à-vis evidence for offerings made to the rather obscure gods Pilumnus and Picumnus.

[93] Cf. Gell., 12.1.1.5, recounting an episode when Favorinus goes to congratulate a friend whose wife has just given birth. The episode focuses on Favorinus' insistence that the new mother breastfeed the child herself, while her mother, presumably there to assist in the birth and postpartum recovery, dismisses the idea. This episode is discussed in detail in chapter one.

[94] Trans., Shackleton Bailey 2015.

[95] The *bulla* was made from various materials – wealthier boys had gold *bullae*, but they could also be made from leather or other less precious metals (Bradley 2005, 89–90). As Bradley also notes, Palmer 1998 has made an emphatic case that it was not the *bulla* itself that offered protection, but rather its *contents*. Also see the discussion in Faraone

protected against the dangers of childhood and also indicated freeborn status; it was worn until the assumption of the *toga virilis*, another milestone in the life course of the Roman male. Bradley suggests that the moment when the *bulla* was discarded coincides with the time in a child's life when, from a demographic perspective, they "had emerged from the greatest period of deathly danger."[96]

While it seems freeborn girls did not receive a precise equivalent to the *bulla*, there is evidence that they were also given amulets, including a moon-shaped talisman known as a *lunula*, "little moon," an unsurprisingly gendered object given the discussion above. *Lunulae* are mentioned in Roman comedy and are described by Isidore of Seville as moon-shaped "little golden *bullae*" (*bullulae*).[97] Women appear with moon-shaped pendants in funerary portraits from Roman Egypt, and in the south frieze of the Ara Pacis, there appears to be a girl with a small *lunula* around her neck.[98] There is also evidence that boys and girls both wore phallic amulets, a common apotropaic symbol that appears in a variety of media, with the power to ward off the evil eye, a source of much anxiety (a fear which persists in a number of contemporary Mediterranean cultures).[99]

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forthcoming, 83–84. Faraone also emphasizes that *bullae* were containers; for example, Nero's *bulla* was reported to hold the sloughed skin of a snake. Roman cemeteries in Hungary have yielded examples containing "organic material wrapped in cloth – for example, a raisin, thorns, or a tiny twig, perhaps of coriander"; another one contained a milk tooth (from Hieraoplis), another from Aquileia was filled with hairs (ibid., 83). The *bulla* figures in a broader tradition of amuletic cases.

[96] Bradley 2005, 89–90.

[97] Isidore of Seville defines the term *lunula* (*Etym*. 19.31.17): *Lunulae sunt ornamenta mulierum, in similitudinem lunae bullulae aureae dependentes* ("*Lunulae* are women's ornaments in the shape of the moon, little hanging gold *bullae*"). The *lunula* is also mentioned in Plautus' *Epidicius* 639–40. See Olson 2012, 16; Crummy 2010 examines archeological evidence for *lunulae* in late Roman Britain.

[98] Edmondson and Keith 2008, 145; Olson 2012, 16. The Ara Pacis girl appears to be the only sculptural rendition of a female child with a *lunula* in imperial Italy.

[99] Bradley 2005, 89–90.

Both silver *lunulae* and winged phalluses have also been found in infant burials in Colchester, a late Roman site.[100]

To return to *Silvae* 4.8, Statius chastises his friend for not sharing the happy news right after the birth, and he explains, "When your third child was wailing, did no letter of announcement come immediately, telling me to heap my altar with festal fire and wreathe my lyre and decorate my doorway …?"[101] Juvenal makes clear that it is laurel that wreathes the doorway, accompanied by platforms set up in the street for a kind of party in celebration of the birth (*Sat*. 6.78–80).[102] Laurel has a number of associations, not least of all purification, which brings us back to the *dies lustricus*, itself a purificatory rite for the newborn.[103]

While it is hard to say how often (and in what precise ways) these rituals were performed in the imperial period, the *dies lustricus* traditionally involved a ritual in which three men move toward the house where the infant was born, with each then assuming one of the tasks of hitting the threshold with an axe or pestle, the third sweeping with a broom. Köves-Zulauf, focusing on the events surrounding the birth of a male child, offers a structuralist interpretation of this ritual, arguing that the three-fold activity represents different stages of the birth process: severing the umbilical cord (axe), observing a child's soundness (pestle), and then cleansing and purifying (broom) – a series of events familiar

[100] Crummy 2010, see especially 51ff., on the finds from Abbey Field and Butt Road.
[101] Stat., *Silv*., 4.8.35–42; adapted from Shackleton Bailey, trans., 2015.
[102] Also see Gell., *NA* 12.1. Cf. Rawson 2003, 109. n. 29, who writes that "The fact that these Juvenal references are heavily satirical does not detract from their value as evidence of common forms of celebration."
[103] Cf. Plin., *HN* 15.135, 138 (*eadem purificationibus adhibetur*). Laurel also has the ability to ward off a lightening strike, according to Pliny. See Lennon 2014, 60.

from Soranus' description of natal and immediately postnatal practices.[104] For lack of evidence, I doubt that Romans engaged with the ritual's symbolism as such, but the culminating act of cleansing is certainly worth noting. Cleansing – both literally and figuratively – were central to the infant's first days of extra-uterine life, and the imagery of an infant's first bath was important enough to merit relatively frequent visual representation, as seen on a number of sarcophagi from the high empire, discussed in the following section.

A funerary altar for a man named Poppaeus Ianuarius (fig. 5.1) from the city of Rome, dating to the latter half of the second century CE, draws together this confluence of themes. On the front of the altar is a rather generic inscription in clear, red letters, flanked by two torches: "For the gods below, Poppaea Ianuaria made [this altar] for Poppaeus Ianuarius, her patron, well-deserving."[105] Ianuaria, the dedicator, appears to be the freedwoman of Ianuarius who is perhaps the togate figure pictured on the left side of the altar (fig. 5.1a), with head covered and hands lifted, engaging in a prayer and likely about to perform a sacrifice. On Ianuarius' left is a low table, laden with some (indistinguishable) goods, beneath which is a small pig. On the right side of the altar (fig. 5.1b), we see a woman holding an infant, who is nursing at her left breast. In her right hand she carries a burning torch and stands beneath a laurel tree, hung with fillets.

[104] Köves-Zulauf 1990. Cf. Lennon 2014, 59–60.
[105] *CIL* VI, 24819: *D(is) M(anibus) / C(aio) Poppaeo / Ianuario / Poppea / Ianuaria / patrono be/ne merenti / fecit*. The alter is currently in the Vatican Museum, Galleria Chiaramonti.



Figure 5.1a–b: Marble funerary altar for C. Poppaeus Ianuarius (*CIL* VI, 24819), latter half of the second century CE, Rome; (a) view of left and front sides of altar; (b) view of right side.

The relationship between Ianuarius and Ianuaria is ambiguous: in addition to being Ianuarius' freedwoman, was she also his nurse?[106] That would offer one explanation for the female figure breast-feeding the infant. Indeed, there is much evidence that nurses maintained close ties to their masters' families, and that they both provided and received funerary dedications from the families they served.[107] Another interpretation, however, is also plausible. Ianuaria may be have been both freedwoman and wife (or sexual partner) to Ianuarius, which would explain the child. Perhaps Ianuarius died just after the birth of their child, who would have been an infant at the time of the altar's manufacture – a dramatic turn of events. Petersen has argued for this

[106] My thanks to K. P. D. Huemoeller for suggesting this possibility.
[107] Joshel 1986; Bradley 1986. On wet-nursing and breast-feeding, see chapter one.

interpretation, maintaining that the female figure on the right is Ianuaria, performing a rite in thanksgiving for a safe birth, as a corollary to Ianuarius' sacrifice on the left side of the altar.[108] He disputes earlier interpretations of the imagery, which identified the female figure as Juno Lucina, an identification that would make sense based on the torch and infant.[109]

Whether or not the figure on the right is Ianuaria or Juno Lucina, the imagery is unmistakably birth-related and clearly evokes the goddess. The torch and the laurel tree point to birth's association with light and purification, as well as the celebrations following a birth. The laurel is no doubt related to the process of post-partum purification. In the context of this altar, with the imagery pointing to parturition and early infancy, the table laden with goods could perhaps be a thanks offering; in a polemical passage of *De Anima*, Tertullian describes that after a birth, "for a whole week a table is laid out for Juno" (39.2). The pig may be part of this same set of rituals.[110] In the end,

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[108] Petersen 1964, 173, n. 138.
[109] Ibid., "We will grant readily that Ianuaria may have intended to sacrifice to Iuno Lucina rather than to any other divinity."
[110] From Varro, we know that pigs were traditionally considered a wedding sacrifice, and that they had a sexual and procreative association (*Rust*. 4.4.10). He explains that the word *porcus* is used, "especially by nurses (*nutrices*)," to describe sexually mature female genitals, which he compares to the Greek word χοῖρος, and has the same connotations in Greek (*Nam et nostrae mulieres, maxime nutrices, naturam qua feminae sunt in virginibus appellant porcum, et Graecae choeron, significantes esse dignum insigne nuptiarum*). While the animal appeared in various sacrificial settings, it is worth observing that it was also one of the three creatures sacrificed in the *suovetaurilia* (along with a sheep and bull), the archetypal lustral sacrifice, which took place in two forms (*minora*, with suckling animals; *maiora*, with adult animals). See, Cato, *Agr*. 141, where the ritual (*minora*) is described for the purification of farmland. The ritual was also employed for the lustration of various public spaces and groups, such as the Area Capitolina (Tac., *Hist*. 4.53), when the animals were sacrificed to Juno, Jupiter, and Minerva. The performance of the *suovetaurilia* – in the context of the census – is likely depicted on the 'Altar of Domitius Ahenobarbus.' See Beard, North and Price 1998 (vol. 1), 112–13, 2.7.

there are multiple ways of reading of the imagery on this altar, but it is safe to say that the imagery of the breast-feeding woman holding a torch evokes the importance of light and purification as important aspects surrounding a birth. Indeed, the focus on purification suggests that one of the immediate risks was thought to be pollution stemming from the process of birth itself.[111]

Statius' *Silvae* 4.8 makes it clear that members of the infant's household were not the only ones engaged in celebratory activity – members of the wider social and familial network also participated in the process in their own homes. Giving newborns amulets, to be worn throughout childhood (at least until the assumption of the *toga virilis* in the case of the *bulla*), was one effort to protect them from the perils of infancy and life more generally, but there are clues that other family members performed rituals to protect the child as well. A passage from Persius' second satire describes the *avia* (grandmother) or *matertera* (maternal aunt) anointing the newborn's forehead (*frons*), using her middle finger, to ward off the evil eye (*infami digito et lustralibus ante salivis / expiat, urentis oculos inhibere perita*), then uttering a prayer for the child's future success.[112] The middle finger was used for insults (hence *infami digito*), while her saliva was thought to be purifying (*lustralibus… salivis*), placed on the forehead just above the eyes. This gesture of purification and protection might be connected to the process of opening the eyes of the newborn to perceive light, to drive off the "darkness" of the womb.[113] In essence, as

[111] See Lennon 2014, 55–61, who is cautious about the extent to which Romans were preoccupied with birth-related pollution, in contrast with the Greeks, but he does conclude that "it appears that some degree of danger existed. Furthermore, the threat could be countered through the use of purificatory instruments of actions" (61).
[112] Persius, *Sat*. 2.31–38.
[113] Brind'Amour and Brind'Amour 1971. They relate this to the development of the Christian baptism, "… les puissances des ténèbres doivent être chassées…" (1010). They

newborns open their eyes, they also become vulnerable to the threat of the evil eye. This threat is perhaps not unrelated to Statius' wish to his friend Menecrates that his children will be not be victims of "dark envy" (*atra… invidia*, 8.16–17). Envy and the evil eye appear to be real threats to which newborns and young children might be exposed, and which these measures were meant to dispel. Children are especially vulnerable to the evil eye, "[b]ecause they are fragile… and because they are desired. The one who casts the evil eye is the one who looks at them with longing."[114]

While infant mortality was of course a serious risk in the perinatal period, there were a number of other important sources of anxiety in the immediate aftermath of a birth, which were viewed as risks by parents and other caretakers. These anxieties included pollution, associated with the birth itself and the 'darkness' of the womb, and the ill-will of others, exemplified by the evil eye and *atra invidia*. The importance of amulets, such as the *bulla*, speak to the desire to protect children from the dangers of infancy and childhood. In one sense, all these anxieties can be grouped under the umbrella of concern about mortality – yet that would be to miss the point. The anxiety surrounding darkness, pollution, and ill-will speaks to persistent worries in Roman culture about one's standing among family, friends, and neighbors, in a world policed by exacting and vengeful divinities. Parents, in turn, relied on family members and the wider community to protect the most vulnerable forms of life. Again, the network of actors participating in a birth and its aftermath turns out to be much wider than a single

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argue that the *matertera* here is playing the role of Juno in opening the infant's eyes. Zwierlein-Diehl 1999 argues that the onyx alabastron (fig. 5.8) perhaps depicts this very ritual.

