

## ABSTRACT

SULLIVAN, VANESSA ANNE. Increasing Fertility in the Roman Late Republic and Early Empire. (Under the direction of Dr. S. Thomas Parker).

During the late Republic and early Empire, many Roman citizens emphasized their personal fertility and were concerned with increasing the citizen birthrate. The continuation of individual families, as well as the security of the Roman state and economy relied upon the existence of a stable population. Literary, medical, documentary and legal sources show a variety of political and social means that were employed by men and women of all classes to promote fertility. These means included legislation as well as an emphasis on the non-use of abortion. Medicine also played a role in increasing conception rates, through the involvement of physicians and reliance upon folk medicine. This research shows the critical importance of motherhood to Roman society during this period, and raises questions about the impact that the desire for fertility had upon Roman society.

Increasing Fertility in the Roman Late Republic and Early Empire

by  
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## DEDICATION

To my dear ones.

## BIOGRAPHY

Vanessa A. Sullivan became fascinated with Ancient Rome at an early age while growing up in Raleigh, North Carolina. She moved to the mountains to attend UNC-Asheville in 2002 where her Classics major and Women's Studies minor joined together to instill a love for the study of ancient women and medicine. After graduating with a B.A. from UNC-Asheville, she returned to Raleigh for an M.A. in History from North Carolina State University. After graduation, she plans to continue her studies in ancient medicine while pursuing a Ph.D.

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## LIST OF ABBREVIATIONS

OCD      *Oxford Classical Dictionary*

## INTRODUCTION

The Romans emphasized fertility and the critical importance of motherhood, even though many modern scholars of ancient Rome have focused on infanticide. My study finds that Roman men and women, from the late Republic to the early Empire, used various means to generate children. Concerns about fertility were not confined to upper class males, but reached to women and the lower classes. Many Romans were aware that the security of their persons, their families, and their city or empire rested on a sustained population for the economy and protection from enemies. Some Romans were also concerned about fertility in relation to their personal happiness. In pursuing an increase in fertility rates, men had recourse to political and legal methods, while both men and women relied on medical knowledge. Political and social legislation targeted all classes, and women were subject to public policy alongside men.

In analyzing the methods of increasing fertility in Roman society, I will first look at the ancient sources available in order to understand the ancients' attitudes about fertility. Then, I will move onto legislation proposed by Roman politicians. Such legislation dealt with land reform and the food supply, as well as marital arrangements and child bearing. Varied literary authors attempted to discourage the use of contraception and abortion, and many elite Romans expected legislation to do the same. Next, I will turn to medicine and discuss the ways in which Roman physicians attempted to increase conception rates by regulating sex. Its timing within the menstrual cycle and its frequency were scheduled and the physical and emotional state of the partners were monitored. Folk medicine also played a role in

increasing fertility rates, and such methods were widely distributed across the empire in literary and medical texts. These discussions will show the determined attempts of ancient Romans to increase their fertility, during the late Republic and early Empire.

This work is situated within a wider structure of Roman demographic history. Karl Beloch, in his work on demography *Die Bevölkerung der griechisch-römischen Welt* (1937), analyzed census records and archeological evidence using new scientific and statistical methods. Further advances in the field came in 1955, when Arthur Boak published his work *Manpower Shortage and the Fall of the Roman Empire in the West*. Using the methods of comparative history, he compared Rome's population with that of medieval England and modern China. J. C. Russell, in *Late Ancient and Medieval Population* (1958), used published census data about small populations within the empire to model the size of the wider Roman population; other cultures, such as medieval England, were used as comparative models. In 1966, Keith Hopkins reviewed and noted the biases and irregularities in the evidence used by previous scholars, in his article "On the Probable Age Structure of the Roman Population." After discounting epigraphic evidence due to the biases of selective commemoration, he introduced the use of UN model life tables for calculating the probable demographics of the Roman population. P.A. Brunt's *Italian Manpower* (1971) returned to the (updated) methodologies of Beloch and analyzed a wide range of sources, compiling what has become a sort of statistical reference work for ancient historians.

Roger Bagnall and Bruce Frier again returned to the use of comparative history in *Demography of Roman Egypt* (1994), using newly developed demographic statistical techniques and newly available census records. Walter Scheidel in *Measuring Sex, Age and*

*Death in the Roman Empire* (1996) also compared Roman society with other cultures, but did so in order to find whether demographic patterns were environmentally or culturally based. Tim Parkin's work *Roman Demography and Society* (1994) surveyed the previous methodologies and the available evidence, and found that the sources did not hold up to a rigorous scientific analysis, and so could not be used as the foundation of statistical studies. He suggested searching for general demographic trends rather than statistical certainties.

Scholarship relating to the ancient birth rate has often focused on infanticide or herbal birth controls. The statistical frequency of infanticide and a possible preference for male children are debated. In 1980, Donald Engels, in his article "The Problem of Female Infanticide in the Greco-Roman World," dismissed the possibility of widespread female infanticide. By his calculations, a 20% exposure rate of female infants would cause severe population decline. Mark Golden countered this position in his 1981 article, "Demography and the Exposure of Girls at Athens." Golden argued that due to the remarriage of widows, there was an oversupply of females in the Greek population. This led to widespread female infanticide (10% of all female live births). In his 1994 article, "Child Exposure in the Roman Empire," W. V. Harris argued that infanticide of both sexes was widespread in Rome, though female infants were more likely to be exposed. In her 1985 article "Not Worth the Rearing," Cynthia Patterson shifted the debate about statistics to include the social impacts of infanticide in Greece. Research on the birth rate of ancient populations was expanded by John Riddle's work *Contraception and Abortion from the Ancient World to the Renaissance* (1992). This work advanced the idea that the ancients possessed knowledge of effective herbal remedies that could limit their fertility. The present work will not focus on the

statistics of infanticide and wider demographic trends or attempts to limit fertility, but will instead investigate how the ancient Romans of the late Republic and early Empire reacted to concerns about their fertility.

## CHAPTER 1

### Primary Sources

While we must rely primarily on ancient sources written in Greek and Latin, nonetheless, each author has personal biases that must be penetrated before one can begin to evaluate what is said. The biases that authors bring to bear on their works result in perspectives that sometimes differ widely. The written sources for women's fertility and sterility in the ancient world include medical works, legal texts and papyri, as well as varied literary genres, such as history, philosophic and encyclopedic texts, poetry, orations, eulogy and letters.

At times incorporating myths and legends as well as fact, history as a genre records past events deemed significant by the author. The author's personal bias affects the text, by what is included, emphasized and concluded. Polybius (200-118 B.C.E.) was a Greek author who was held in Rome as a political detainee. During his tenure in Italy, he began an extended history of Rome from its beginning to his own time. The *Roman Histories* was an attempt to explain Rome's rapid rise to power over the Mediterranean world. He relied on written sources for information about earlier periods, as well as observation and oral history for information about contemporary events.<sup>1</sup> Among the particular concerns expressed in his

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<sup>1</sup> Peter Derow, "Polybius," in *Oxford Classical Dictionary*, ed. S. Hornblower and A. Spawforth (Oxford: Oxford University Press, 1996), 1210. Hereinafter, the *Oxford Classical Dictionary* will be cited as *OCD*.

work were the low childrearing rates in Greece. He complained that infanticide was causing the downfall of Greek society and needed to be prevented.<sup>2</sup>

Dionysius of Halicarnassus (late first century B.C.E. - early first century C.E.) was a Greek rhetorician who taught in Rome. In an attempt to prove that the successful city of Rome was, in origin, a Greek city, he wrote a history called *Roman Antiquities*. Much is made of Roman virtues, and in describing them, Dionysius often used rhetoric and imagined speeches.<sup>3</sup> During his discussion of early Roman history, he mentioned several laws that he ascribed to the first Roman king, Romulus.

Plutarch (50 -120 C.E.) was a Greek philosopher and historical biographer who taught for a time in Rome. His most famous work, the *Parallel Lives*, is a series of biographies that compared the lives of forty-six famous Greeks and Romans. Rather than attempting a detailed history of these figures, Plutarch focused on anecdotes and their moral characters.<sup>4</sup> His biographies of Tiberius and Gaius Gracchus detailed the events and consequences of their political careers.

Appian (late 1<sup>st</sup>/early 2<sup>nd</sup> century C.E.) was a Greek historian who, when he became a Roman citizen, began a history of the Roman Empire. This work was directed to a Greek audience and described events from the period of the Roman kings to Appian's own time. In his *Roman History*, Appian used a variety of literary sources, many of which are not extant, as well as his imagination. He selected varied facts and stories from his sources and

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<sup>2</sup> Polybius, *Roman Histories*, trans. W. R. Paton in 6 vols. (London: Harvard University Press, 1927), 6:385.

<sup>3</sup> Donald Russell, "Dionysius of Halicarnassus," *OCD*, 478.

<sup>4</sup> Donald Russell, "Plutarch," *OCD*, 1200-1201.

constructed speeches by famous individuals. In order to encompass all of Roman history, he minimized the amount of information that he included in his work.<sup>5</sup> In detail, Appian dealt with the state of public land in Rome and the experiences of the Gracchi brothers.<sup>6</sup>

The Greek historian Cassius Dio (164-229 C.E.) covered much of Rome's history from its mythical founding by Aeneas to 229 C.E.<sup>7</sup> Organized in the annals format, Dio related all events that occurred in a single year and grouped them together in a continuous narrative, even if they were not linked to each other.<sup>8</sup> Dio relied on literary sources as well as his own observations for information; usually he did not repeat the biases of earlier writers, but rather drew his own conclusions about motivations and causality.<sup>9</sup> When discussing Augustus Caesar, Dio noted the system of rewards and punishments he created, as well as some of the motivations behind, and reactions to this legislation.<sup>10</sup>

Tacitus (56-118 C.E.) was a Roman historian, who wrote, among his other treatises, a minor work known as *Germania* in 98 C.E. In analyzing the German tribes, he discussed their customs and lives from an ethnographic perspective. So as to understand German civilization, Tacitus compared it to that of the Romans, often making moral judgments about

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<sup>5</sup> Kai Broderson, "Appian," *OCD*, 130.