[114] Barton 1995, 93. She points to Plut., *Mor*. 680d. Eyes were understood to be both aggressive and vulnerable.

household or kinship group. The rituals surrounding birth dispersed the effort to manage risks among a wider community, drawing a spectrum of individuals into the process. These social activities provided a structured way to approach and experience the transitional period, offering a thought-provoking contrast (or complement) to the kind of determinism implied by approaches to the Fates and their role in the birth process, a subject to which I turn in the next section.

II. Fate(s), Timing, and Corporeality

II.1. "*Sic volvere Parcas"*

Birth occupies an important position in the negotiation and determination of a child's future. As a result, (Juno) Lucina and (Artemis) Eileithyia have a close relationship to the Fates, the *Parcae* (or *Fata*/*Fatae*) in Latin and the *Moirai* in Greek, who were seen to be responsible for fixing a child's destiny.[115] In contrast to Juno Lucina, however, who was the object of active engagement in the hope of better outcomes, the Fates embodied a kind of fixity that raises questions about perceptions of human agency (which, in turn, were highly variable). Reflections on the Fates' determination of the life course are featured prominently in funerary epigraphy and iconography, sometimes providing complex perspectives on the relationship between birth and death, luck and blame. Indeed, birth, it turns out, was seen to play a significant role in this patterning of the life course, which raises questions about how luck and chance figure in the determination of events.

[115] The term *moira* can also mean "allotment" (it has sacrificial overtones, as in an allotment of sacrificial meat). *Parcae* and *Fata*, despite the former being feminine (like the Moirai) and the latter neuter, appear to be used interchangeably.

The Greek Fates – Clotho, Lachesis, and Atropos – were associated with the act of spinning. Respectively, they spin, measure, and cut the tread of life, suggesting the triad of birth, life, and death.[116] In Plato's *Republic*, the three sing in harmony with the Sirens, "Lachesis [singing] the things that were, Clotho the things that are, and Atropos the things that are to be": Λάχεσιν μὲν τὰ γεγονότα, Κλωθὼ δὲ τὰ ὄντα, Ἄτροπον δὲ τὰ μέλλοντα.[117] Romans integrated and adapted the Greek Fates, probably assimilating them to pre-existing Latin deities, especially the singular goddess Parca, who proliferated under the influence of the Greek model.[118] The Greek Fates continued to exert their influence in Latin sources of the empire, as when Statius wishes Menecrates' children long life and glory – "White Atropos has promised them old age and glory of lengthy achievement, their country's Apollo his laurels."[119]

At birth, the Fates determine an individual's destiny, particularly the day of death. Their control over death was absolutely central in Roman popular imagination, as evidenced by frequent invocations of the Parca(e), Fata, or *fata/fatum*, in funerary inscriptions. They appear on a wide range of epitaphs, for men and women, slaves and free, adults and children, and played a key role in Romans' understanding of the untimely inexplicable death of the young. A plaque in elegaics (first half of the first century CE) from a *columbarium* on the via Appia explores the untimely death of a fourteen year-old

[116] See Dasen 2011. On "myths" of spinning, weaving, and fabric, see Svenbro and Scheid 1996.
[117] Plato, *Rep*. 617c.
[118] *LIMC* s.v. *Moirai*; Weiss 1992, 369–70; Tels-de Jong 1959, 68–77; Horst 1943. Earliest evidence for dedications to Fata and Parca consists of a set of cippi from Tor Tignosa: *ILLRP* 10; *CIL* I^2, 2845 = *ILLRP* 11; *CIL* I^2, 2846 = *ILLRP* 12. See below on their likely relationship to two Parcae known as *Nona* and *Morta*.
[119] Statius, *Silv*. 4.8.18–19; trans., Shackleton Bailey 2015.

girl named Cornelia Calliste, which occurred after she languished in sickness for seven days.[120] The verse is written in her voice:

> *causa / latet fati, partum tamen esse / loquontur.*
> *sed quaecumque / fuit, tam cito non merui.* (*CIL* VI, 5534 = *CLE* 1035)
>
> The reason for my fate is unknown, people nevertheless say that it is birth.
> But whatever it is, I did not deserve it so soon.

Hug interprets this epitaph as commemorating the girl's death after giving birth (*partum*), but that is not the only way to read the verse.[121] It seems rather unlikely that "the reason" for her death, offered up as *partum* by the unstated subject of *loquontur* ("people say"), would be called into question (*sed quaecumque / fuit*) if she perished soon after giving birth. An alternative reading takes *partum* as more aphoristic, in keeping with the generality implied by *loquontur*, meaning an individual's fate is decided at birth – *one's fate is one's birth*.

In addition to the abstract *fatum*, the Parcae and Fata appear in Roman funerary inscriptions with frequency. An epitaph from Rome of imperial date, for a fifteen year-old boy named Narcissus taken in the "flower of youth" (*flore iuventae*), calls attention to the *fatum miserabile* of one "whom the Parcae snatched so young" (*Parcae nam impubem quem rapuere*…).[122] The language of the Fates' "snatching" (forms of the verb

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[120] The rest of the inscription makes it clear that she had two loving parents (*gemino / delicta parenti*) and that she was "pleasing to *D/dominus*" (*grata fui domino*), probably a slave master, but also, perhaps a husband named Dominus?
[121] Hug 2014, 273–74.
[122] *CIL* VI, 10226 = *CLE* 1119 = *ILS* 6068 (Rome). The term *impubem* suggests, quite literally, that he had yet to grow a beard. Whoever wrote the inscription, needless to say, probably took some pleasure in the phrase *flore iuventae*, punning on the boy's name. Narcissus was almost certainly a citizen, as a recipient of the *frumentum publicum*.

rapere) is not uncommon.[123] The Fates can also be jealous and cruel, sometimes described as *Fata invida*, begrudging someone's good fortune, as in the case of a seventeen year-old boy who died just as he was making a career in Hadrian's praetorian guard, *fata / inviderunt mihi*.[124]

In the consideration of life and death, the Fates are sometimes contemplated alongside the personification of chance or fortune, Tyche in Greek and Fortuna in Latin, who is also connected (sometimes directly, sometimes indirectly) with fertility, as I argued in chapter two.[125] The Fates suggest a deterministic structure for the contemplation of an individual's life course – in particular, the day of death – which stands in contrast to the human condition of ignorance, given the unknowability of life's twists and turns. The Fates enact and represent a certain kind of fixity and precision in the measurement and closure of an individual life. Juno Lucina oversees a messier, open-ended set of possibilities, and her goodwill can alter the course of events. The Fates, by contrast, present a more cut-and-dry approach, and in a certain sense, the absence of possibility. Rather, they suggest the unknowability (for humans) of certain parts of the life course in advance, but the fixity of those aspects in a dimension beyond human access, thus offering the a clear way to diffuse blame among human actors.

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[123] For example, see *CIL* VI, 12845 = *CLE* 387, lines 7–8, n. 54 above (*[rap]ta meis fatis*…).
[124] *CIL* VI, 8991 = *CLE* 101 = *ILS* 7741. *Fata invida*, see, e.g., *CIL* VI, 10731 = *CLE* 647; *CIL* XI, 5412 = *CLE* 1766.
[125] On the evolution and relationship between Tyche and Fortuna, see Matheson 1994; Eidinow 2011; Arya 2002.



Figure 5.2: Funerary urn for Julia Secunda and Cornelia Tyche, 150–165 CE, Campus Martius, Rome.

This complex of connections – among the Parcae, Fortuna, and Lucina – is evoked to great effect on a large, marble funerary urn from Rome, dating to 150–165 CE, featuring busts of a mother and daughter pair in high relief, Cornelia Tyche and Julia Secunda (fig. 5.2).[126] Their portraits are framed by Corinthian columns, topped by a

[126] On the dating and other matters, I follow Kleiner 1987, 253, no. 113. What remains of the urn is currently in the Louvre (inv. MA 1331). Kleiner list its provenance: "Rome, Campus Martius; later other collections in Rome, including that in the Palazzo Cesi." The monument was recut and the part with the inscription is now missing, save about one quarter of the text. Renderings of the inscription are preserved in eighteenth century drawings, such as that of B. de Montfaucon (1719), reproduced in Bruun and Edmondson

pediment with rosettes on either side, and completed with short descriptions of their fine qualities (*forma singularis*, *mores*, *pietas*, etc.) beneath the two busts. A hexameter inscription on the left side of the urn, addressed to the deceased in the voice of Julius Secundus, husband and father, laments that the Parcae decreed the two would die together on the same day in a shipwreck, a destiny assigned to them both *at birth*. The daughter was eleven years old at her death, the mother thirty-nine. The fourteen lines of verse spell out the name 'Julius Secundus' in an acrostic. The poem evokes the connection between the day of birth and death:

> *Sic etenim duxere ollim / primordia Parcae /*
> *et nevere super vobis vitalia fila, /*
> *cum primum Lucina daret / lucemq(ue) animamque /*
> *ut vitae diversa dies foret u/naque leti*.[127]
>
> For indeed, long ago, the Parcae laid the warp of their web[128]
> and spun for you the vital threads –
> as soon as Lucina gave light and life –
> that you would have different birthdays but the same day of death.

Lucina's bestowal of "light and life" (*lucemq(ue) animamque*) is bound up with the moment the mother and daughter's destiny was determined by the Parcae. It is worth dwelling for a moment on the notion that the precariousness of birth, when the child first perceives light after the darkness of the womb, is also a moment when the day of death is set, offering a cyclical view of the life course – from darkness, unto darkness, as it were. Birth, then, is a moment of a kind of *settling*, when certain aspects of the life course fall

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2014, 10–11, fig. 1.4. Inaccuracies in the drawing must be noted, however, particularly the confusion about the objects depicted in the pediment (discussed below) on the front of the urn. The drawing depicts a trumpet (second object from right), which is in fact a rudder sitting atop a globe.

[127] *CIL* VI, 20674 (column 2, lines 16–19) = *CLE* 436 (lines 7–10). I adhere to the more plausible *foret unaque leti* (proposed in the *CLE*) rather than *fortunaque leti* (found in the *CIL*). The reading in the *CIL* rather misses the phrase's pun (discussed below).

[128] On the language of *ordior* and *primordia,* see Courtney 1995, 372–73 (no. 174).

into place. These lines suggest that the certainty of the day of death, however, contrasts with the future's unknowability from a human perspective. Lucina's association with the Parcae – all of whom are associated with the child's emergence – lends her a darker, more fatalistic quality. The line, *ut vitae diversa dies foret u/naque leti*, with its chiastic structure, suggests precisely the connection between birth and death – their nature as determined and connected, yet unknown in advance. The phrase *foret unaque leti* is no doubt meant to be a pun on *fortuna*, which would have been obvious to anyone reciting the verse out loud. In this context, what would be perceived as risk (in this case, a fatal shipwreck) is not so much a *possibility* as an eventuality. The monument's verse and iconography plays with the relationship between the deterministic outlook suggested by the Parcae in relation to the caprice of *fortuna*.

The word *fortuna* brings us to Tyche, the deceased mother's name. The monument draws the viewer's attention to this name and its status as both a concept and divine personification. By the period under investigation in this study, Tyche/Fortuna was seen as a protector of fertility and good fortune, as discussed in chapter one, but also an embodiment of their fragility. In the Greek pantheon, Tyche is the daughter of Ocean and Tethys (a water nymph), and, in her earliest manifestations, appears as a marine goddess. The connection to water may have had something to do with its importance as an agricultural resource, as well as the dangers of sea travel, the perils entailed by the pursuit of rewards at sea, an appropriate reference give the circumstances of Cornelia Tyche and Julia Secunda's demise.[129]

[129] Hes., *Theog*. 360. Matheson 1994, 20–21.

For our present purposes, τύχη or *fortuna* is central to this monument's iconography. Above the two portraits is an architrave, topped with a pediment depicting a number of objects in relief. On the right of a *bisellium* (an ornamental couch for two), above the rendering of Cornelia Tyche, we find (from left to right) a cornucopia, torch, rudder topping a globe, and a wheel.[130] The torch, of course, has a polyvalent set of associations, related to salvation, matrimony, birth, and death. The cornucopia is a typical symbol of fertility and plenty – the fecundity of the earth – and thus good fortune.

By the early empire, the standardized Roman Fortuna is depicted holding a cornucopia in one arm, and a rudder in the other, a sign of her power to 'steer' events and stimulate growth, a confluence of maritime and agricultural imagery, as chapter two made clear. In the Flavian era, she acquired a globe and orb, on which she rests her rudder, and by the Antonine period, her famous wheel, suggesting a cyclical view of time; sometimes she even stands on a sphere, indicating the precariousness of fortune, symbolism that evolved and endured for many centuries thereafter. Tyche/Fortuna signifies – and presides over – the instability of one's future.[131] While the Moirai/Parcae suggest a deterministic framework for human life, Tyche/Fortuna can indicate how capricious the course of events may be for individuals. These two are not necessarily in conflict, but their relationship is variable and complex. Humans know they will die, but they do not know *when*, nor do they know what ups and downs will accompany their passage through life.

[130] On this iconography, see Matheson 1994; *LIMC* s.v. *Tyche/Fortuna*.
[131] Ibid. , 23. All these aspects are discussed at length in chapter two. The standardization of Fortuna's imagery is seen most clearly on coinage.

Both mother and daughter are associated with – and depicted as – goddesses. In the Antonine age, private deification was quite popular, and the configuration of mother and daughter points to precisely this trend.[132] Julia Secunda is connected to Diana, underscoring her virtue and virginity: she is pictured beneath a quiver and bow, accouterments of the goddess. Cornelia Tyche is associated with the goddess Tyche/Fortuna. Her hair is gathered into braids, piled atop her head, in a hairstyle similar to one worn by Faustina the Younger.[133] This hairstyle, furthermore, also looks surprisingly like a *polos*, a cylindrical headdress often donned by the goddess Tyche.[134] Cornelia Tyche is thus both the victim of *tyche* and *is* Tyche. Embedded in her very name is both a force and explanation for her unexpected demise at sea. Cornelia Tyche and Julia Secunda's funerary urn thus presents a rich confluence of concepts and divine actors associated with birth, death, chance, and fate – Lucina, Fortuna/*fortuna* and Tyche/*tyche*, and the Parcae. The monument evokes the fixedness and unknowability of fate for human actors, in relation to the unpredictability of fortune.

The relationship between Tyche, the Fates, and birth deities – so palpable on the funerary urn – has a long history. By the fourth century BCE, Tyche was receiving offerings on her own and in conjunction with the Moirai, emphasizing their overlapping associations.[135] The goddess Eileithyia, as a singular divinity, was also worshipped along with the Moirai in some parts of Greece. In Athens, the Moirai received offerings in concert with Hera Teleia (goddess of marriage) and Artemis.[136] Sometimes Eileithyia is

[132] Kleiner 1987, 255.
[133] Ibid.
[134] Matheson 1994 notes the use of this headdress in depictions of Tyche.
[135] Ibid., 20.
[136] Eidinow 2011, 37; 177, nn. 73–74. Cf. Pironti and Pirenne-Delforge 2013, 81ff.

replaced by a group of goddesses called the Eileithyiai, who merge with the Moirai;[137] notably, no such confluence (Lucinae and the like) occurs in Latin.

The close connection between gods of birth and gods of fate is also discernable in the Roman pantheon. As we saw, birth is precisely the time when an individual's life course is determined. Juno Lucina, as it were, brings the child *in lucem*, at which time the Fates then set in place particular aspects of the life course. In addition to the timing of death, however, there is also evidence that the Fates were seen to be implicated in the *timing* of birth, which could have far-reaching ramifications on the local level – in terms of an infant's viability – but also from a more cosmic perspective, given the pervasive importance of astrological signs. Aulus Gellius (quoting Varro) discusses a connection between the Fates and the timing of birth, in particular. Gellius notes that births in the ninth and tenth months produce the best outcomes. The names of the three (Latin) Fates are explained as follows:

> *Antiquos autem Romanos Varro dicit non recepisse huiuscemodi quasi monstruosas raritates, sed nono mense aut decimo, neque praeter hos aliis, partionem mulieris secundum naturam fieri existimasse idcircoque eos nomina Fatis tribus fecisse a pariendo et a nono atque decimo mense. Nam "'Parca,'" inquit, "inmutata una littera, a partu nominata, item 'Nona' et 'Decima' a partus tempestivi tempore."* (*NA* 3.16.9–10)
>
> Varro says that the ancient Romans did not consider [premature births] as preternatural rarities, but thought that women naturally give birth in the ninth or tenth month, and in no others besides these, and so they named the three Fates (*Fatis tribus*) from birthing and from the ninth and tenth month. For "*Parca*," he said, "is so called from 'birth' (*a partu*), with one letter changed, likewise *Nona* and *Decima* from the timely moment for birth."

Here, Varro describes *Parca* as a name of one of the three Fates (*Fatis tribus*), and characterizes the others using names associated with positive birth outcomes, *Nona*

[137] Bettini 2013, 61–62. He explains, "In both Greece and Rome, as in many later European cultures, the divinities of destiny and of birth are one and the same."

and *Decima*, exemplifying viable durations of gestation. Drawing on Varro, Tertullian echoes these names in *De Anima*, as ever critiquing *superstitio Romana*, which, he explains, has created "…Nona and Decima, from the significant months, and Partula, who governs parturition, and Lucina, who brings [the child] into the light" (…*Nonam et Decimam a sollicitioribus mensibus et Partulam, quae partum gubernet, et Lucinam, quae producat in lucem*).[138] The pairing of Nona, Decima, and, most of all, Partula, again point to the *partus-Parcae* etymology. The names of these Roman Fates were thus connected with perceptions of time and viability at birth. Indeed, they embody the idea that an infant's chances at life are bound up with gestational time. We might expand that idea out to include the significance of the time of birth and its ramification for an individual's life course as set by the Fates.

In the same passage, Gellius offers an alternative name for the third Fate, citing Casellius Vindex and Livius Andronicus' *Odyssia*, who name the three goddesses Nona, Decuma, and Morta.[139] The substitution of Morta for Parca (or Partula) suggests the close connection between birth and death.[140] This name comes as no surprise, given the belief that the Parcae fixed the terminus of an individual's life span and their frequent

[138] Tert., *De Anim*. 37.1. See Waszink 2010, 423.
[139] Gell., 3.16.11; Blänsdorf 2011, frag. 23 (Morel 11), cf. Hom., *Od*. 2.99–100, 3.237–38. See Bettini 2008, 316ff.
[140] Latte 1967, 53, interprets Morta (in contrast to the alternative names Parca/Partula) as the Fate that represents death in childbirth ("Auch der dritte Name Morta hat seine Bestätigung gefunden, offenbar die Macht, die über der tödlich verlaufenden Geburt waltet"). While this is certainly possible, I am inclined to argue that the name Morta should be more broadly construed, suggesting the 'fatal' nature of the Fates' control over individuals' destinies – that is, their control over the endpoint of a person's life.

invocation in funerary contexts.[141] I should note that as names for the Fates, Morta and Nona may also be traced back to several fourth century BCE cippi from Tor Tignosa, which include dedications to gods named *Parca Maurtia* and *Neuna Fata*.[142]



Figure 5.3: Glass paste depicting Fates with infant (bottom left).

Along with the literary and epigraphic testimony, there is a strong iconographic tradition in which the Fates are pictured with infants, determining their future, as on the glass paste from the British Museum of imperial date (fig. 5.3), and numerous Roman 'biographical' sarcophagi (such as those pictured in figs. 5.5–7 below). On the paste, three female figures hold objects generally associated with the Parcae/Moirai, while the child lies on the bottom left.[143] Although it is hard to make out, from left to right, the figures hold what appears to be a *volumen* (scroll, book), spindle and distaff, and scales and a torch, the last

[141] Gellius, however, does not take this approach, rather stating that Vindex was mistaken: instead of *Morta*, Vindex should have understood *Moera*, that is *Moira*, connecting the Roman Fates to their Greek counterpart.
[142] Tor Tignosa inscriptions (also see above n. 118): *ILLRP* 10 (*Parca Maurtia / dono*(*m*)); *CIL* I^2, 2845 = *ILLRP* 11 (*Neuna dono*(*m*)); *CIL* I^2, 2846 = *ILLRP* 12 (*Neuna Fata*).
[143] See Weiss 1992.

of which is also characteristic of Juno Lucina and Eilethyia.[144] I am also intrigued by the notion that the spindle and distaff "could metaphorically refer to the cutting of the umbilical cord, implying that the midwife is the human doublet of the Parcae or Moirai, like them determining life or death and prospects for the future."[145] I would argue that the association of the Fates with midwives is also suggested by the iconographic tradition in which two or especially three women (including the midwife) are pictured with a woman giving birth.[146] An ivory plaque from the Archeological Museum of Naples (fig. 5.4), dating to the first centuries BCE/CE, offers a rendition of this configuration comprising three helpers, with the midwife drawing out the infant as two attendants frame her and the parturient.[147]



Figure 5.4: Ivory plaque depicting birth scene, first century BCE/CE.

[144] I follow Dasen 2009, 202, in her identification of the objects. She compares this paste to another gem and glass paste with similar iconography (ibid., 202, figs. 2–3). Unfortunately, the paste is unprovenanced.
[145] Dasen 2009, 202.
[146] Köves-Zulauf 1990, 272, suggests a similar idea with regard to the Carmentes (that is, as 'midwives' of sorts).
[147] Cf. Coulon 2004, 210–11, fig. 2.

The iconography of the British Museum glass paste (fig. 5.3) combines the traditionally Greek Moirai (as spinners) with an important Roman convention, namely, the inclusion of a *volumen* that the figure on the far left appears to be unfolding. Indeed, combining the spindle and distaff, *volumen*, and scale is highly reminiscent of a depiction of the three Fates from the Isola Sacra necropolis (tomb 11), dating to the late second century CE, where one holds a spindle and distaff, another unfolds a scroll, and a third carries a balance.[148]

In the literary and iconographic tradition of the Roman empire, the Fates combine speaking and writing/reading with spinning, their conventional activity in Greek contexts, a development with interesting ramifications from the perspective of the culture of literacy in the high empire, although there is not space here to examine all the attendant implications.[149] I must emphasize, however, that the transition from spinning to writing is also worth reflecting upon from a gendered perspective. The traditionally female activity of spinning, associated with the Fates, is paired or superseded in this iconography by writing/reading.[150] In a number of images, one Fate is also seen making a newborn infant's astrological sign on a globe or gesturing to a point on a sundial (which I shall discuss below), another form of reading.

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[148] *LIMC* s.v. *Moirai*, no. 33.