<sup>6</sup> Appian, *Roman History*, trans. Horace White (Cambridge: Harvard University Press, 1991), 3:15-27.

<sup>7</sup> Earnest Cary, "Introduction," in *Roman History* (Cambridge: Harvard University Press, 1960), 1:xii.

<sup>8</sup> Cary, "Introduction," 1:xiv.

<sup>9</sup> John Rich, "Cassius Dio," *OCD*, 300.

<sup>10</sup> Cassius Dio, *Roman History*, trans. Earnest Cary (Cambridge: Harvard University Press, 1961), 7:17-19.

each society.<sup>11</sup> In his discussion of family life, he noted the manner in which children were handled in Germany.<sup>12</sup>

Suetonius (69-140 C.E.) wrote biographies of the first twelve emperors, *The Twelve Caesars*, which partly overlapped with the time period Dio covered.<sup>13</sup> Suetonius broke from tradition by not eulogizing his subjects, but rather chronicled their actions, good and bad. He included varied anecdotes about the emperors, instead of focusing only on the historical and military events in which they were involved.<sup>14</sup> Suetonius repeated much contemporary gossip and included many scandalous stories about the emperors, some of which are repeated by later authors. In his biography of Augustus, Suetonius wrote of the marriage legislation he had passed, which allowed only a three-year grace period before remarriage, and which increased rewards for those who did marry.<sup>15</sup>

Orations and philosophical texts are also good sources for understanding ancient history; their biases are more pronounced than in other sources, as they purposefully present only one perspective. Over fifty-eight published speeches and many philosophical and rhetorical works by the Roman politician and orator Cicero (106-43 B.C.E.) are extant. In his speeches, he persuasively argued for his client; invective towards the opposition and his personal enemies is often apparent.<sup>16</sup> In a defense speech, the *Pro Sestio*, Cicero's adversity

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<sup>11</sup> Ronald Martin, "Tacitus," *OCD*, 1469.

<sup>12</sup> Tacitus, *Germania*, trans. H. W. Benario (Warminster: Aris and Phillips, 1999), 33.

<sup>13</sup> Robert Graves, "Introduction," in *The Twelve Caesars* (London: Penguin Classics, 2003), i.

<sup>14</sup> Robert Graves, "Introduction," viii.

<sup>15</sup> Suetonius, *Augustus*, in *The Twelve Caesars*, trans. Robert Graves (London: Penguin Classics, 2003), 65.

<sup>16</sup> John Simon and Dirk Obbink, "Marcus Tullius Cicero," *OCD*, 1558-1560

with the politician Publius Clodius Pulcher arose through complaints about Clodius' reform of the grain dole.<sup>17</sup> Many aphorisms of the philosopher Musonius Rufus (30-101/2 C.E.) are extant, but only fragments of his *Discourses* remain.<sup>18</sup> These didactic works promote Stoicism as a lifestyle, and reflect Stoic morals.<sup>19</sup> In the *Discourses*, Musonius discussed the possible existence of legislation on contraception and abortion, and he included his moral views of infanticide.<sup>20</sup>

The literary genre of encyclopedic works range from collections of trivia and famous sayings, to serious works documenting aspects of the natural world or various vocations. Cato the Elder (234-149 B.C.E.) wrote a work on the administration of mid-size farms in Italy known as *On Agriculture*. It contains advice on the management of slave labor, cultivation tips, recipes and prescriptions.<sup>21</sup> Among the medical prescriptions that Cato offered are a series that included cabbage, a plant that can be used to prevent disease in reproductive age women.<sup>22</sup>

The *Natural History* is an encyclopedic account of the natural world, which Pliny the Elder (23-79 C.E.) wrote during his retirement, finishing it in 77 C.E.<sup>23</sup> He drew from at least 100 authors, as well as personal experience and observations, compiling 20,000 distinct

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<sup>17</sup> Cicero, "Pro Sestio," in *Pro Sestio and In Vatinius*, trans. R. Gardner (Cambridge: Harvard University Press, 1984), 109.

<sup>18</sup> William Ross and Miriam Griffin, "Musonius Rufus," *OCD*, 1013.

<sup>19</sup> Julia Annas, "Stoicism," *OCD*, 1446

<sup>20</sup> Musonius Rufus, "Discourses" in *The Roman Socrates*, trans. Cora Lutz (New Haven: Yale University Press, 1947), 97-101.

<sup>21</sup> John Briscoe, "Marcus Porcius Cato," *OCD*, 1224-1125.

<sup>22</sup> Cato, "On Agriculture," in *Cato and Varro: On Agriculture*, trans. William Hooper (Cambridge: Harvard University Press, 1993), 141-153.

<sup>23</sup> H. Rackham, "Introduction," in *Natural History* (Cambridge: Harvard University Press, 1989), 1:vii-viii.

pieces of information. He usually did not evaluate his sources and accepted them equally. He relied on his own experience and the texts that were available to him for his information and thus limited himself to the knowledge available to the aristocratic Roman male.<sup>24</sup> Pliny included anecdotes mixed with scientific facts and marvelous tales, usually without attempting to verify his facts<sup>25</sup> and at times accidentally inserted erroneous information in his haste to complete his work.<sup>26</sup> Pliny's distaste for physicians and Greek medicine is notorious. He believed that doctors were corrupt and ignorant, and charged exorbitant fees for worthless concoctions.<sup>27</sup> He recommended traditional Roman medicine, a collection of native recipes, rather than Greek medical philosophy and methodology.<sup>28</sup> He collected many folk remedies in his work.

Poetry as a literary genre encompasses a range of forms such as epic, elegy and satire. Lucretius, a Roman poet of the early first century B.C.E, wrote an epic poem known as *De Rerum Natura*, which presented an Epicurean view of the world.<sup>29</sup> During a discussion of love as a folly, he discussed sexual relationships and practices such as *coitus interruptus*.<sup>30</sup> The Roman poet Ovid (43 B.C.E. -17 C.E.) also discussed sexual relationship in his *Amores*, a series of erotic elegies about the relationship between the imagined courtesan Corinna and

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<sup>24</sup> Nicholas Purcell, "Pliny the Elder," *OCD*, 1197.

<sup>25</sup> Rackham, "Introduction," 1:ix.

<sup>26</sup> Purcell, "Pliny the Elder," 1197.

<sup>27</sup> Pliny, *Natural History*, trans. H. Rackham (Cambridge: Harvard University Press, 1961), 8:191.

<sup>28</sup> John Scarborough, *Roman Medicine* (Ithaca: Cornell University Press, 1969), 65.

<sup>29</sup> Peta Fowler and Don Fowler, "Lucretius," *OCD*, 888-889.

<sup>30</sup> Lucretius, *De Rerum Natura*, trans. Ronald Melville (Oxford: Clarendon Press, 1997), 136.

her lover.<sup>31</sup> In two of the elegies, he discussed Corinna having procured an abortion and her lover's reaction.<sup>32</sup> As well, Ovid wrote an epic poem known as the *Fasti*, which explained the events and festivals on the traditional Roman calendar. Although he offered some complaints about the restrictiveness of the medium, he was free to select what events to include and emphasize;<sup>33</sup> and he incorporated several stories relating to the fertility of women.

In many cases, comedy ridiculed daily life with jokes and puns. The plays of the comedic playwright Plautus (205-184 B.C.E.) are based upon Greek New Comedy originals, and many are set in Greece, although references to specifically Roman situations are made.<sup>34</sup> In his work *Braggart Soldier*, an imagined wife discussed a group of women and magic workers that she had hired.<sup>35</sup>

Satire, an ancient literary form that focused on ridiculing contemporary individuals and politics, is another good source for information about women's fertility. No complete satires of the Latin author Lucilius (180-102 B.C.E.) are extant, but about 1,400 line fragments remain. His work encompassed both daily personal experiences, as well as his moral judgments about Roman society.<sup>36</sup> Juvenal, a Roman author of the late first, early second century C.E.,<sup>37</sup> wrote sixteen satires about daily life in imperial Rome. He focused on

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<sup>31</sup> Stephen Hinds, "Ovid," *OCD*, 1084.

<sup>32</sup> Ovid, "Amores," in *Ovid in Love*, trans. Guy Lee (New York: St. Martin's Press, 2000), 69-71.

<sup>33</sup> Hinds, "Ovid," 1085.

<sup>34</sup> Peter Brown, "Titus Maccius Plautus," *OCD*, 1194-1195.

<sup>35</sup> Plautus, "Braggart Soldier," in *Plautus*, 65-180, ed. David Slavitt and Palmer Bovie, trans. Eric Segal (Baltimore: Johns Hopkins University Press, 1995), 118.

<sup>36</sup> Michael Coffey, "Gaius Lucilius," *OCD*, 887.

<sup>37</sup> G.G. Ramsey, "Introduction," in *Juvenal and Persius* (Cambridge: Harvard University Press, 1993), xiii.

the people of Rome and their moral downfall from an imagined ‘better’ time of early Rome, rather than the politicians who were the traditional target for satirists.<sup>38</sup> He targeted all aspects of life in his attempt to anger, amuse and disturb his readers and to ridicule ‘modern’ morals. However, he never gave a moral alternative to the bad behavior he mentioned,<sup>39</sup> as rhetoric and moral exempla did. Juvenal focused on women specifically in his *Satire Six*, which was formatted as a lecture to a young man about to why he should avoid marriage. Juvenal listed the different types of bad Roman women and discussed their specific characteristics. One of his stock characters was the female abortionist, whom he discussed in conjunction with the rich adulterous wife who avoided childbirth.<sup>40</sup> Juvenal delivered invaluable insights in this satire about sterility.

Roman eulogy, present in both literary and epigraphical sources, is another good source for women’s fertility. These eulogies impart information about the traditional virtues of women, and assigned these stock elements to the deceased woman. In literary eulogy, the minor virtues of women included wool working, religiosity, modesty of dress, and care for the family, while the four main virtues were *pudicitia* (sexual fidelity and love for husband), *obsequium* (cooperativeness), *comitas* (graciousness) and *facilitas* (calm manner).<sup>41</sup>

The *Laudatio Turiae*, a Roman funerary inscription from the first century B.C.E., mimicked the form of a literary funeral eulogy. Although scholars have traditionally thought

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<sup>38</sup> Llewellyn Morgan, “Satire,” in *A Companion to Latin Literature*, ed. Stephen Harrison (Oxford: Blackwell Publishers, 2005), 184.

<sup>39</sup> Morgan, “Satire,” 186-187.

<sup>40</sup> Juvenal, “Satire Six,” in *Juvenal and Persius*, trans. G.G. Ramsay (Cambridge: Harvard University Press, 1990), 131-133.

<sup>41</sup> Susan Treggiari, “Marriage and Family,” in *A Companion to Latin Literature*, ed. Stephen Harrison (Oxford: Blackwell Publishers, 2005), 381.

it was dedicated to Turia, wife of the consul Quintus Lucretius Vespillo, this has since been found to be improbable.<sup>42</sup> Several paragraphs of the inscription relate to the couple's infertility and the wife's attempt to remedy the situation.<sup>43</sup>

The politician and writer Seneca (4 B.C.E./1 C.E.-65 C.E.)<sup>44</sup> wrote poetic tragedies and dialogues on philosophy and published many personal letters.<sup>45</sup> His *Consolation to Helvia*, a dialogue in which he consoled his mother about his exile, drew on the traditional motifs and routine arguments of eulogy.<sup>46</sup> In his attempt to convince Helvia not to mourn, he argued that although she displayed the traditional virtues of women, she displayed none of their weaknesses, such as their tendency to abort viable fetuses.<sup>47</sup>

Personal letters are a valuable source for understanding the private life of Roman individuals, and information gleaned from them can be partially extrapolated to the rest of society. Pliny the Younger, an inheritance lawyer and senator of the early second century C.E., published 247 letters of his personal correspondence in nine books.<sup>48</sup> They were published during his lifetime, and are organized in a generally chronological, rather than

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<sup>42</sup> Eric Wistrang, "Introduction," in *So-called Laudatio Turiae* (Lund: Beringska Bottryckriet, 1976), 9.

<sup>43</sup> *So-called Laudatio Turiae*, trans. Eric Wistrand (Lund: Beringska Bottryckriet, 1976), 27-29.

<sup>44</sup> Leighton Reynolds, Miriam Griffin, and Elaine Gantham, "Lucius Annaeus Seneca," *OCD*, 96.

<sup>45</sup> C. Costa, "Introduction," in *Seneca's Dialogues and Letters* (New York: Penguin Books, 1997), xi.

<sup>46</sup> Costa, "Introduction," xxiii.

<sup>47</sup> Seneca, "Consolation of Helvia," in *Seneca's Dialogues and Letters* (New York: Penguin Books, 1997), 22.

<sup>48</sup> Betty Radice, "Introduction," in *Letters of the Younger Pliny* (Baltimore: Penguin Books, 1963), 12-13.

topical order.<sup>49</sup> Writing with the intention of later publication,<sup>50</sup> he included reflective essays, advice and recommendations.<sup>51</sup> The letters themselves portray the daily life of upper class Romans.

Other letters written on papyrus have been found in Egypt that offer access to a wider range of the population as they were used to record important personal documents by all classes. Much of their value lies in capturing minor details of daily life; their long survival was not anticipated.<sup>52</sup> Over seventy percent of the Egyptian papyri have been found discarded in the dump heaps of the city Oxyrhynchus.<sup>53</sup> A letter (1 B.C.E) found in these trash deposits recorded an absent husband's instructions to his wife concerning whether to rear their infant.<sup>54</sup> It is not clear how representative Egypt or the city of Oxyrhynchus are of the wider Roman empire, and this evidence cannot be definitively extrapolated.

Another valuable source for social views of women's fertility is ancient medical texts. The medical writers, though all concentrating on similar subjects, varied considerably in their approaches to women's health, and thus their theories can vary considerably. Soranus (98-138 C.E.),<sup>55</sup> a Greek physician practicing in Rome, composed medical works on many varied topics. His treatise *Gynecology* was the most influential and is considered to represent

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<sup>49</sup> Radice, "Introduction," 16.

<sup>50</sup> *Ibid.* 11.

<sup>51</sup> *Ibid.* 17.

<sup>52</sup> "Introduction," in *Select Papyri* (Cambridge: Harvard University Press, 1988), xii.

<sup>53</sup> Walter Cockle, "Oxyrhynchus," *OCD*, 1088.

<sup>54</sup> "Papyrus Oxyrhynchus 744," in *Select Papyri*, trans. A. S. Hunt and C. C. Edgar (Cambridge: Harvard University Press, 1988), 295.

<sup>55</sup> Victor Ehrenberg and Simon Hornblower, "Soranus," *OCD*, 1426.

ancient medical treatment of women at its best.<sup>56</sup> The knowledge contained therein is an accumulation of past gynecological and obstetric knowledge, though Soranus approached it in his own way.<sup>57</sup> Soranus seems to have been friendly to women because he focused on the well being of the patient more than other writers did, preferring to save the life of the mother over the child during difficult labor.<sup>58</sup>

Writing in Greek, the physician Galen (129-199/216 C.E.)<sup>59</sup> was a near contemporary of Soranus. Of his 180 varied treatises, 120 have survived, though few make mention of women.<sup>60</sup> His understanding of anatomy was complex, as he had many opportunities for animal dissection,<sup>61</sup> but he lacked complete knowledge of the purpose of the female reproductive system, especially the Fallopian tubes and ovaries.<sup>62</sup> Galen was educated in philosophy and rhetoric before he studied medicine, and much of this background comes out in his extensive work.<sup>63</sup>

Of the varied documentary sources available from antiquity, law codes allow for a wide analysis of the place of women, because they apply to all social classes. In Roman tradition, a group of ten men were appointed from 451-450 B.C.E. to write down the statutes

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<sup>56</sup> Owsei Temkin, "Introduction," in *Gynecology* (Baltimore: Johns Hopkins University Press, 1956), xxv.

<sup>57</sup> Owsei Temkin, "Introduction," xli.

<sup>58</sup> Soranus, *Gynecology*, trans. Owsei Temkin (Baltimore: Johns Hopkins University Press, 1991), 190.

<sup>59</sup> Ludwig Edelstein and Vivian Nutton, "Galen," *OCD*, 621.

<sup>60</sup> Robert Siegel, "Introduction," in *On the Affected Parts* (Basel: S. Karger, 1976), 1.

<sup>61</sup> Siegel, "Introduction," 3.

<sup>62</sup> Ralph Jackson, *Doctors and Disease in the Roman Empire* (Norman, OK: University of Oklahoma Press, 1988), 95.

<sup>63</sup> Edelstein and Nutton, "Galen," 621.

of Rome. All customary laws were not included, but rather the council chose to write into legislation only those laws that they considered useful.<sup>64</sup>

A later codification of law was Justinian's (527-565 C.E.) *Digest*, which collected all the previous laws of the empire that were still in effect. Although the codification is dated from the sixth century C.E., a main source of laws was the commentaries of Ulpian, a lawyer from the early-third century C.E.<sup>65</sup> The *Lex Cornelia on Murderers and Poisoners*, an edict of Ulpian contained in Justinian's *Digest*, discussed the punishment of women who had aborted their fetuses.<sup>66</sup>

The written sources that remain from antiquity allow us to access the past through the eyes of those who lived it. However, each of these sources has biases that can obscure the historical fact for which scholars search. By understanding these biases and using a variety of sources, history can be approached more clearly.

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<sup>64</sup> Micheal Crawford, "Twelve Tables," *OCD*, 1565-1566

<sup>65</sup> Tony Honore, "Justinian's Codifications," *OCD*, 803-804; Tony Honore, "Ulpian Marcellus," *OCD*, 1570.

<sup>66</sup> *Digest of Justinian*, trans. Alan Watson (Philadelphia: University of Pennsylvania Press, 1998), 48.8.8. [No pagination.]

## CHAPTER 2

### Political and Social Legislation

Roman public officials were concerned about the low birthrate in late Republican and early Imperial Rome. Elite Romans, politicians especially, were concerned with the way the low birth rate would impact the number of citizens eligible for military service. Land reforms, the grain dole and the alimentary system served to increase the birth rate of the Republican lower class, and Julius and Augustus Caesar used legal means to increase the birth rate of the middle classes and elite. The complaints of Polybius, a Greek writer from the second century B.C.E., reinforce these pleas to increase the birth rate. Their complaints were framed in such a way as to show that they believed in the existence of means to combat this problem, and were not just expressing despair.