[149] de Angeli compares treatment of the Roman Parcae with Greek Moirai (*LIMC* s.v. *Moirai*, p. 638): "Nell'ambito di tale funzione peculiare delle Parcae risulta essere l'azione dello scrivere il destino, del fissare per iscritto le sorte degli uomini e del mondo, secondo un'immagine ampiamente attestata in letteratura e a volte anche nelle epigrafi funerarie che, seppure non del tutto estranea all cultura religiosa greca, di fatto raramente e solo in età tarda risulta essere attestata per le Moirai, ed in tutti questi casi per una verosimile influenza della cultura romana…." The difference is also observed by Small 1997, 77.

[150] On the culture of educated female elites during this period, see Hemelrijk 2004.

Servius' gloss on the famous Virgilian phrase *sic volvere Parcas* ("thus the Fates unfold/roll," as in "decide," *Aen*. 1.22) points precisely to this combination or elision of spinning and writing/reading: "[Virgil] took *volvere* either from spinning or from a book: for one [Fate] speaks, another writes, and a third spins threads" (*aut a filo traxit 'volvere' aut a libro; una enim loquitur, altera scribit, alia fila deducit*). Servius' description points to the iconography of a Fate holding a *volumen*, as Bettini explains, "one of the three Parcae *scribit*, meaning obviously that she 'writes' the *fata*, an act placed on the same level as their more regular one of 'spinning'."[151]

This brings us to the word *fatum*. In *De Lingua Latina*, Varro uses his understanding of the verb *fari* (to speak, utter) to explain the term *fatum*, "fate," or with deference to its status as a participial form, the "spoken thing":

> *Ab hoc tempora quod tum pueris constituant Parcae fando, dictum fatum et res fatales. Ab hac eadem voce qui facile fantur facundi dicti, et qui futura praedivinando soleant fari fatidici; dicti idem vaticinari, quod vesana mente faciunt...* (*Ling*. 6.7.52)
>
> From the fact that the Parcae establish the time-span of life (*tempora*) for children by speaking (*fando*), we say fate (*fatum*) and fateful things (*res fatales*). From this same word, those who speak (*fantur*) easily are called fluent (*facundi*), and those who are wont to speak (*fari*) the future by presentiment (*futura praedivinando*) are prophets (*fatidici*); they are also said to prophesy (*vaticinari*), because they do this with an unsound mind (*vesana mente*)…

In a study of the complex valence of *fari*, Bettini draws attention to the Parcae and how 'by speaking' (*fando*), they establish the fate (*fatum*) of infants around birth.[152] It is by the aggregation of signs, *omina*, that infants' *fatum* is ascertained and then recorded by the Fates; this is accomplished by *omina*, "before, during, and after" a birth, forming "a

[151] Verg., *Aen*. 1.22; see Bettini 2008, 326.
[152] Ibid., 316ff.

complex of prophetic signs" (including but not limited to a horoscope), also known as a *genitura* or *genesis*.[153] These *omina* inform and reflect the *fatum*, which, as Servius explains, one of the Parcae writes down (*scribit*).[154] Ovid even describes the Fates as keeping an "archive of the world," *rerum tabularia*, a quintessentially Roman and "heroically 'bureaucratic'" way to imagine the record-keeping of human destiny.[155]

In addition to several sarcophagi with mythological content, 'biographical' sarcophagi, which feature scenes from the life of the deceased, offer a visual representation of the Fates in the aftermath of a birth.[156] Here, I want to focus on the birth-related imagery on three such sarcophagi, currently in Agrigento (fig. 5.5), Florence (fig. 5.6), and Los Angeles (fig. 5.7).[157] These feature two or three Fates, in lower relief, who stand in the background of what appears to be the neonate's first bath.[158]

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[153] Ibid., 318. The *genitura* is frequently invoked by Suetonius as presaging general (normative) aspects of emperors' lives. Bettini (ibid., n. 9) points to Suet., *Aug*. 94, *Calig*. 57, *Vit*. 3, *Vesp*. 25 (14, for term, *genesis*), *Tit*. 9; also, Amm. Marc. 29.1.5, 27; Eutr. 7.20 etc.

[154] Ibid., 327–28.

[155] Ibid., 326, n. 30 (Ov., *Met*. 15.807ff.).

[156] There is a wide-ranging bibliography on sarcophagi. Relevant to the current discussion, for example, are both more general works on sarcophagi and those that specifically address the biographical variety. See, for example, Huskinson 2015; 1996; Meinecke 2014; Birk 2013; Ewald and Zanker 2012; Elsner and Huskinson 2010; Koortbojian 1995; Whitehead 1984 (a dissertation devoted to biographical sarcophagi); Kampen 1981 (an especially informative article on biographical sarcophagi).

[157] Unfortunately, we only know the precise find-spot for the Agrigento sarcophagus – in the necropolis south of the temple in Agrigento (*LIMC* s.v. *Moirai* no. 38).

[158] A more complete list of all similar sarcophagi, as well as mythological sarcophagi with relevant iconography, is found in *LIMC* s.v. *Moirai*. To the best of my knowledge, there are twelve total sarcophagi with images of the 'first bath'. See Amedick 1980, cat. no. 2, p. 121, pl. 53; cat. no. 64, p. 132, pl. 62; cat. no. 107, p. 139, pl. 57; cat. no. 123, p. 142, pl. 62; cat. no. 142, p. 145, pl. 61; cat. no. 178, p. 150, pl. 58, 59, 60; cat. no. 198, p. 154, pl. 54; cat. no. 205, p. 161, pl. 62; cat. no. 236, p. 159, pl. 55; cat. no. 248, p. 161, pl. 72, 73, 74; cat. no. 273, pl. 165, pl. 64. All of these references are organized in Berg 2015, 219–20, table 12.1.







Figure 5.5a–c: Child's sarcophagus, mid-second century CE, Agrigento. (a) frontal view of sarcophagus with child's sickbed and mourners; (b) left side of sarcophagus with child enjoying a ride in a cart drawn by a billy-goat; (c) right side of sarcophagus with bath scene.



Figure 5.6: Detail of first bath from Uffizi sarcophagus, 150–170/80 CE.



Figure 5.7: Detail of first bath from Los Angeles sarcophagus, 170–80/200 CE.

The three sarcophagi show the deceased (in all three cases, male) after birth, receiving his first bath, administered by a midwife or nurse as his mother looks on, seated on a chair. The sarcophagus from Agrigento is particularly interesting, as it is for a child, depicting him on the front on his deathbed, surrounded by his grieving parents (fig. 5.5a).[159] While the first bath was associated with the immediate aftermath of a birth, as Soranus clearly elucidates, the dress and posture of the mothers, as well as the large size of the neonates, perhaps suggests that these images are meant to represent a composite of activities surrounding the birth. In all three images, the mother wears a *stola*, the garment of a *matrona*, with her cloak draped over her head in a gesture of modesty and piety. This is not exactly the garb of someone in the *immediate* aftermath of childbirth. The infants, likewise, each of whom is being lowered into the bath, are rather too big to be newborns – an artistic choice probably meant to indicate their robustness and fitness. By placing the mother opposite the child, observing the bath, the imagery calls to mind the drama of the separation of the mother and child and the new nature of their bond as the child's identity is established in the family and community, and takes a place in the cosmic order.

Based on these observations, it as been argued that the bath scenes represent not the immediate aftermath of the child's emergence, but rather activities on the *dies lustricus*. The association between bathing and lustration is rather appealing.[160] One problem that arises from this interpretation, however, is that our literary sources generally

[159] Cf. Ewald and Zanker 2012, 60–61.
[160] The connection is offered in Feinblatt 1952; *LIMC* s.v. *Moirai*, p. 647–48; Bettini 2008, 326–27. On the religious use of water, especially regarding lustration in Roman religion, see Edlund-Berry 2006, especially pp. 164–65. Cf. Parker 1996, 50–51, on first baths and Greek purity regulations, as well as the *amphidromia*. As to the latter, many questions are unanswered by our evidence, such as was the *amphidromia* also meant to purify the women who had participated in bringing the child to birth?

appear to associate the Fates with the day of birth itself, rather than the *dies lustricus*. Additionally, if these reliefs were picturing a component of the lustral rites, one might expect to see male family members present, not simply the mother, midwife, and attendants.[161] Rather, the process of birthing – without complications – occurred in a female space, and the configuration of women on all three reliefs suggests this kind of setting.[162] Finally, while we must keep in mind that absence of evidence is not evidence of absence, I will add that none of our literary sources mention the infant's bath as part of the *dies lustricus*, although this does not preclude the possibility that the bath *represents* an important aspect of the lustral rites, exemplified in these idealized images.

We might compare these images on the sarcophagi to a late republican onyx alabastron, pictured in fig. 5.8. The alabastron shows three women gathered around an infant, one touching the infant's face with her right hand, which Zweirlein-Diehl connects to the apotropaic (and lustral) gesture of the *matertera*, described by Persius.[163] The female figure in the background holds a water jug, which Zweirlein-Diehl has connected to the *dies lustricus*, although the jug might also gesture to the infant's first bath. The three female figures have been identified as the Carmentes, though it is also possible they represent the three Fates – and as I will show, the Carmentes are analogues for the Fates.

[161] The male figure (with child) on the far right of the scene from the Uffizi sarcophagus (fig. 5.6) represents the next stage of the child's life after birth, rather than another participant in the bath scene.
[162] See Hanson 1994. In an elite context, it was when the birth became difficult that males might have entered the birthing chamber. This is also implied by the very structure of Soranus' *Gynecology*.
[163] Pers., *Sat*. 2.31–38. See Zwierlein-Diehl 1999, especially 16–20; Dasen 2009, 207. The alabastron also features an image of Venus, a small temple, and a *tropaeum*.



Figure 5.8: Onyx alabastron with three Carmentes/Fates (?) and infant, 50-30 BCE.

The ambiguity of the alabastron's iconography speaks to similar problems we encounter in trying to unpack the bath images on the sarcophagi. There are some difficulties, therefore, in interpreting the bath scenes as *specifically* representing the *dies lustricus*. A concatenation of factors points to a more capacious reading, taking into account the activities and accouterments of the Fates.

In figs. 5.5c and 5.6, one fate holds a *volumen*, suggesting the acts of recording and reading, which may have a special relationship to the act of naming, one of the primary goals of the *dies lustricus*. We learn from Suetonius that *omina* surrounding the birth of a child, as well as on the *dies lustricus*, were seen to indicate aspects of the child's future, which in turn, might be linked to the choice of the child's name (assigned on the *dies lustricus*). These were names *ex casu nascentium* ("from the accident of

birth"), such as Agrippa, named for his breech position, discussed below. Nero's baneful *genitura*, for example, involved both an episode just after the birth, in which his father, Domitius Ahenobarbus, was reported to speak ill of anything produced by his union with Agrippina. This was followed by another omen on his *dies lustricus*, when Gaius Caesar made a joke about naming the infant after Claudius, at that point derided as a fool (*inter ludibria*) in the imperial house.[164] Bettini also points to Ausonius' discussion of his nephew Pastor ("Shepherd"), thus named because the sound of a shepherd's flute (*fistula… pastoralis*) was heard at his birth. The swiftly dissipating breath of the flute-player was in fact a harbinger of Pastor's untimely death, then enshrined in his name, a sign understood too late.[165] In unlucky Pastor's case, *omen* and *nomen* are tightly bound up, pointing to the importance of the act of naming.