During the early Roman Republic, many poor farmers possessed tracts of land, the *ager publicus populi Romani*, which they farmed in return for a small rent payment. This was public land owned by the Roman state, acquired when Rome conquered the Italian peninsula, and was distributed among the poor. Ancient sources tell of the rich driving out many of the poorer farmers in the later Republic and settling on the land as squatters; each squatter was restricted to 500 iugera.<sup>67</sup> It would have cost the Roman state more to collect a rent on these lands than the monetary benefit it would receive from it, so the rent payment was often

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<sup>67</sup> Approximately 330 acres; Appian, *Roman History*, 3:15-17.

overlooked. Over time, families regarded the possessed property as family land that had been passed down through the generations, and so felt they had ownership rights to it.<sup>68</sup>

The Roman politician Tiberius Gracchus addressed the low birth rate through reforming the use and distribution of the *ager publicus*. When Tiberius returned from Spain where he served as quaestor in 137 B.C.E.,<sup>69</sup> he passed through the Roman countryside. During this trip, he “observed the dearth of inhabitants in the country, and that those who tilled its soil or tended its flocks were imported barbarian slaves, he then first conceived the public policy which was the cause of countless ills to the two brothers. However, the energy and ambition of Tiberius were most of all kindled by the people themselves, who posted writings on porticoes, housewalls, and monuments, calling upon him to recover for the poor the public land.”<sup>70</sup> Such a statement likely contains an element of exaggeration for rhetorical effect, however larger farms and agricultural estates had become more common during the 2<sup>nd</sup> and 1<sup>st</sup> centuries B.C.E., in response to an increase in demands for farmed products. Some small landowners benefited from the new markets and archeological excavations show the continued existence of small farms in the Po Valley and hilly areas.<sup>71</sup> However, due to the property restrictions on military service, large estates threatened the availability of military conscripts.

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<sup>68</sup> H. H. Scullard. *From the Gracchi to Nero* (London: Routledge, 2003), 20.

<sup>69</sup> Ernst Badian, “Sempronius Gracchus Tiberius,” *OCD*, 1384.

<sup>70</sup> Plutarch, “Tiberius Gracchus,” in *Lives*, trans. Bernadotte Perrin (Cambridge: Harvard University Press, 1988), 10:163.

<sup>71</sup> Dominic Rathbone, “Roman Agriculture,” *OCD*, 45.

When Tiberius became the *tribunus plebis* in 133 B.C.E.,<sup>72</sup> his major official act was to introduce to the plebian assembly legislation for a mass redistribution of public lands. He attracted supporters, having said “the Romans possessed most of their territory by conquest, and that they had hopes of occupying the rest of the habitable world; but now the question of greatest hazard was, whether they should gain the rest by having plenty of brave men, or whether, through their weakness and mutual jealousy, their enemies should take away what they already possessed... He admonished the rich to take heed, and said that for the realization of these hopes they ought to bestow this very land as a free gift, if necessary, on men who would rear children, and not, by contending about small things, overlook larger ones.”<sup>73</sup> Tiberius’ land reform would benefit the poor and landless citizens of Rome, and give them the means to support themselves, bear and raise children.

Another motive that triggered Tiberius’ reforms was the system by which military service requirements were determined. Citizen males were divided into five property classes; the two lowest property classes were not eligible for conscription into army service. Although property qualifications were occasionally lowered to include more people in the higher classes, the limits could not be lowered too much, or landless men who became soldiers would have nothing to which they could return after their term of service ended.<sup>74</sup> As the number of displaced farmers grew during this time, the number of males eligible for service decreased. The Roman government attempted to solve this problem through land grants to small farmers. Recipients of land grants were able to support larger families than

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<sup>72</sup> Badian, “Sempronius Gracchus Tiberius,” 1384.

<sup>73</sup> Appian, *Roman History*, 3:23.

<sup>74</sup> Scullard, *From the Gracchi to Nero*, 22.

those working as laborers or tenants. As they had the monetary capacity to do so, men with land would be more likely to reproduce in greater numbers. This, in turn, would increase the strength of the Roman military by supplying it with more men eligible for military service.

Tiberius' legislation reinforced the 500 *iugera* limit, but allowed families to own another 250 *iugera* for each son after their first; the land remaining would be distributed among landless citizens by a commission of three men.<sup>75</sup> Any land accepted by these farmers could not be alienated. The larger landowners were predominately senators, and although they may not have been opposed to the purpose of the legislation, many would have been hesitant to surrender their extra land without compensation.<sup>76</sup> Tiberius submitted this legislation straight to the plebian assembly, bypassing the senate and their traditional oversight.<sup>77</sup> When Octavius, Tiberius' fellow tribune, vetoed the legislation, Tiberius made it less favorable to the rich by limiting the amount of land per man to only 500 *iugera*.<sup>78</sup> Tiberius resubmitted the matter to the assembly, but Octavius again vetoed it. In response, Tiberius had Octavius removed from office and replaced with a new tribune, Mummius.<sup>79</sup>

Soon after Tiberius replaced Octavius, King Attalus III of Pergamum died and left his kingdom to the Roman people. Tiberius put a vote to the assembly to use this gift as a source of funds for his reforms, usurping the Senate's traditional role.<sup>80</sup> Tiberius was so popular with the people and introduced such 'radical' reforms without the sanction of the Senate, that

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<sup>75</sup> Appian, *Roman History*, 3:19.

<sup>76</sup> Scullard, *From the Gracchi to Nero*, 26.

<sup>77</sup> Plutarch, "Tiberius Gracchus," 10:167.

<sup>78</sup> Badian, "Sempronius Gracchus Tiberius," 1384.

<sup>79</sup> Appian, *Roman History*, 3:27.

<sup>80</sup> Plutarch, "Tiberius Gracchus," 10:177.

many feared the possibility that he would become a tyrant. The illegal removal of Octavius, in addition to Tiberius' possibly illegal campaign for reelection, solidified the fears of his detractors and he was killed by a mob of senators led by Scipio Nasica<sup>81</sup> Despite the circumstances of Tiberius' death, a land commission including his brother Gaius Gracchus, was established to oversee the distribution of land. By 125 B.C.E. an estimated 75,000 Romans had received land through this program.<sup>82</sup>

In addition to serving on the land commission, Gaius Gracchus proposed and helped to create a dole that would further alleviate the suffering of poor and landless Roman citizens. While tribune in 123-122 B.C.E.,<sup>83</sup> he initiated the *Lex Frumentaria*, legislation that prompted the Roman government to build warehouses to store corn that had been bought in bulk while prices were low. This corn would be sold in monthly rations to the indigent, at the price of 6 1/3 *asses* per *modium*,<sup>84</sup> regardless of fluctuations in market prices. Although this legislation targeted the poor, any Roman citizen was eligible to purchase at this price.<sup>85</sup> However, as slaves and freedmen in the late Republic made up between 2/3 and 3/4 of the

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<sup>81</sup> Andrew Lintott, "Political History," in *Cambridge Ancient History*, ed. J.A. Crook, Andrew Lintott, and Elizabeth Rawson (Cambridge: Cambridge University Press, 1994), 9:68.

<sup>82</sup> Scullard, *From the Gracchi to Nero*, 30.

<sup>83</sup> *Ibid.* 32.

<sup>84</sup> An *as* was a small bronze Roman coin. Michael Crawford, "Roman Coinage," *OCD*, 360. A *modium* was a unit of measure equivalent to 307 fluid oz. Frederick Pryce, Mabel Lang and Michael Vickers, "Measures," *OCD*, 943.

<sup>85</sup> Scullard, *From the Gracchi to Nero*, 33.

population of Rome,<sup>86</sup> it is very likely that some of them made it on to the dole illegally, especially slaves and foreigners.<sup>87</sup>

Property qualifications prevented landless citizens from being conscripted into the army,<sup>88</sup> so Gaius Gracchus' establishment of the corn dole was likely prompted by political motives. However, beginning in 107 B.C.E., during the Jugurthian war, property qualifications for service were routinely ignored. Gaius Marius recruited citizens who had previously not been eligible for service, and had them outfitted at state expense.<sup>89</sup> This change gave politicians motivation to give grants of money and food to the poor in order to increase the birth rate.

The dole did not fully provide for the nutritional needs of men or their families, but it increased the quality of life of a Roman family and allowed for the production of more children without significant hardship. This was one way the Roman government attempted to increase the citizen birth rate generally. It wished to increase the number of males especially, due to a constant need for soldiers. The corn dole was targeted to adult males; women were generally excluded.<sup>90</sup> Unmarried men were eligible for the dole, as it allowed them the expendable income to marry and raise a family; married women could be directly affected by the dole, if their husbands were eligible.

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<sup>86</sup> P.A. Brunt, *Italian Manpower* (Oxford: Clarendon Press, 1971), 387.

<sup>87</sup> *Ibid.* 381.

<sup>88</sup> Scullard, *From the Gracchi to Nero*, 22.

<sup>89</sup> John Campbell, "Roman armies," *OCD*, 172.

<sup>90</sup> Brunt, *Italian Manpower*, 382.

In 58 B.C.E., the tribune Publius Clodius Pulcher abolished the charge on subsidized grain, giving it free to those on the corn dole rolls, as part of his reform.<sup>91</sup> At this time, the number of people on the dole totaled about 40,000. The orator Cicero stated that this change cost Rome 1/5 of its yearly revenues.<sup>92</sup> Since Cicero was more likely to overstate the cost of the dole than understate it, this statement should refer to the total cost of distributing corn in 56 B.C.E., as opposed to just the extra cost added to that of the corn dole already in place under earlier legislation.<sup>93</sup> Clodius' change could also have worked to prevent political manipulation of grain prices: politicians could no longer lower the price in order to gain popular support. This meant, however, that the populace would forcefully block any future attempts to reinstate fees on grain. The permanent expense this change entailed, one-fifth of government revenues,<sup>94</sup> shows the importance of increasing the birth rate to those in power.

The number of those on the dole did not stay constant. By 46 B.C.E., the number of people on the rolls had increased, and many had been added in an illegal manner.<sup>95</sup> In response, Julius Caesar cut the rolls by over half, from 320,000 to 150,000. He sent 80,000 of those taken off of the dole overseas to found colonies, but the other 90,000 were simply removed.<sup>96</sup> A new system (*subsortio*) was established by which new names were only added to the dole in order to replace someone who had died. In 44 B.C.E., Octavian Caesar increased the number of plebs receiving the dole, giving gifts of grain and money to over

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<sup>91</sup> Guy Chilver and Andrew Lintott, "Publius Clodius Pulcher," *OCD*, 350.

<sup>92</sup> Cicero, "*Pro Sestio*," 109.

<sup>93</sup> Brunt, *Italian Manpower*, 379.

<sup>94</sup> Cicero, "*Pro Sestio*," 109.

<sup>95</sup> Cassius Dio, *Roman History* 4:149.

<sup>96</sup> Suetonius, *Julius Caesar*, 20-21.

250,000. He increased the grain dole to 320,000 in 5 B.C.E., but it was again restricted to 150,000 in 14 and 37 A.D., where it stayed.<sup>97</sup> Although both Caesars severely restricted the number of dole recipients, they were still in favor of supporting an increase in citizen birthrates. By lowering the number of those on the corn dole, non-citizens would be removed, so that only eligible citizens would be registered. This ensured that government resources were targeted directly to increasing the reproduction rate of citizens.

At the end of the first century C.E., the emperor Nerva instituted an alimentary system in Italy that supported the nourishment of poor children.<sup>98</sup> Under Hadrian, this system provided legitimate male children 16 *sesterces*<sup>99</sup> and legitimate female children 12 *sesterces* a month. The monthly allowance dropped to 12 *sesterces* for illegitimate males, and 10 for females. Boys were supported until the age of 18, and girls were supported until age 14.<sup>100</sup> At these ages, boys could support themselves by working, and girls were old enough to marry. The system was supported by the interest earned through an imperial mortgage scheme. Landowners were loaned money worth eight percent of their land, and were expected to pay five percent interest, in perpetuity.<sup>101</sup> Trajan instituted a similar system in Rome at the beginning of his reign that assisted almost 5,000 children. According to Pliny the Younger: “The army and citizen body will be completed by their numbers, and they will have children

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<sup>97</sup> Brunt, *Italian Manpower*, 381-382.

<sup>98</sup> Richard Duncan-Jones, *Economy of the Roman Empire* (Cambridge: Cambridge University Press, 1974), 292.

<sup>99</sup> A *sesterce*, a multiple of the *as*, was a Roman coin composed of the metal orichalcum. Crawford, “Roman Coinage,” *OCD*, 360.

<sup>100</sup> Duncan Jones, *Economy of the Roman Empire*, 288.

<sup>101</sup> John Balsdon and Anthony Spawforth, “Alimenta,” *OCD*, 63.

one day who will support themselves without any need of allowances.”<sup>102</sup> These *alimenta* programs were set up in order to increase the birthrate by defraying some of the cost of raising children.

The citizen birthrate was further addressed politically by means of restrictions on soldiers’ rights of marriage. Starting during the Punic wars, soldiers were stationed in areas outside of Italy and did not have the opportunity to return to Rome for many years,<sup>103</sup> and so would not be able to have sexual relations with their wives. The typical period of service during the late Republic was six years,<sup>104</sup> but the maximum may have been up to eighteen or twenty years.<sup>105</sup> Marriage between citizen men and foreign women was banned, unless both possessed *conubium* (the right to contract a legal marriage);<sup>106</sup> illegitimate children of a citizen soldiers and non-citizen women were not considered citizens, while illegitimate children born of citizen parents were citizens.<sup>107</sup> This restriction may have worked to prevent Roman soldiers from establishing marital-type relationships with or producing children by non-citizen women during their long absences from Italy.

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<sup>102</sup> Pliny, *Letters, Panegyricus*, trans. Betty Radice (Cambridge: Harvard University Press, 1969), 2:385.

<sup>103</sup> J. W. Rich, "The Supposed Roman Manpower Shortage of the Later Second Century B.C.," *Historia* 32, no. 3 (1983): 289.

<sup>104</sup> Appian, *Roman History*, 1:261.

<sup>105</sup> Lucilius, "Lucilius," in *Remains of Old Latin*, trans. E. H. Warmington (Cambridge: Harvard University Press, 1979), 1:163; Polybius, *Roman Histories*, 3:311.

<sup>106</sup> Susan Treggiari, *Roman Marriage* (Oxford: Oxford University Press, 1991), 46.

<sup>107</sup> Brian Campbell, "Marriage of Soldiers Under the Empire," *Journal of Roman Studies* 68 (1978): 154.

In 13 B.C.E., Augustus extended these earlier marriage restrictions and banned soldiers from entering into any marital relationship during their term of service.<sup>108</sup> This marital ban may have worked to discourage soldiers from forming ties with peoples near whom they were stationed so they could be more easily transferred where needed; non-citizen women would not impede army movement by following their soldier-husbands.<sup>109</sup> The inclusion of Roman women in this ban ensured that they also would not follow their soldier-husbands on campaign. Women who might otherwise have married soldiers and established families in the provinces would instead be eligible for marriage to other Roman citizens and increase the Italian birthrate.<sup>110</sup>

Most Roman soldiers during this period enlisted in their late teens, when they would be unlikely to be married;<sup>111</sup> soldiers who were married were not legally required to seek divorce upon enlistment, however it seems to have been a common practice.<sup>112</sup> Beyond the impracticalities of sustaining a marriage over long distances, divorce would free women to remarry in Rome and bear citizen children. In the late second century C.E., soldiers were often recruited from the areas in which they were stationed, and so families of soldiers would be less likely to inhibit army movements. Though his reasons remain unclear, it was during this period that Septimius Severus removed the ban on marriage.<sup>113</sup>

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<sup>108</sup> Brunt, *Italian Manpower*, 248.

<sup>109</sup> Campbell, "Marriage of Soldiers," 154.

<sup>110</sup> Treggiari, *Roman Marriage*, 64.

<sup>111</sup> Walter Scheidel, "Marriage, Families, and Survival: Demographic Aspects," in *A Companion to the Roman Army*, ed. Paul Erdkamp (Oxford: Blackwell Publishing, 2007), 423.

<sup>112</sup> Campbell, "Marriage of Soldiers," 156.

<sup>113</sup> *Ibid.* 165.

Julius Caesar attempted to extend restrictions to civilians through regulations that prevented male citizens from being abroad for more than three years. The imperial biographer Suetonius notes, “Since the population of Rome had been considerably diminished by the transfer of 80,000 men to overseas colonies, [Caesar] forbade any citizen between the ages of twenty and forty, who was not serving in the army, to absent himself from Italy for more than three years in succession.”<sup>114</sup> Although Caesar may have considered other reasons in his decision, one of his motives was likely to ensure men returned home in order to marry citizen women. The creation and continuation of such relationships while men were overseas was nearly impossible due to the long distance between the parties. In such situations, citizen men must have been tempted to establish sexual relationships with local non-citizen women. One of Caesar’s motivations for requiring men to return to and stay in Rome may have been to ensure that such relationships would not last, and men would be able to create permanent relationships with Roman citizen women. Julius Caesar’s willingness to create policies that drastically restricted the movement of citizens demonstrates the importance of increasing the birth rate.

While Tiberius Gracchus focused on the poor and landless and Julius Caesar focused on civilians, Augustus Caesar directed his attention towards the upper classes as well as the military. When he became a disguised monarch in 27 B.C.E., he encouraged couples of the senatorial and equestrian classes to marry so that they would be sexually available to each other for legitimate procreation. Claiming that men who did not marry were “bent upon destroying and bringing to an end the entire Roman nation,” he introduced a series of social

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<sup>114</sup> Suetonius, *Augustus*, 70.

legislation, including laws on marriage and child rearing.<sup>115</sup> His legislation levied penalties such as decreased inheritance rights on men who refused to marry, or to remarry after death or divorce of their spouse. Men who married were rewarded with increased inheritance rights and priority in selection of candidates for public office.<sup>116</sup> Augustus allowed betrothed men exemptions from the penalties of the unmarried. Suetonius reported: “When he discovered that bachelors were getting betrothed to little girls, which meant postponing the responsibilities of fatherhood, and that married men were frequently changing their wives, he dealt with these evasions of the law by shortening the permissible period between betrothal and marriage, and by limiting the number of lawful divorces.”<sup>117</sup> He instituted a maximum time limit on betrothal of two years so that marriage could not be postponed indefinitely.<sup>118</sup>

Although children could be considered a natural outgrowth of marriage in Roman society, childbearing rates could have been higher than those that were exhibited by married upper class couples at the time. Some elite citizens may have deliberately limited their family size due to personal preference, but may still have been concerned about the availability of citizens for military service. Possibly believing that the low childbearing rates among married couples were intentional, Augustus offered rewards to those who had larger than average families, hoping to encourage others to follow this example. In a speech to such men, he offered “honours and offices, so that you may not only reap great benefits yourselves but

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<sup>115</sup> Cassius Dio, *Roman History*, 7:11.

<sup>116</sup> J.A. Crook, "Political History," in *Cambridge Ancient History*, ed. Alan Bowman, Edward Champlin, and Andrew Lintott (Cambridge: Cambridge University Press, 1996), 10:132.

<sup>117</sup> Suetonius, *Augustus*, 65.

<sup>118</sup> Cassius Dio, *Roman History*, 7:19.

may also leave them to your children undiminished.”<sup>119</sup> When faced with great protests against the provisions of these laws, he lowered the monetary penalties and increased the rewards. However, the basics of the laws were kept in place.<sup>120</sup>

A possible method to increase the citizen population of Rome would have been to institute a ban on the infanticide of *healthy* legitimate children. As we shall see with restrictions on abortion in Chapter 3, there was a general assumption that Roman legislators would respond to low birth rates by banning any major contributing factors. Further, poets and authors responded by demonizing those who used such methods. These reactions do not appear in discussions of infanticide. The evidence concerning infanticide during the late republic is far from certain,<sup>121</sup> and does not allow definite generalizations about it as a cultural practice.<sup>122</sup> However, the evidence suggests that it was not sufficiently widespread to have attracted the negative attention of lawmakers.