The omens that inform the naming of a child may reflect the *fatum*, recorded by the Fates. This may explain why Tertullian, in *De Anima*, mentions the so-called *Fata Scribunda*, "invoked" on the *dies lustricus*, a phrase which Bettini convincingly emends as *Fatis scribunda*. Tertullian's phrase then reads "on the final day [i.e., *dies lustricus*] words are called out to be written by the Fata" (*dum ultima die Fatis scribunda advocantur*), which would suggest that the Fates fix – or more pointedly, *record* – the newborn's destiny on the day of naming, cementing his or her future.[166] This reading can be tied in to the depiction of a Fate holding a *volumen*, as seen on all three of the sarcophagi.[167] Given this combination of factors surrounding naming and destiny, in

[164] Bettini 2008, 319; Suet. *Ner*. 6. Also see Champlin 2003.
[165] Bettini 2008, 320; Auson., *Pastoralia* 11.
[166] Ibid., 328.
[167] This motif occurs on a number of other sarcophagi (e.g., *LIMC* s.v. *Moirai*, no. 41, 43, 44). Cf. *LIMC* s.v. *Moirai*, no. 45, a fifth-century CE mosaic from a Roman house ("villa

combination with the child's size and the mother's dress on the sarcophagi, it seems likely that these bath scenes collapse into one image aspects of the birth – in a female space – and a series of events following the birth, including aspects of the *dies lustricus*.[168]

The notion that *omina* at the birth and *dies lustricus* all contribute to the child's *fatum* prompts a consideration of time and time-measurement, especially given the time-related imagery on these sarcophagi. On all three, one of the Fates indicates a spot on a globe, placed atop a column. This globe represents one of two instruments. Most likely, it is a celestial globe, a representation of the sphere of the heavens; the Fate is gesturing to the confluence of stellar phenomena at the child's time of birth, suggesting the determination of his horoscope. It could also represent a spherical sundial, which might be inscribed with the signs of the zodiac.[169] Supporting the former reading is the fact that a cosmic globe would provide all the information about the positions of celestial bodies that determine aspects of the child's future. Likewise, there is decisive evidence for their use – both decorative and educational – in the Roman empire, and the instrument was "strongly associated in ancient minds with time itself."[170] For these reasons, I am inclined

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of Theseus") in Paphos, depicting the first bath of Achilles, as the Greek Fates look on (labeled Clotho, Lachesis, Atropos). Lachesis holds a tablet as Atropos unfolds a *volumen*.

[168] In this regard, my reading is closer to that of Feinblatt 1952.

[169] The globe sundial of Prosymna (second century BCE) is a remarkable example of the type, which includes the signs of the zodiac; see Schaldach 2016, 73–76, 3.8–10. I have encountered no evidence, however, that such sundials were common in Sicily and Italy during the second century CE.

[170] Evans 2016, 144. E.g., the Pompeian mosaic of the Seven Sages from the Villa of Titus Siminius Stephanus (first century BCE/CE). The sages sit around a cosmic globe, while a concave sundial rests on a pedestal behind them (ibid., 143ff., fig. 1.12). Also consider the globe borne by the Farnese Atlas (second century CE), Museo Archeologico Nazionale, Naples (no. 6374; ibid., fig. 4.2). Evans points out that globes were teaching

towards the first interpretation. The latter reading, however, also has some traction as there appears to be a tradition of picturing the Fates with sundials of the concave variety. The spherical shape undoubtedly indicates the instability and cyclical nature of human life, as suggested by Fortuna's globe or wheel.

However we interpret the globe imagery, it clearly points to the determination of the child's future based on time and attending celestial indicators. On the Uffizi sarcophagus (fig. 5.6), two Fates gesture to different points on the globe, with one holding a *volumen* in her left hand, perhaps indicating the corresponding time of death. On the Agrigento sarcophagus (fig. 5.5), which also features a panel with images of the deceased child at play (in a cart drawn by bill-goats, fig. 5.5b), the viewer is probably meant to contemplate the pleasant moments of the child's life, framed by the knowledge that his early death was "already determined at the hour of his birth," as Ewald and Zanker observe, "no one can escape the fate that was fixed for him from the very beginning."[171] It would seem that uncertainty about the time or manner of death only exists through human ignorance. There is no doubt that the Fates are bound up with the precise measurement of time, as indicated by their representation with concave sundials. A sarcophagus from Puteoli, for example, featuring scenes from the myth of Prometheus (c. 300 CE), shows a Fate engaging in the traditional activity of spinning (on the front of the sarcophagus), while on the left side, another points towards a sundial placed atop a

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tools in philosophy and astronomy. Leontius (date unknown) and Ptolemy (second century CE) describe how to set up a celestial globe; there are also two such ornamental globes, dating to around the second century CE, in Mainz and Paris (ibid., 148).

[171] Ewald and Zanker 2012, 61.

column.[172] In a relief from Ostia (c. 290–300 CE), also featuring scenes from the myth of Prometheus, the Fate Atropos (her name is etched to the lower right of her body in Roman letters) gestures to a point on a similar sundial.[173] Sundials evoke the transitory nature of life.[174]

The technological precision implied by these instruments speaks to the general preoccupation with time measurement surrounding the birth, a notion at the very heart of works such as Censorinus' *De die natali*, as well as the fascination and anxiety about astrological birth charts among Romans of the empire, from the top to the bottom of the social hierarchy.[175] As I demonstrated in the first part of this chapter, lunar time and the cycle of lunar months were key to Greeks' and Romans' understanding of pregnancy and easy birth, and the god who guarantees timely birth, Juno Lucina, was even understood by some to *be* the moon. The Fates' activity on these sarcophagi – with the globes and *volumina* – points to another preoccupation with time measurement, hinging on the amalgamation of *omina* and the astrological significance of a birth's timing.

These patterns of representing the Fates, exemplified by the biographical sarcophagi and funerary epigraphy, however, should not occlude the diversity of opinion regarding the significance of the horoscope and nativity, part of a larger ambivalence about astrology, despite its widespread popularity in the empire. Augustine's observes in

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[172] *LIMC* s.v. *Moirai*, no. 56. The sarcophagus is currently in the Museo Nazionale, Naples, no. 6704.
[173] *LIMC* s.v. *Moirai*, no. 57. The relief (c. 290–300 CE) is currently in the Vatican, Sala dei Busti.
[174] Evans 2016, 151ff.
[175] Barton 1994a, 40–49. Augustus, for example, used astrology to great effect, but also passed a law in 11 CE making it illegal to receive an astrological consultation in private or to inquire about another person's time of death (ibid., 42–43). On Censorinus, also see Argetsinger 1990; 1992.

The City of God that twins, though conceived at the same time and sharing a birthday, take different courses in life and suffer different illnesses, as do others born simultaneously but in different locations.[176] He urges the consideration of all the diverse aspects that affect a person's life and the formulation of a life course. Ambrose makes a similar point, calling attention to the messiness of birth and the impossibility of establishing when exactly it occurs, since it is a *process* or set of joined-up moments rather than a single, isolated event. He emphasizes the absurdity of the astrologer locating a precise 'moment' of birth – between all the flurry of activity, from examining the child to announcing its emergence, "how many moments (*atomi*) have passed by!"[177] Ambrose and Augustine's misgivings, while pointing to a more general distrust of astrology (by no means confined to Christian authors, but here carrying that particular flavor), still underscores just how much weight was placed on those first moments after a birth and the ambiguities of the process whereby a child acquires a future all its own.

Looking back to the Agrigento sarcophagus (fig. 5.5) and the scene of the boy's death, it is also possible that we should see the Fates, at this moment of the child's disentanglement from his mother and identity-formation, as signifying not only an explanation for misfortune but also an effort to diffuse blame. Here, views on the so-called 'eighth-month child' are especially useful.[178] While space does not permit a full exploration, let it suffice to say that there was a widespread belief throughout the Greco-

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[176] August., *De Civ. Dei* 5.2.

[177] Ambrose, *Hexameron* 4.4.14F: *inter effusionem et susceptionem depositionemque pignoris, fletum eius et nuntium quot atomi transierunt!* There is much of interest in this polemical passage (4.4.14), where Ambrose describes the midwife checking first the child's sex, and in those first moments, the astrologer enters the scene to cast the horoscope (My thanks to Jamie Kreiner for calling my attention to this passage). On the difficulties posed by the language of *susceptio* and *depositio,* see Shaw 2001.

[178] Hanson 1987.

Roman world that children born in the eighth month of gestation *always perished* for numerological and astrological reasons; children born in the seventh- and ninth month were thought to have a better chance at life.[179] This was not, however, a uniform belief.[180] The idea of the doomed eighth-month child could diffuse blame for a negative birth outcome, and as Hanson has argued, "the decision that [the child] was one of eight months moved infant and maternal death outside the realm of human intervention, a technique useful in a society which must often have confronted death in close conjunction with birth."[181] I want to suggest that we might see the Fates in a similar light: by cementing the child's fate from the moment of separation from the mother, the Moirai/Parcae offered an explanatory framework, rooted in a deterministic outlook, that leaves them with sole responsibility for untimely death.

We can also see explanations for the fragility of neonates through this lens – that certain *times* are inherently dangerous and/or especially meaningful. The period between the birth and *dies lustricus* was particularly important and carefully measured out, as suggested above in the discussion of Juno Lucina and birth ritual. The *dies lustricus* occurred on the eighth and ninth day after the birth and must have been a time when the fitness of the child was carefully observed, measured, and during which many children

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[179] Ancient astrology is notoriously complex. The notion of the eighth-month child – and the attendant astrological and numerological ideas around it – will be explored in depth in a future version of this study.

[180] Censorinus observes that there was not quite uniform agreement on the matter among revered physicians and philosophers: "…nearly everyone, following the opinion of Epicharmus, has said that a child cannot be born in the eighth month; Diocles of Carystus and Aristotle of Stagira felt otherwise" (*DN* 7.6, trans., Parker 2007). The widespread popularity of this idea, however, is embodied by *P. Fouad*. 1.75, in which a woman explains her sister's death as the result of her birth of an eighth-month child (also dead; see Hanson 1987, 601, for a discussion). The eighth-month child appears in many texts, and there is a Hippocratic treatise devoted to the problem.

[181] Hanson 1987, 601.

surely perished, and some were exposed. This period provided a stopgap before granting the child membership in a kinship network through the act of naming.[182] Many authors, including Lucretius, Pliny, and Plutarch, remark upon the fragility of neonates; Plutarch, in a discussion of the length of time between birth and the *dies lustricus* – and the reasons for its variance by sex – discusses precisely the dangers of the child's seventh day of life out of the womb:

> γὰρ ἑβδόμη σφαλερὰ τοῖς νεογνοῖς πρός τε τἄλλα καὶ τὸν ὀμφαλόν· ἑβδομαῖος γὰρ ἀπολύεται τοῖς πλείστοις· ἕως δ᾽ἀπολυθῇ, φυτῷ μᾶλλον ἢ ζῴῳ προσέοικε τὸ νήπιον. (*Quaest. Rom.,* 288c)
>
> But the seventh day is perilous for newborns for various reasons, including the umbilicus; since for many, it falls off on the eighth day; until it falls off, the infant resembles a plant more than an animal (*zōon*).

Plutarch goes on to offer various numerological reasons for the difference in practice for boys and girls, including the notion that odd numbers are more "generative" (hence nine days for boys), since an odd number added to an even always yields an odd.[183] The duration granted to boys also corresponds to the length of time between nundinal days, special market days in the Roman world.[184] This connection is observed by Macrobius (*Sat*. 1.36) in a discussion of *nundinae* (*Sat*. 1.36).[185] By inscribing

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[182] Cf. King 2000 on the epigraphic record of commemorating infant death. There is a rich bibliography on infant exposure, see, for example, Pomeroy 1986; Harris 1994; Shaw 2001; Corbier 2001; Grubbs 2013.

[183] One wonders how this interpretation would incorporate the fact that two odds add up to an even.

[184] On the *nundinae*, see Ker 2010, especially 367–68, where he observes that the *nundinae* were viewed through their "cyclical aspect," and through the contrast between intranundinal days and *nundinae*.

[185] Interestingly enough, several recent medical studies have suggested that male infants are more fragile at birth, based on factors such as birth weight, APGAR score, respiratory distress and resuscitation, and stillbirth. While ancient and modern comparison of this sort are profoundly treacherous, this kind of reasoning might offer some insight into why boys were given slightly more time before naming. See, for example, Dunn *et al*. 2015.

neonatal fragility in this numerological framework, we can see how the construction of these first days of life also diminish the stigma of responsibility for those involved, should a newborn die before the naming day.