The term “infanticide” can refer not only to the deliberate act of killing a young child but also to the abandonment or exposure of an unwanted child in a public area. An Egyptian papyrus document from 1 B.C.E. contains a letter from soldier on campaign to his pregnant wife, which referenced their fetus. “If by chance you bear a child, if it is a boy, let it be, if it is a girl, cast it out.”<sup>123</sup> Parents did not assume that this was a death sentence for the infants,

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<sup>119</sup> Cassius Dio, *Roman History*, 7:9.

<sup>120</sup> Suetonius, *Augustus*, 65.

<sup>121</sup> W. V. Harris, “Child Exposure in the Roman Empire” *Journal of Roman Studies* 84 (1994): 6.

<sup>122</sup> Tim Parkin, *Demography and Roman Society* (Baltimore: Johns Hopkins University Press, 1992), 97.

<sup>123</sup> “Papyrus Oxyrhynchus 744,” 295.

as many of those who were exposed survived as slaves. Such children were left at locations frequented by individuals or slave traders looking for infants to raise or sell.<sup>124</sup>

Although there is evidence of children in Egypt who were abandoned and then raised as slaves, it is questionable how well this evidence can be extrapolated to the rest of the Roman Empire.<sup>125</sup> Exposure of infants was likely not a widespread practice, since unwanted children could be more profitably sold into slavery. A law in the *Twelve Tables* referenced the right of the *pater familias* to sell his son into slavery. “If a father thrice surrenders a son for sale the son shall be free from the father.”<sup>126</sup> Even enslaving children would not cause a net subtraction in population, as slaves would be granted citizenship after manumission.

An exchange between the Emperor Trajan and Pliny the Younger, the governor of Bithynia, dealt with the status of free children who were raised as slaves. Presumably, these children would have to prove their origin, but after doing so Trajan decided that they “should not be prevented from making a public declaration of their right to freedom, nor should they have to purchase their freedom by refunding the cost of their maintenance.”<sup>127</sup> Although Trajan was in a position to create such an edict, his rescript to Pliny made no mention of the legality or morality of infanticide.

The Greek historian Dionysius of Halicarnassus recorded what may have been an early law ascribed to the first Roman king, Romulus. “He obliged the inhabitants to bring up

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<sup>124</sup> Harris, “Child Exposure,” 9.

<sup>125</sup> Cynthia Patterson, “Not Worth The Rearing,” *Transactions of the American Philological Association* 115 (1985): 120.

<sup>126</sup> “Twelve Tables,” in *Ancient Roman Statutes*, trans. Allan Johnson, Paul Coleman-Norton, and Frank Bourne (Austin: University of Texas Press, 1961), 10.

<sup>127</sup> Pliny, *Letters, Panegyricus*, 2:251.

all their male children and the first-born of the females, and forbade them to destroy any children under three years of age unless they were maimed or monstrous from their very birth.” Such children could be exposed after five neighbors had given their approval.<sup>128</sup> This story appears in Dionysius’ work alone, and does not seem to represent real Roman custom from any period of the Republic. Rather, the council of five neighbors restricting the authority of the *pater familias* evokes Greek traditions.<sup>129</sup> Other than this questionable reference, there are no laws banning or restricting infanticide until the era of the Christian emperors.<sup>130</sup>

The Stoic philosopher Musonius Rufus (30- 101/2 C.E.) mentioned both abortion and infanticide in his *Discourses*. He interpreted the Julian laws on childrearing as containing mention of contraception and abortion, likely under the assumption that if they were contributing to the low birth rate in Rome, they would be outlawed.<sup>131</sup> “They forbade them to use contraceptives on themselves and to prevent pregnancy.”<sup>132</sup> However, when later discussing infanticide, Rufus made no mention of its legality. “Some who do not even have poverty as an excuse but are prosperous and even wealthy none the less have the effrontery not to rear later-born offspring.”<sup>133</sup> Although Rufus condemned wealthy families who resorted to infanticide, his concern with exposure lay in the Stoic belief that exposure was

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<sup>128</sup> Dionysius of Halicarnassus, *Roman Antiquities* (Cambridge: Harvard University Press, 1937), 2:355.

<sup>129</sup> Harris, “Child Exposure,” 5.

<sup>130</sup> Sallares, “Infanticide,” *OCD*, 757.

<sup>131</sup> John Riddle, *Eve’s Herbs* (Cambridge: Harvard University Press, 1997), 86.

<sup>132</sup> Translated by Keith Hopkins based on text in Musonius, frag. 15a. “Contraception in the Roman Empire,” *Comparative Studies in Society and History* 8, no. 1 (Oct. 1965): 141.

<sup>133</sup> Musonius Rufus, “Discourses,” 99.

unnatural, since fetuses were thought to contain part of their soul from the time of conception.<sup>134</sup>

Discussions about infanticide by non-Christian and non-Stoic Roman authors do not contain a moral element. Juvenal mentioned the exposure of illegitimate children that were later picked up by rich women who raised these children as their own. “I say nothing of suppositious children... [Fortune] fondles them all and folds them in her bosom, and then, to provide herself with a secret comedy, she sends them forth to the houses of the great. These are the children that she loves, on these she lavishes herself, and with a laugh brings them always forward as her own nurslings.”<sup>135</sup> He criticized the practice of these women, referring to the children who were secretly adopted and would grow to become influential figures. However, he did not criticize the actions of the biological parents. Rather, the 'crime' that he condemned was that of rich women lying about the origin of their children.

Polybius expressed concern in his *Roman Histories* about the low childbearing rates in contemporary Greece. As he had a close relationship with Scipio Aemilianus, he may have had discussions with Tiberius Gracchus and influenced his perspective on this topic. Polybius directed his complaints towards those who practiced infanticide, claiming that its widespread use was causing the downfall of Greek society. “For as men had fallen into such a state of pretentiousness, avarice, and indolence that they did not wish to marry, or if they married to rear the children born to them, or at most as a rule but one or two of them, so as to leave these in affluence and bring them up to waste their substance, the evil rapidly and insensibly

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<sup>134</sup> Harris, “Child Exposure,” 15.

<sup>135</sup> Juvenal, *Satire Six*, 133.

grew.”<sup>136</sup> Although Polybius added an element of exaggeration for rhetorical effect, infanticide did exist in Hellenistic Greece,<sup>137</sup> and so he was able to make such a complaint. If he had done so when infanticide was unknown or rarely used, his peers would have immediately disregarded his comments. In the same way, Roman politicians did not refer to low *childrearing* rates in their speeches and legislation, but rather to low *childbearing* rates. If infanticide was the main cause of low population growth, they were in positions to combat it by passing legislation and addressing it in their speeches. Although they used several other means, no politician during the late Republic or early Empire passed any such legislation concerning the legality of infanticide. Instead, they passed legislation encouraging citizens to reproduce at higher rates.

Politicians throughout the late Republic and early Empire created legislation and policies that impacted childbearing rates of the citizen population. Land redistribution and the grain dole increased the quality of life of poorer Roman citizens, allowing them to support a larger number of children. Military restrictions on marriage attempted to prevent marital relationships between soldiers and non-citizen women, and freed citizen women to marry other citizen men and remain in Italy. Travel restrictions forced men to spend more time within the vicinity of their citizen wives. Marital legislation and a system of rewards and punishments made marriage and children more enticing, but no laws were created to ban infanticide. The variety of legal methods employed by Roman politicians shows their deep concern for the size and growth rate of the population.

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<sup>136</sup> Polybius, *Roman History*, 6:383.

<sup>137</sup> J. Robert Sallares, “Infanticide,” *OCD*, 757.

## CHAPTER 3

### Attempts to Restrict the Use of Abortion

Judging on the basis of surviving medical and literary evidence, the Romans possessed a good, working knowledge of pragmatic medicine. Specific medical knowledge could be gained through reading handbooks on medical practice, such as Soranus' *Gynecology*. More general medical knowledge was learned through experience when members of the *familia* treated their sick. Since most knowledge was gained through personal communication and hands-on practice, scholarly judgments about this topic are based on the literary, documentary and archeological evidence that remains. These show that the knowledge and use of abortifacients and contraceptives was spread especially among women and midwives. If partial effectiveness is assumed, their non-use would make an impact on the general fertility of the population. Elite Romans, in their attempts to increase the citizen birth rate in Rome, attempted to restrict women's use of and access to these remedies.

The actions of abortionists were subversive to the ideal of bountiful Roman motherhood, as they allowed women to deny their natural fertility. The hostility toward abortionists in the works of Ovid, Juvenal and Seneca suggests that abortionists were targeted as destroyers of the ideal of the childbearing woman; the 'evil abortionist' was an anti-ideal to which good women were compared.

Of the many forms of family planning available to the ancient Romans, abortion is the most frequently mentioned form of birth control.<sup>138</sup> Abortion in the ancient world refers to willful termination of a fetus in the middle to later months of pregnancy. What we now call early-term abortions were not in the ancients' perception. The frequency of references to abortion in literary texts, as well as attempts to place restrictions on its use reflects its widespread availability among the upper classes.

One form of contraception available was *coitus interruptus*. Since other sexual practices are discussed in the ancient sources without much hesitation, there should be no hesitation to talk about this particular method. However, there are few mentions of it in the sources, and so we presume that the paucity of references indicates that it was not a widely practiced option.<sup>139</sup> One mention comes from Lucretius, in *De rerum natura*. He noted that women, courtesans in particular, prevented conception by pulling away from the man after he had ejaculated.