Plutarch observes the instability of a neonate, more plant- than animal-like, but also calls attention to the meaningful and polyvalent demarcation of events surrounding the birth of a child. This highly regulated (and measured) period of time between the birth and *dies lustricus* fits into the bigger picture of activities surrounding a birth, which, as I have shown, was also understood to be the time when the individual's life course was determined. While birth and its immediate aftermath were a time of enormous uncertainty as to the neonate's fitness and longevity – not to speak of birth's risks for the mother's health – it was also a highly fraught, symbolically meaningful, and determinative period. The attention to measurement, speaking, and recording attests to a desire to qualify and quantify what was, in essence, a time of the most radical uncertainty in a human's life, and to embed it in a deterministic framework. Recourse to determinism – from horoscopes to the Fates – also provided opportunities to shift and diffuse blame as the child faces new risks in the outside world.

II.2. *Carmentis and the Carmentes*

The deterministic outlook the Fates embody may be closely bound up with prophecy, which I want to address because of its importance for conceptualizing and shaping potential futures. Carmentis, mythical prophet/nymph/deity in the Roman

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Based on data collected from primiparous women with singleton babies (at term), they conclude, "This large cohort study demonstrates term, appropriately grown male babies fare more poorly in the intrapartum and neonatal period compared to female babies, though the underlying contributing physiology is not thoroughly established."

antiquarian tradition, proliferates into a group of two or three Carmentes – goddesses of birth and prophecy – and analogues, of sorts, for the Fates. While a study of the Fates reveals how they are implicated in birth and time, the Carmentes speak to the entanglement of prophecy, birth, and space. By space I refer to the neonate's position at birth (cephalic, podalic) and the passage of the child from the interior of the mother's body to the exterior world.

Carmentis and the Carmentes are defined by fate-speech.[186] In Virgil's *Aeneid*, Carmentis is a nymph and mother of Evander, she is a *vates* who prophesies the greatness of Rome. Evander points out her altar and the *porta Carmentalis*, a double gate in the Servian wall at the southern end of the Capitoline, named for his mother, as he leads Aeneas on his guided tour of the once and future Rome in *Aeneid* 8.[187] The altar is "an ancient honor of the nymph Carmentis, prophetic seer (*vates fatidica*), who was the first to sing of the great sons of Aeneas and noble Pallanteum."[188] Servius provides a gloss, explaining that Carmentis was a prophetess or future-teller (*vates*), a *vaticinatrix*, and that in the old days (*antique*), *vates* were called *carmentes*, "for which reason the scribes (*librarii*) who wrote down their words were known as *carmentarii*."[189] This explanation

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[186] Varro, *Ling*. 6.7.52 (discussed above, pp. 379–80). Carmentis receives extensive treatment in Habinek 2005, especially 220–233. Also see Guittard 2009.

[187] The shrine of Carmentis was located just inside the Porta Carmentalis. It stood to the right of the gates as one left the city, although no trace of an edifice has been detected (Richardson 1992, 301). Several authors refer to the spot: Festus refers to it as the *sacellum Carmentae* (450 Lindsay), Solinus mentions the *Carmentis fanum* (1.13). On the gates and their relationship to the triumph, see Beard 2009, 98ff.

[188] *Aen*. 339–41: *nymphae priscum Carmentis honorem, / vatis fatidicae, cecinit quae prima futuros / Aeneadas magnos et nobile Pallanteum*.

[189] Serv., *Aen*. 8.336: *…nam antique vates carmentes dicebantur, unde etiam librarios qui eorum dicta perscriberent, carmentarios nuncupatos*. In the *Aeneid*, she fortells Rome's greatness; At Ov., *Fast*. 1.471ff., she is also the mother of Evander. Takács 2008, 31; 154, n. 30.

combines the themes of verbal pronouncement with recording/writing that emerged in the previous section.[190]

Plutarch provides four important pieces of information about Carmentis, two of which are in the form of etymologies that appear elsewhere in the literary tradition: (1) she is related to/associated with Evander; (2) she is a generation/birth goddess and a Fate (*Moira*); (3) she is a seer, and her name comes from the word for song/verse, *carmen*;[191] or (4) Carmenta means "bereft of mind," from *carere* ("to lack") plus *mens* ("mind"), recalling Varro's connection between *vaticinari* and *vesana mente*.[192] Essentially, Carmentis is connected to the concept of 'fate' – indeed, some considered Carmentis herself to be a Fate.

Both Ovid and Servius describe Carmentis as accompanied by two sisters or companions, Porrima and Postverta. This grouping seems to generate her plural identity, the Carmentes. Servius explains, "Some say that her companions (*comites*) are Porrima and Postverta, because both the past and future (*praeterita et futura*) are known to

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[190] It is worth noting that a *vates* may also have subversive associations, perhaps more akin to a Greek *mantis* or magician. This notion is typified by Livy's description of the Bacchanalian affair of 186 BCE, in which the adherents of the new and subversive cult behave wildly – tossing their bodies around and singing "like *vates*" (*cum iactatione fanatica corporis vaticinari*, 39.16.8). Essentially, a *vates* may embody foreign and subversive behavior, operating outside of Roman tradition and *mores*. Cf. Habinek 2005, 227; Graf 2003, 49.

[191] Plutarch repeats this etymology at *Mor*. 278c.

[192] Plutarch uses the alternate name for her, Carmenta: "This Carmenta is thought by some to be a Fate (*Moira*) presiding over human generation/birth (*genesis*), and for this reason she is honored by mothers. Others, however, say that the wife of Evander the Arcadian, who was a prophet and inspired to utter oracles in verse, was therefore surnamed Carmenta, since *carmina* is their word for verses, her own proper name being Nicostrate. As to her own name there is general agreement, but some more probably interpret Carmenta as meaning bereft of mind, because of her ecstasies under inspiration, since *carere* is the Roman word for to be bereft, and *mens* for mind" (*Life of Romulus* 21.2–3; adapted from Perrin, trans., 1914). Plutarch repeats this etymology at *Mor*. 278c.

vates."[193] This is highly reminiscent of a characterization supplied by Ovid, which comes in an antiquarian passage on the rites of the Carmentalia, the festival associated with Carmentis.[194] We do not know a great deal about this festival, though it appears in numerous *fasti*; from a few inscriptions, including one recently unearthed at Gabii, it is clear that there was a priesthood associated with Carmentis/Carmentalia, held by eminent equestrians, and it appears to have existed in the republican and imperial periods.[195] By way of encouraging his readers to attend the festival's rites, Ovid offers up the following explanation:

> *siquis amas veteres ritus, adsiste precanti:*
> *nomina percipies non tibi nota prius.*
> *Porrima placatur Postvertaque, sive sorores*
> *sive fugae comites, Maenali diva, tuae:*
> *altera, quod porro fuerat, cecinisse putatur,*
> *altera, venturum postmodo quicquid erat*. (*Fast*. 1.631–636)
>
> If you love ancient rites, attend the prayers:
> you will hear names you have never heard before.
> Porrima is placated, and Postverta, either your sisters

[193] Serv., *Aen*. 8.336.

[194] The first day of the Carmentalia in the *Fasti Praenestini* is reconstructed as follows (Degrassi 1963, 113): *Karm(entalia) [np] / … [Carmentis partus curat omniaque] / [f]utura ob quam ca[ussam in aede eius cavetur ab scorteis omnique] / omine morticino* ("Carmentalia, *NP*, Carmentis attends to births and everything that is about to be, for which reason her temple is free from leather and every sign of death").

[195] My thanks to Andrew Johnston for sharing with me this new inscription from Gabii. An altar from Rome, likely dating to the early second century CE, attests to the priesthood, *CIL* VI, 3720 = *ILS* 1418 (Rome): *Soli Lunae / Apollini / Dianae / Ti(berius) Claudius / Pollio / proc(urator) Aug(usti) / XX hereditatium / proc(urator) Alpium / Graiarum / flamen Carmentalis / praef(ectus) gentium in Africa / praef(ectus) alae Flaviae milliari[ae]*. As Johnston notes, this is most likely the Pollio whom the younger Pliny recommends to Cornutus (*Ep*. 8.21, c. 107 CE). With less certainty, one might also include a funerary inscription, *CIL* VI, 41272 = *ILS* 9011, from Rome (*T(ito) Statilio / Optato p[raef(ecto) ann(onae)] / proc(uratori) Aug(usti) a [rationibus] / flamini C[armentali]*…). Cicero mentions the priesthood at *Brut*. 56, with reference to M. Popilius Laenas, who apparently held the priesthood the same year he was consul.

or companions in exile, Maenalian[196] goddess:
one is thought to have sung what happened in the past,
the other, whatever was about to come in the future.

In the context of Carmentis' prophetic associations, the pairing of past and present (in the form of Porrima and Postverta) provocatively suggests that prophecy may be as much about history as it is about the future. Macrobius echoes Ovid's characterization of the goddesses, whom he calls Antevorta and Postvorta, literally "turned before" and "turned after," describing them as "most fitting" (*aptissimae*) companions of Janus, whose double faces looked backwards and forwards, into the future and the past (*Sat*. 20). Despite Macrobius' omission of Carmentis, the association with Janus makes sense on a number of levels, not least of all because the Carmentalia took place in January, Janus' month.

Ovid imagines Carmentis as part of a trio with the power to understand the past and future. While there is not a direct equivalency, the triple identity of Carmentis, Porrima, and Postverta, paired with the power of prophesy, suggests an association with the Fates. Their association is evinced by Plutarch's assertion that some consider Carmentis to be a Fate, but the relationship is deepened by the notion that she comes in a group of three. This configuration – and the relationship to song – is reminiscent of the passage from Plato's *Republic* quoted above, "Lachesis [singing] the things that were, Clotho the things that are, and Atropos the things that are to be" (*Rep*. 617c).

Carmentis' prophetic identity becomes even more complicated by other testimonia regarding the Carmentes. Gellius, quoting Varro, claims there are *two* Carmentes, rather than three, called Prorsa and Postverta, no doubt variants of Porrima

[196] The Maenalian goddess is Carmentis. Maenalus is an Arcadian mountain, recalling her Arcadian origins.

and Postverta (there is no mention of a singular Carmentis).[197] This is reminiscent of Roman iconographic flexibility in depicting two or three Fates, as seen above. According to Varro, the names Prorsa and Postverta derive from the cephalic and podalic presentation of infants at birth, and the two Carmentes were worshipped in Rome in order to protect women against the dangers of breech births. "Backwards" and "forwards," according to Varro's definition, have a very corporeal set of associations. It is worth quoting Gellius' passage in full:

> *Quorum in nascendo non caput, sed pedes primi extiterant, qui partus difficillimus aegerrimusque habetur, "Agrippae" appellati, vocabulo ab aegritudine et pedibus conficto. Esse autem pueros in utero Varro dicit capite infimo nixos, sursum pedibus elatis, non ut hominis natura est, sed ut arboris. Nam pedes cruraque arboris ramos appellat, caput stirpem atque caudicem. "Quando igitur," inquit, "contra naturam forte conversi in pedes, brachiis plerumque diductis, retineri solent, aegriusque tunc mulieres enituntur, huius periculi deprecandi gratia arae statutae sunt Romae duabus Carmentibus, quarum altera 'Postverta' cognominatast, 'Prorsa' altera, a recti perversique partus et potestate et nomine."* (*NA* 16.16)
>
> Of those who are born feet first rather than head first, and whose births are very difficult and painful, they are called "Agrippa," from the word for "difficulty" (*aegritudo*) and "feet" (*pedes*). Furthermore, Varro says that children born with their heads lowest and feet raised upwards are not in accordance with human nature, but that of trees. For he calls feet and legs "tree branches," the head "stalk" and "trunk." "Therefore," he says, "those that are turned feet first, contrary to nature (*contra naturam*), often with their arms extended, are usually held back [in the womb], and then women labor with difficulty; for the sake of protecting against this danger there are altars erected at Rome for the two Carmentes, one is called "Postverta" and the other, "Prorsa," from the words for birth the right and the wrong way (*recti perversique partus…nomine*) and from [the goddesses'] power.

Varro's two Carmentes are less about prophecy and more about the very moment of birth and its attendant dangers (*pericula*), especially the danger of breech birth. Propitiating the

[197] They are discussed at length by Tels-de Jong 1959.

two Carmentes is a way to protect against these *pericula*, protecting mother and child from a birth "against nature," *contra naturam*.