“She turns the furrow from its rightful course/  
Under the ploughshare,  
makes the seed fall wide. / Whores do this for their private purposes /Lest  
they be filled too often and lie pregnant, / And to make their loves more  
pleasing to their men. / Clearly our wives can find no use for this.”<sup>140</sup>

*Coitus interruptus* is recorded in modern medicine as having an 85% method chance effectiveness;<sup>141</sup> its non-use would have an impact on fertility rates. Short of acrobatics on

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<sup>138</sup> Jackson, *Doctors and Disease*, 108.

<sup>139</sup> John Riddle, *Contraception and Abortion from the Ancient World to the Renaissance* (Cambridge, MA: Harvard University Press, 1992), 4.

<sup>140</sup> Lucretius, *De Rerum Natura*, 136.

the part of the female, *coitus interruptus* depends on the cooperation of the male partner,<sup>142</sup> and so males who wished to increase the citizen birth rate could easily circumvent its use by their wives.

The Roman poet Ovid spoke of abortion in a series of elegies about the imagined courtesan Corinna. In two elegies, Ovid wrote of Corinna's lover finding her recovering from an abortion. Although the lover did not refer to the exact procedure, he mentioned women who "carry lethal weapons in peace-time/ and suffer self-inflicted wounds" and described abortion as "jab[bing] the needle in your own flesh and poison[ing] the unborn."<sup>143</sup> Her actions led to nearly fatal complications, and the lover was fearful of her death. He prayed to Ilithyia (the Roman goddess of childbirth) to request that she save Corinna's life, promising a dedication at the goddess' temple if she should survive.<sup>144</sup>

The lover compared Corinna unfavorably to Medea and Philomela, mythical women who had killed their children. The lover said that these mothers had valid reasons for their actions, but Corinna was motivated by concern for her appearance. "How can you fight this duel on the sands of death/ simply to save your stomach a few wrinkles?" He then listed several goddesses, asking what would have happened if they too had procured abortions. After shaming her, the lover asked the gods to give Corinna a second chance, and warned her to never again procure an abortion. Excluding Corinna, the lover condemned those who die

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<sup>141</sup> Ronald A. Chez and Daniel R. Mishnell Jr., "Control of Human Reproduction: Contraception, Sterilization, and Pregnancy Termination," in *Danforth's Gynecology*, ed. James Scott et al. (Philadelphia: J.B. Lippincott Company, 1994), 622.

<sup>142</sup> Riddle, *Contraception and Abortion*, 4.

<sup>143</sup> Ovid, "Amores," 70.

<sup>144</sup> *Ibid.* 69.

from abortions to their fate. “Tender-hearted girls do—and pay the penalty:/ for the murderess often dies herself/ ... and the people who see it shout *Serve her right!*”<sup>145</sup> Through his poems, Ovid shamed those who procured abortions, and publicized the dangers of the procedures, in an attempt to discourage others.

The satirist Juvenal also referred to abortion, in his *Satire Six*, when he touched on the reproductive habits of rich and poor women. He stated that poor women had children and nursed their infants, but rich women were able to avoid childbirth because they had access to drugs that could abort a fetus or cause sterility.

“Pauper women endure the trials of childbirth and endure the burdens of nursing, when fortune demands it. But virtually no gilded bed is laid out for childbirth-- so great is her skill, so easily can she produce drugs that make her sterile or induce her to kill human beings in her womb.”<sup>146</sup>

Although Juvenal referred only to rich women as having access to knowledge of abortifacients, this is part of the rhetorical flourish of his satire. Women, rich or poor, had access to at least some knowledge of the abortion drugs that he condemns.<sup>147</sup>

In his work *Consolation to Helvia*, Seneca discussed a number of virtues held by his mother Helvia. Among the standard virtues were: her lack of greed and vanity, her joy over her fertility, and that she never tried to prevent conception. “You never were ashamed of your fertility, as though the number of children you had mocked your age. You never tried to hide your pregnancy as though it were indecent, like other women who seek to please only

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<sup>145</sup> Ibid. 70-71.

<sup>146</sup> Juvenal, “Satire Six,” 131-133.

<sup>147</sup> Riddle, *Contraception and Abortion*, 17.

with their beauty. Nor did you ever extinguish the hope of children already conceived whom you were carrying.”<sup>148</sup> By listing Helvia’s standard virtues first, Seneca cast her as the ideal Roman matron, thus representing women who use abortion, even other upper class women, as the dregs of Roman society.

Ovid, in his *Fasti*, offered another example of upper class women using abortion when he described the origin of the festival of the nymph Carmenta. He explained that Ausonian matrons had always been allowed to drive in carriages (*carpenta*), named after Carmenta; when this right was taken from them, the women protested. They refused to bear any children for their husbands until their privileges were fully restored. “To avoid giving birth, reckless and blind they stabbed/ Their guts to expel the growing freight./ They say the Fathers censured their cruel daring/ But yet restored the stolen honour/ And told them to repeat the Teagan Mother’s rites.”<sup>149</sup> The men conceded in response to this boycott, and festivals were established to honor Carmenta. In this story, purposeful use of abortion was held out as an extreme measure available for women to make their influence felt.

In addition to demonizing abortionists in literature, elite Roman males may have looked to legal means to restrict women’s use of abortifacients. The one Roman law that directly references abortion itself as a crime is the *Lex Cornelia on Murderers and Poisoners* (81 B.C.E). The law read, in translation: “If it is proved that a woman has done violence to her womb to bring about an abortion, the provincial governor shall send her into exile.”<sup>150</sup>

The legal classification of abortionists with murderers and poisoners adds further to its

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<sup>148</sup> Seneca, “Consolation of Helvia,” 22.

<sup>149</sup> Ovid, *Fasti*, trans. A.J. Boyle and R. D. Woodard (New York: Penguin Books, 2000), 22.

<sup>150</sup> *Digest of Justinian*, 48.8.8. [No pagination]

demonization, as it is included with other such crimes as castration and murder. In this case it seems that abortion was forbidden under the principles of the law, but there was no active legal campaign against it.<sup>151</sup> Other laws mention abortion in reference to the father. Women were forbidden to abort a fetus after a divorce or in order to deprive their husbands of heirs.<sup>152</sup> Law protected the right of the father to have children, and possibly the right of the state as well.<sup>153</sup>

A literary reference to possible laws on abortion appears in *Germania*, by Tacitus. As he described the family life of the German tribes, he mentioned their stance on reproduction. “It is considered a crime to limit the number of children... and there good customs have greater influence than good laws elsewhere.”<sup>154</sup> The phrase “good laws” (*bonae leges*) could have referred to similar legislation found in Roman law codes, however unenforceable they might be.<sup>155</sup> As well, even if there were not such laws in Rome, Tacitus may have assumed there were due to a perception that abortion was or should have been illegal, because it denied the family and state of children.

The Stoic philosopher Musonius Rufus (30 C.E.- 101/2 C.E.)<sup>156</sup> also mentioned Roman legislation that he thought dealt with contraceptives and abortifacients, likely the Julian laws of Augustus on childrearing.<sup>157</sup>

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<sup>151</sup> Riddle, *Contraception and Abortion*, 64.

<sup>152</sup> *Digest*, 47.11.4, 48.19.39. [No pagination]

<sup>153</sup> Riddle, *Contraception and Abortion*, 64.

<sup>154</sup> Tacitus, *Germania*, 33.

<sup>155</sup> Keith Hopkins, “Textual Emendation in a Fragment of Musonius Rufus,” *Classical Quarterly, New Series* 15, no. 1 (May 1965): 74.

<sup>156</sup> William David Ross and Miriam T. Griffin, “Gaius Musonius Rufus,” *OCD*, 1013.

<sup>157</sup> Keith Hopkins, “Textual Emendation,” 73.

“The rulers forbade women to abort and attached a penalty to those who disobeyed; secondly they forbade them to use contraceptives on themselves and to prevent pregnancy; finally they established honours for both men and women who had many children and made childlessness punishable.”<sup>158</sup>

Rufus interpreted these laws as containing mention of abortion and contraception, while in fact they only contain benefits for childrearing and disadvantages for childlessness.

However, his interpretation shows an assumption that legislators would respond to the low birth rate in Rome by banning a major cause.<sup>159</sup>

In their attempts to increase the citizen birthrate, Romans took a direct approach by refusing to take part in *coitus interruptus*, but also tried social controls. Ovid, Juvenal and Seneca demonized abortionists, and shamed women who procured abortions. Further, Romans expected legislation to introduce restrictions on the practice. While men were responsible for making policy decisions and moral judgments about abortion and contraception, their effectiveness relied upon female involvement, as women were responsible for implementing these methods.

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<sup>158</sup> Translated by Keith Hopkins based on text in Musonius, frag. 15a. "Contraception in the Roman Empire," 141.

<sup>159</sup> Riddle, *Eve's Herbs*, 86.

## CHAPTER 4

### Scheduling Sex

Medicine offered various methods for couples to increase conception rates by scheduling their sexual activity generally and within a woman's menstrual cycle. Men were advised to take long breaks between sexual encounters and ensure that both partners were in the correct bodily state for sexual relations. Individuals scheduled marital intercourse under the advice of medical authorities, so as to increase their rates of conception. This information can be accessed by two contemporary sources, the medical authors Soranus and Galen. Although these two may not be representative of all physicians operating in the Roman Empire, they are important figures in the history of medical thought.

Galen considered sex to be an important part of bodily health as it was necessary to prevent a retention and excess of sperm.<sup>160</sup> It was, however, a physically demanding activity that could take a toll on one's health if performed in excess,<sup>161</sup> and so should only be partaken in by those in the prime of their life.<sup>162</sup> Men were to monitor their health to determine whether sexual acts "are harmless to them or injurious, and at what interval of days they are harmless or harmful."<sup>163</sup> The medical author Soranus differed from this, claiming "intercourse is harmful in itself," and recommended permanent virginity as a means

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<sup>160</sup> Galen, *On the Affected Parts*, trans. Robert Siegel (Basel: S. Karger, 1976), 185.