If we pair Varro's characterization with Servius and Ovid's, we see that Prorsa/Porrima sings of the past and also represents cephalic, and therefore, "natural" birth, while Postverta is identified with the future and breech birth, and is thus "unnatural." While I hesitate to suggest that any of our authors deliberately equates the future with the "unnatural," painful, and dangerous, I do think these definitions and their pairings represent a provocative confluence of ideas. The association of future-telling and breech birth, an "unnatural" configuration, as well its attendant ominous connotations, suggests a pessimistic view of the future.[198] The corollary of this arrangement is a valorization of the past, of the "natural." These associations present a very corporealized understanding of past and future, embodied by the presentation of a fetus, which is both the product of its own family history and uterine environment, as well as an incarnation of a new generation.

There is a further wrinkle in Varro's definition. To be in accordance with "nature" during gestation and birth, in Varro's view, is not to conform to "human nature" (*hominis natura*) – which would suggest coming feet first (as in with feet on the ground) – but rather to "tree nature" (*natura…arboris*), that is, head first, the legs equivalent to branches. This idea is a product of a long Greco-Roman tradition, explored at length in chapter two, in which the development of fetal life was understood through plant life, also reminiscent of Plutarch's description of a neonate as plant-like. Indeed, vegetal analogies were a primary

[198] Plin., *HN* 7.45; "Agrippa" and birth-omens are discussed further below.

means by which physicians and philosophers described the development of fetal life, especially the means by which they draw nutriment to themselves.[199]

In the quotation from Varro, the analogy is used to make a statement about "natural" childbirth rather than fetal nourishment (and related ontological claims). Startlingly, the process of bringing a human to birth *naturally* – and therefore, safely – means adhering to a *non-human* nature. At this vital moment of becoming, at it were, human nature actually imperils the chances of new life. Varro's "natural" birth should remind us of the notion, advanced above, that childbearing and female bodies have a particularly close and unique relationship to the non-human environment, and in this case, non-human natures. In figs. 5.5c and 5.6, it is worth noting that the children are drawn from the bath in an upright position, feet pointing towards the ground, perhaps gesturing towards the child's transition to a *human* existence demarcated by the *dies lustricus*.

The relationship between the two approaches to Prorsa/Porrima and Postverta – prophecy and fetal position – also begs the question: were there particular associations between the manner of birth and a child's destiny? According to Pliny the Elder, the answer is yes, and Marcus Agrippa is his primary example. Like Varro, he begins by explaining that the name Agrippa is given to those unlucky products of breech births, born "unnaturally" (*contra naturam*) and with difficulty (*eos appellavere Agrippas ut aegre partos*, *HN* 7.45). Individuals born from breech births, Pliny asserts, are singularly

[199] These issues are discussed at length in chapter two. Aristotle describes fetuses clinging to a uterus with the language of plant's adherence to the earth through their roots (*Gen. An.* 745b24–26). Galen, who adheres to a gradualist view of fetal development, also employs the analogy extensively. See for example, Gal. *Sem.* II, 4.34–35 = *CMG* 5.3.1, 178.8–15 = 4.625K. Porphyry argues for infants' ensoulment at birth, but also employs extended vegetal analogies in the *Ad Gaurum* (e.g., 3.2), which feature in his promotion of a particular interpretation of heredity.

unlucky, and Marcus Agrippa is one of the only such examples who achieved success, although his various hardships attest to the misfortunes of people born with such difficulty. Indeed, the difficulty of Agrippa's birth – its danger, its unnaturalness – is linked to a whole range of future misfortunes, which reverberate through several generations.

Breech birth is inherently unnatural because it mixes up birth and death. Pliny explains, "It is nature's custom that humans are born head first, and traditionally carried out feet first [after death]" (*Ritus naturae capite hominem gigni, mos est pedibus efferri*, *HN* 7.46).[200] He connects the difficulty of Agrippa's own passage into the world with the destruction wrought by his grandsons, Caligula and Nero, "firebrands of the human race" (*faces generis humani*, *HN* 7.45). Indeed, Pliny reports that Nero too was breech, citing Agrippina's memoirs.[201] For Roman readers, Pliny's reference to Nero's birth would most likely have evoked descriptions of Agrippina's murder at his behest, vividly narrated by Tacitus (*Ann*. 14.8): as the centurion drew his blade to strike the first blow, she cried out, '*ventrem feri*' ("strike my womb").[202]

Connecting Agrippina's death to her son's breech birth, as Pliny's passage implies, suggests both the unnaturalness of Nero's relationship to his mother (they were even rumored to have committed incest), and the notion that his own ominous birth was in fact a harbinger of matricide.[203] In a sense, Nero's birth *did* kill his mother, it just took

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[200] On these lines, see Beagon 2005, 200–1.
[201] Plin., *HN* 7.46: *Neronem quoque paulo ante principem et toto principatu suo hostem generis humani pedibus genitum scribit parens eius Agrippina…* ("According to his mother Agrippina's memoirs, Nero was born feet first, *princeps* a little while ago and enemy of humankind throughout his reign").
[202] Cf. Suet., *Ner*. 34.
[203] See Beagon 2005, 199–200. She observes, "Nero's breech birth probably encouraged

twenty-two years. Dangerous birth, and the very position of a child in the womb, may be bound up with the fate of a whole empire. Birth, then, can be a prophecy in itself. These details indicate a close relationship between the manner of birth and a child, family, and empire's destiny. Position at birth, like its timing, is connected to a broader set of past and future events, and these ideas are embodied by the goddesses who are summoned for aid and who determine one's future.

Conclusion: Shaping and Accepting Destiny

In the minds of our actors, an individual's birth and death are both written in the stars – and on the Fates' scroll. Life is like a thread that is woven into a tapestry, a *volumen* in a library, or record filed away in a cosmic *tabularium*. It is also vulnerable to highs and lows that are difficult to anticipate. The technology of everyday life and perceptions of the terrestrial and celestial landscape shaped Romans' understanding of the ways birth was tied in to other aspects of the life course and how these aspects were determined. The knowledge acquired from tracking cycles of generation or marking the date and time of birth gained meaning through deities governing these activities, who both embodied them and engaged in their measurement. These deities might also serve to shift and diffuse blame in the aftermath of a birth when something went terribly wrong.

In the first part of this chapter, I showed how female generative time was thought to be affected by the lunar cycle, and that Juno Lucina, in turn, both *was* the moon and personified its effects on procreation and more specifically, childbirth. These effects

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negative interpretations in later writers, especially when the murder of Agrippina herself by her own son gave an additional ironic twist to the knowledge that his mode of delivery had been a difficult and dangerous one for his mother."

resonate with medical descriptions of childbirth, which required a loosening of the body and was commonly believed to open up its passageways. In addition to the moon's effects on the specific process of birthing, its waxing and waning also provides an apt visual metaphor for the female body during pregnancy, which itself expands until birth and diminishes in the postpartum period. More generally, the moon's revolutions also suggest the human life cycle.

Juno Lucina was not simply a product of poetic imagination. She has left a varied and complex footprint in sources from Rome and beyond, attesting to her importance in Romans' quest to ensure and account for birth outcomes. We encountered fathers and mothers engaging with the goddess through a variety of means in order to cultivate and maintain her support. Juno Lucina's iconography evokes her polyvalent connection to light, which itself links her to the moon, as well as providing a symbolic manifestation of her salvific power to bring children "into the light," *in lucem*. This process began with birth and the risks circulating around the maternal body, but extended into the following days leading to the *dies lustricus*, involving the community's collective agency in creating the optimal conditions for a child's flourishing.

The Fates and Carmentes offer a different but interlocking perspective on the events surrounding birth. Like Juno Lucina, they were associated with the child's emergence, specifically, its date, time, and position. Everyone is subject to the Fates, and birth (or more expansively, the period between birth and the *dies lustricus*), as the process whereby one body becomes two, constituted the process in which the child's destiny was established as separate and unique. Fates of the Latin-speaking world (and their offshoot, the Carmentes) were the product of an assimilation of the Hellenic model, as well as an

adaptation of it, supplementing or replacing their depiction as spinners by picturing them with *volumina*, globes, and sundials. They become the interpreters and scribes of destiny, embodying a deterministic outlook on the human life course, which coalesces and is chronicled at birth. Funerary epigraphy and iconography offer us a clear picture of this outlook, where the Fates are seen to fix the life span at birth. Their presence in first bath scenes valorizes their connection to the birth (and its extension, the *dies lustricus*) and emphasizes the importance of the process in the figuration of the rest of an individual's life. The Fates, finally, insofar as they offered an explanation for untimely death (*Fata invida* and so forth), may also have helped to diffuse blame.

Combining our evidence for the rituals leading up to and including the *dies lustricus*, we can discern the Fates participating in a highly symbolic and structured series of events that mark the neonate's transition from the darkness into the light (thanks to Juno Lucina). Plutarch compares the child to a plant before the umbilical stump falls off around the seventh day, suggesting that the *dies lustricus* may also coincide with the transition from a plant- to animal-like stage of existence. The attention to measurement, speaking, and recording that we find in the literary, epigraphic, and iconographic sources on the Fates, presents a picture of precision and control that contrasts with the radical uncertainty of the perinatal period for both mother and child. These associations, in addition to the series of ritualized activities surrounding a child's birth, gave shape and structure to a time of instability and uncertainty by tying aspects of the birth into the broader framework of the life course.

The Romans treated Juno Lucina very differently from the Fates. Their divergent treatment demonstrates the complex interplay and layering of human agency and

determinism in people's perceptions of birth and its attending circumstances. While the Elder Pliny claims that statues to the Tria Fata stood in the Forum (*HN* 34.22) – nearly the oldest in the city – there is little evidence of cultic activity in their honor during the period covered in this chapter, despite their important role in funerary epigraphy and iconography, especially in explanations for untimely death, *Fata invida*.[204] While revered for their power, they were also the objects of a great deal of blame. Juno Lucina, by contrast, was the recipient of dedicatory inscriptions, vows, altars, shrines, and temples. It was an individual's prerogative to communicate with deities through a variety of means, seeking help and protection in pursuit of a desired outcome. The Fates, alternatively, appear inexorable and uncompromising, as suggested by Servius' etymology for Parcae, from the verb *parcere* (to spare), "because they spare no one."[205] By examining the activities and symbolism around birth through Juno Lucina, the Fates, and Carmentes, we perceive complementary and contradictory attitudes towards individuals' ability to shape their destiny – how one might attempt to understand and manage life's uncertainties in a universe where anything may be a sign, simply one node in a vast, unknowable cosmic web.

[204] On the Tria Fata, see Richardson 1992, 400. On the Parcae, de Angeli points out (*LIMC* s.v. *Moirai*, p .638): "A tale ruolo delle P[arcae], all'interno dell'immaginario religioso romano, corrisponde di fatto una quasi totale mancanza di testimonianze di culto in loro honore."

[205] Serv. *Aen*. 1.22: … *dictae sunt Parcae* κατὰ ἀντίφρασιν*, quod nulli parcant*… ("They are called the Parcae according to *antiphrasis*, because they spare no one").

Conclusion

Situating Birth Risk

Why do humans take risks? We often do so in order to gain something for ourselves or others, or to avoid a potential loss. Sometimes we have no choice in the matter – some risks are inherent to the fabric of our lives and identities. This was true of birth risk for Roman women, as it is for many women globally and trans-historically. I have tried to break down how the risks of generation and birth were constructed and understood in the Roman world – how they were embedded in and representative of overarching social structures and deeply engrained cultural norms. To undertake this task, Mary Douglas' cultural theory of risk has been essential. The risks of childbearing could be both deeply personal and profoundly public; they were not necessarily confined to the domestic or 'feminine' sphere, but were bound up with the anxieties of family, community, and empire building. They reflected views about the relationship between humans and the non-human environment, just as they were linked with efforts to survive and thrive in a world pulsing with unseen connections and hidden dangers.

Stepping back and surveying the big picture, we observe a society that put a premium on women's procreative capacities. The Roman world and its political masters were heavily pronatalist. Women, overall, were valued most highly for their fertility, upon which they relied in the face of demographic pressures and systematic oppression. We find the clearest instantiation of this pronatalist vision in imperial iconography, which put a great emphasis on *fecunditas*, particularly among women in the first family. Their ability to bear children was linked to – and exemplified – the overall success of the

empire. The wellbeing of the imperial family became metonymically linked to the wellbeing of the empire as a whole, in which the production of children was a central concern.[1] The landmark Julian laws, aimed primarily at elites and drawing on ideals that long predated Augustus' rule, extended state power into the household (and bedroom) in unprecedented ways. As a chorus of girls and boys sang at the secular games in 17 BCE, in a litany of hopes for the new golden age, "Goddess, may you produce young and bring success / to the decrees of the fathers about yoking / women and to the marriage law / for abundant new progeny."[2]

Given the intense focus on childbearing as the *telos* of a woman's life, many techniques were brought to bear in order to prepare the female body for procreation and enhance her offspring's chances at life. Female bodies were a site for the exercise of numerous forms of expertise and competition among different parties, each with its own interests and claims to authority. As I discussed in chapter one, a medically complicated birth had much in common with legally complicated births, when doctors, midwives, lawyers, and relatives crowded in together in collaboration or competition.[3] Birth was often an intensely social (and sometimes political) process with far-reaching consequences involving a highly variable network of participants. Outcomes were affected by cultural practices like cord-cutting and breast-feeding, as well as local disease ecologies. Whether contemplating birth on a micro-historical or demographic scale, we see that an almost endless number of human and non-human actors can pose risks and

[1] Hug 2014.
[2] Hor., *Carm. Saec.* 17–20.
[3] Hanson 1994.

affect outcomes. This notion perhaps finds its clearest articulation in the networked view of childbirth that I advanced in chapter four, drawing on actor-network theory.

In the introduction to this dissertation, I suggested we might fruitfully compare the webbed, invisible, overwhelming – and ultimately unquantifiable – risks of Beck's modern 'risk society' with the interconnected sympathetic cosmos of Greco-Roman antiquity. Perhaps it is because I have recently watched California wildfires burn through people's lives and biblical floodwaters engulf Houston, but as I conclude the dissertation, I am drawn back to Beck's vision and his descriptions of the proliferation of risks that pile up and tangle together in ways that elude the powers of technocrats, scientists, politicians, and corporations. Risks are the product of interconnections among humans, non-humans, and the environment, but they also reinforce and exist within hierarchies, where some bear the brunt of certain risks more than others.[4] Risks exist in a webbed configuration, but that metaphor should not let their hierarchical distribution elude us. I think this is as true in the present as in the past – just with different parameters, boundaries, and explanatory frameworks.

Behind the often fine-grained analysis of the studies that comprise this dissertation, there is always the shadow of the silent, demographic catastrophe of women spanning millennia, up to the present day, who experience unequal access to nutrition and other resources from the moment of their birth.[5] This absence can be obscured in the face of the rich and enigmatic evidence we have from antiquity, which occupies our attention

[4] This is also an important point to keep in mind given the flat ontology implied by actor-network theory.
[5] See chapter one, p. 53, n. 68.

and imagination. As we conclude, however, it is important to dwell again on this harsh reality and the vulnerability it entailed for half of the Roman population.

Whether free or enslaved, rich or poor, the risks of childbirth fell squarely on the shoulders of women. At the same time, I do not want to occlude the fact that women, on a sliding scale from the wealthy, freeborn widow to the slave, experienced highly variable degrees of autonomy as to the care of their physical bodies through access to food, medicine, leisure, and much else. The bodily risks of childbirth were exacerbated by the gendered, unequal distribution of resources, which, in turn, varied in accordance with social and economic status as well as cultural norms. Taking into account all this variability and diversity, there is no doubt that a relentless cycle of pregnancies, births, and deaths characterized the adult life of the vast majority of women across the empire. There was no other *normal*.

By shifting our perspective among different layers and stages of the birth process, we can also discern variations in the distribution of risk and uncertainty. Generation is, after all, a process of growth and transformation, and so the contours of risk shift over the course of the process. Pregnancy is a period when maternal and fetal bodies are entangled – when, as I argue in chapter three, the two may be perceived as having interests in common or in conflict ('maternal-fetal conflict'). The quick-birther amulets of chapter four might be seen through this lens: they can help a woman give birth with ease, aiding both her and her offspring; if misused, however, the amulets have the power to harm the female body by continuing to exert their pull on her internal organs after parturition. Birth can also be a dramatization of an underlying conflict between a woman and her fetus, in which both lives are on the line. We might recall Veturia's epitaph from chapter

one, in which her husband defined her life through her many births, implicitly revealing the ways childbearing both enhanced her status and undermined her wellbeing. This configuration not only affected the relationship between Veturia and her offspring, but also between Veturia and her husband.

During both pregnancy and birth, the risks circulate around and within the female body. Birth, as the process that creates two bodies from one, involves a disentangling of their joined-up risks, and, to a certain extent, a resolution of uncertainties about the infant. The emergence of the child, then, with its subsequent naming and acceptance (the *dies lustricus*) produces a kernel of certainty, represented most effectively by the Fates and their spinning or reading/writing imagery. Parturition is a process of separation and also a kind of *settling* in the life of the child, heretofore unseen.

Birth, however, also marks the beginning of a new period of uncertainty, when the child is exposed to a fresh, external world of risks. We might turn back to Lucretius' famous simile comparing a newborn child to a shipwrecked sailor. The infant wails "since life holds in store for him so much hardship" (5.227). The fragility of the neonate during this transition from the womb to outside world has been explored in a number of different ways in these pages. Landscape and waterscape analogies/metaphors were one valuable avenue for expressing and explaining this problem. With an implicitly proto-eugenic and pronatalist argument, Soranus argues that fragile, weak children are the result of women's failure to conform to (his) proper regimen. There were also strategies for diffusing blame, such as recourse to the 'eight-month' child explanation; the Fates, likewise, could serve a similar explanatory purpose.[6]

[6] See Hanson 1987 on the eight-month child explanation.

The transition from unseen to seen, dramatized so profoundly during birth itself, is a central theme throughout the dissertation, as is the (relatedly) tight relationship between the generative female body and the non-human environment. I have argued that the hidden processes of generation and gestation – as well as their risks – were frequently imagined through analogies and metaphors drawn from the non-human environment. Each chapter, in its own way, examines how Greeks and Romans worked to understand and mitigate risks – to make them approachable and, if possible, to overcome them. Locating birth risks in the internal environment of the female body – or in the body's interface with forces and objects in the external world – constitutes one important way this was accomplished. By describing and understanding procreative risks through familiar phenomena, they might become easier to understand, if not to mitigate. This is why metaphor and analogy play such a central role in this project: they were vital tools in my actors' efforts to understand and visualize forces that were both unseen and formidable. The deities examined in chapter five, as vehicles for explaining procreative success or failure, exemplify the lived reality of this dilemma and efforts to address it.

At its core, my hope is that the project has made headway in exploring what Donna Haraway calls "situated knowledges." Drawing on the metaphor of vision, she has advocated for a feminist 'objectivity' based in investigations "from another's point of view," emphasizing that all perspectives are *partial*, "there are only highly specific visual possibilities, each with a wonderfully detailed, active, partial way of organizing worlds."[7] She calls for "elaborate specificity" and "loving care" in the effort to see from alternative

[7] Haraway 1988, 583. She begins, "I would like to proceed by placing metaphorical reliance on a much maligned sensory system in feminist discourse: vision" (ibid., 581).

perspectives, whether human or non-human.[8] Haraway's metaphor is a helpful way to frame the various attempts to *see into* female bodies, to materialize and embody risks, that are at the core of this dissertation.

This brings me to the topic of embodiment and my argument, in chapter two, that representations of imperial Fortuna should encourage us to think about risk as *gendered*.[9] Fortuna dramatizes the relationship between the female generative body and gain and loss in the environment, exemplified by her cornucopia and the rudder, among other such accouterments. I have argued that we have much to learn from examining Fortuna as an incarnation of embodied and environmental risk.

But what does it mean for risk to be gendered? Feminist scholars have long observed the marked status of females and other 'others' in relation to an unmarked male perspective (or gaze) in western culture.[10] The universalizing, authoritative tone of Soranus' *Gynecology* typifies this kind of disembodiment. Throughout this project, I have dwelled on efforts (in overwhelmingly male sources) to pin down birth risks and their causes, since the forces imagined to harm fetal life, were, for the most part, so elusive. Risk, in its labile nature, resists a fixed positioning. As I have shown, a great deal of effort went into imagining, visualizing, and explaining why things go wrong. These efforts constitute an *embodiment* of risk – attempts to render the immaterial, material. "[I]mmateriality can only be expressed through materiality," to use Miller's phrase.[11]

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[8] Haraway 1988, 583.
[9] On embodiment in antiquity writ large, see Holmes 2017.
[10] Haraway 1988 is addressing precisely this configuration by arguing for objectivity from an embodied, partial, *situated* perspective.
[11] Miller 2005, 28.

In the deeply patriarchal Roman world, the project of embodying and personifying something so disembodied as chance and precarity seems, precisely, to call for a female body. It is no coincidence that Fortuna was female, appearing in her matronly, divine female form. Indeed, as the deity who personified chance and bore on her person symbols of fertility, success, and power, as well as their subversion, Fortuna constituted, in the most obvious sense, efforts to *embody risk*.

Anxiety about Fortuna's femaleness, I should add, has been enduring and certainly transcends her Greco-Roman instantiations. In light of the above arguments, I was recently struck by a dark passage from *The Prince*, where Machiavelli recommends that men seeking power proceed with boldness "because Fortune is a woman (perche' la fortuna è donna), and if you want to keep her under it is necessary to beat her and force her down (batterla e urtarla)."[12] As he draws on classical sources to argue his point (alluding to the famous Latin proverb, *fortis fortuna adiuvat*), Machiavelli seems to transform Fortuna into a wife or domestic whom men must periodically beat into submission.[13] It is precisely her feminine embodiment that provokes the author's call for violence.

The complexity and enigmatic nature of Fortuna in the Roman world relate to a broader set of cultural issues that, in my view, make the study of generation and birth – and especially birth risk – so worthwhile and challenging. In this regard, Fortuna's globe is a useful figure. Fortuna is sometimes described as balancing on a sphere, a sign of her tenuousness. Pseudo-Cebes, for instance, emphasizes her precarity by placing her on a "spherical rock" (λίθος στρογγύλος), as opposed to a "square rock," which represents

[12] Trans., Bondanella 2005.
[13] Ter., *Phorm*. 203. On gender in Machiavelli, see Pitkin 1999.

true *paideia*.[14] Spheres and globes are also associated with time, life, and destiny, as chapter five made clear. In Hellenistic culture, they were symbols of astronomical learning, and under the Roman empire, came to symbolize power – Roman control over the *orbis terrarum*. Accordingly, Fortuna's rudder often rests on a globe.[15] In a range of different ways, spheres and globes tie human concerns into a cosmic order.

Depending on one's perspective or situation, Fortuna's relationship to the globe – and the globe's significance – will shift. Globes are symbols and sources of power and prestige, but they are also inherently unsteady. By balancing on a sphere, Fortuna suggests the tenuousness of being 'on top of the world'. Like birth, the globe is, at its essence, polyvalent and precarious, symbolizing something universal while reinforcing the importance of specific *situations* for meaning and understanding. When it comes to interpretation, historical or otherwise, it always matters who you are, where you are, and how you see the world. Giving birth is as universal as it is particular, entirely specific in its meaning in an infinite number of ways.

[14] Ps.-Cebes 7. See Fitzgerald and White 1983, 141, n. 27; *LIMC* s.v. *Fortuna*, fig. 158a.
[15] A fine example is the Braccio Nuovo Fortuna (second century CE) in the Vatican (no. 2244); Lichocka 1997, fig. 330.

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