<sup>161</sup> Galen, *On Hygiene*, trans. Robert Green (Springfield: Thomas, 1951), 27.

<sup>162</sup> *Ibid.* 53.

<sup>163</sup> *Ibid.* 275.

of preserving health.<sup>164</sup> However, both stances were tempered by the social necessity of reproduction.

Galen believed that sex drained a man of most of his vital spirit, *pneuma* or air. Blood was thought to carry this air from the lungs to the spinal cord, and from there to the testicles; during its journey, the blood turned white and was purified into sperm. When a man ejaculated, the expulsion of sperm would draw out his vital spirit, weakening the body.

“And the loss that all the parts of the animal undergo at such times will be not only of seminal fluid but also of vital *pneuma*; for this too is emptied from the arteries along with the seminal fluid. So it is not at all surprising that those who are less moderate sexually turn out to be weaker, since the whole body loses the purest part of both substances.”

After ejaculation, fresh blood would rush through the veins towards the testicles, and the process of purifying it into semen would begin anew.<sup>165</sup>

Since excessive sexual intercourse weakened the body, Galen instructed men to turn to doctors for supervision and advice, so as to ensure the greatest benefit with the least harm. After having sexual relations, men were instructed to recover and wait a period of time, individual to each man, before they ejaculated again.<sup>166</sup> The fluid that inhabited the genital area immediately after ejaculation was thought to be less pure and of lower quality because it had suddenly rushed there from other parts of the body. The process of purification had not

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<sup>164</sup> Soranus, *Gynecology*, 29.

<sup>165</sup> Galen, *On Semen*, 139-141.

<sup>166</sup> Galen, *On Hygiene*, 275.

been completed and the semen was mixed with blood.<sup>167</sup> Impure seminal fluid was not suitable for productive sexual relations, as it was less likely to lead to successful conception.

While Galen regulated the frequency of the sex act, Soranus regulated its timing within the menstrual cycle. *Gynecology* stated that the correct time for productive intercourse was the few days “when menstruation is ending and abating,”<sup>168</sup> in days four to six of the menstrual cycle, as measured from the first day of menstruation.<sup>169</sup> The purpose of menstruation was thought to be a cleansing of the uterus in preparation for the attachment of an embryo;<sup>170</sup> sexual relations directly after this catharsis would be most productive, as the seed would have a clean slate on which to attach. Modern medicine recognizes that women usually ovulate between days eleven to fifteen of their cycle, and sex during this time is most likely to result in pregnancy.<sup>171</sup> Although the ancient method was ineffective, some effort was made to understand the timing of ovulation and conception rates. It could be argued that since the ancient method was scientifically ineffective, then observation of this would lead to its disuse. However, it was included in a textbook work by a respected physician that was widely disseminated; although ineffective, this advice is presumed to have been valued.

Men also turned to medicine to determine the environment in which the marital sex act should be performed, to increase the likelihood of conception. The physiological and physical state of the male was taken into account in the timing of the sex act. The regimen

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<sup>167</sup> Galen, *On Semen*, 181.

<sup>168</sup> Soranus, *Gynecology*, 34.

<sup>169</sup> Grace Couchman and Charles Hammond, “Physiology of Reproduction,” in *Danforth’s Obstetrics and Gynecology*, ed. James Scott et al. (Philadelphia: J.B. Lippincott, 1994), 44.

<sup>170</sup> Soranus, *Gynecology*, 25.

<sup>171</sup> Couchman and Hammond, “Physiology of Reproduction,” 38.

Galen prescribed for men to follow before sex included eating a small amount of food, so that the body was neither hungry nor digesting. If a meal or bath was needed, sex should occur first; however, sex was most efficient if done just before sleep.<sup>172</sup> The psychological and physical state of the male was thought to affect sperm quality.

The ancients based this evaluation of the importance of the physiological state of the male in part on observation. Stress has been proven to have negative impacts on the quality and volume of semen ejected by healthy males. A study done on healthy fertile male third-year medical students at Trakya University in India took note of their sperm concentration and mobility during and then two months after their final examinations. Their stress levels were measured using the STAI<sup>173</sup> test, and the results were analyzed in conjunction with the semen samples.<sup>174</sup> During the stress of the final exam period, a 50% decrease in semen quality was detected.<sup>175</sup> Another study performed on the semen of twenty-eight healthy fertile males over six to twelve months measured “abstinence, frequency of ejaculation, health behavior and status, experienced stress, social support, and life events” as well as ego-resiliency.<sup>176</sup> Stress was found to negatively impact the volume of semen per individual, and to increase the number of abnormal morphological forms.<sup>177</sup> When conception is desired, a

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<sup>172</sup> Galen, *On Semen*, trans. Phillip De Lacey (Berlin: Akademie Verlag, 1992), 137.

<sup>173</sup> State Trait Anxiety Inventory, a test used to measure an individual’s stress levels.

<sup>174</sup> Sevgi Eskiocak et al., “Association Between Mental Stress and Some Antioxidant Enzymes of Seminal Plasma,” *Indian Journal of Medical Research* 122 (Dec 2005): 492.

<sup>175</sup> *Ibid.* 494.

<sup>176</sup> P. T. Giblin et al., “Effect of Stress and Characteristic Adaptability on Semen Quality in Healthy Men,” *Fertility and Sterility* 49, no. 1 (Jan 1988): 128.

<sup>177</sup> *Ibid.* 130.

negative mental state should be avoided; recognizing this, the ancient medical writers prescribed activities to relieve stress, such as satisfying hunger.

Soranus issued similar regulations for women to follow before they had sex. Both a woman's mind and body were to be at ease. She should not suffer from indigestion: sex should occur after a massage and a small meal had been eaten. Soranus' justification for these terms was that they allowed the male's sperm to more readily attach to her uterus and not be expelled.<sup>178</sup> He also mentioned a list of traits relating to the psychological state of the woman. Sexual activity should occur when the woman was sober, she had physical and mental desire for sex and "a pleasant state exist[ed] in every respect."<sup>179</sup> At an earlier point in his text, Soranus described the requirements for a fertile marriage partner and mentioned constant cheerfulness as an important feature of fertility.<sup>180</sup> Here, as with advice for men, a regimen was suggested that ensured stress relief for women prior to the sexual act, due to the negative effects stress could have on conception and pregnancy.

Studies have shown that women facing significant stress are less likely to conceive; when they do, they are more likely to bear children with birth defects. A Smithsonian Institute study noted that women with non-anatomic infertility reported significantly higher stress levels than women with anatomic infertility.<sup>181</sup> Maternal stress that occurs two months before and during the first two months of pregnancy has been associated with an increased

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<sup>178</sup> Soranus, *Gynecology*, 34-35.

<sup>179</sup> *Ibid.* 35.

<sup>180</sup> *Ibid.* 33.

<sup>181</sup> S. K. Wasser, G. Sewall, and M. R. Soules, "Psychosocial Stress as a Cause of Infertility," *Fertility and Sterility* 59, no. 3 (Mar 1993): 689.

risk of cleft palate and lip, anencephaly and spina bifida.<sup>182</sup> Soranus responded to risks like these by recommending men only marry women with calm characters, and by arranging for these women to be relieved of stress. This was not done out of concern for her health, but out of desire to increase the birth rate.

The Roman population could not sustain itself without the reproduction of its citizens. To ensure that sex would lead to conception and also so that the embryo would be viable, males turned to their physicians to set out regulations and systems they should follow. The timing of sex with in the menstrual cycle and the frequency of sex were regulated to ensure success. As well, the mood and physical state of the sex partners was taken into account, so that any negative feelings or health would not imprint onto health of the fetus.

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<sup>182</sup> S. L. Carmichael et al., “Maternal Stressful Life Events and Risks of Birth Defects,” *Epidemiology* 18, no. 3 (May 2007): 358.

## CHAPTER 5

### Fertility and Folk Medicine

Both men and women, elite and poor, were concerned about the low birth rates of the citizen population of Rome, as well as their individual fertility. This can be seen by the varied methods used to increase conception rates, which varied depending on the social group implementing them. Women primarily turned to folk medicine in their search for fertility enhancers. Although the remedies used may not have always had a strict pharmacological basis, their perceived effectiveness may have had a placebo effect on the women involved. The collection of these remedies in texts such as Pliny's *Natural History* and the attempts to control fertility show that increasing fertility was a major concern of Roman citizens.

Folk medicine can be defined as “medical practice before the Hippocratic Corpus and the traditional medicine that competes with scientific medicine after the fifth century B.C.”<sup>183</sup> Although Greek and Roman physicians relied upon the data supplied by folk medicine, they dismissed the belief system it contained in favor of theoretical observations.<sup>184</sup> Laypeople relied upon folk medicine, which contained magic, rituals, incantations and amulets as well as drugs, to treat illness outside of the realm of doctors and scientific medicine.

Women involved in magic were referred to as *sagae*, ‘wise women.’ They were of the lowest stratum of magic workers, and were relegated to doing simple purifications, love

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<sup>183</sup> John Riddle, “Folk Tradition and Folk Medicine,” in *Quid Pro Quo: Studies in the History of Drugs* (Hampshire, UK: Variorum, 1992.), 38.

<sup>184</sup> *Ibid.* 40.

potions and healing cures.<sup>185</sup> *Saga* is also a term used for women trained in herbal medicines who were called to care for the sick with traditional knowledge they had learned from their mothers and other female relatives.<sup>186</sup> However, some may have been slaves educated in traditional rites, whose owners hired out their services.<sup>187</sup> In this environment, knowledge could spread easily between women.

Medical magic was used by women of all classes, either through the use of a *saga* or through personal knowledge. In Plautus' *Braggart Soldier*, a stereotypical wife of the upper class asked her husband for money to pay off the expenses she had incurred that month. "Dream interpreter, diviner, sorceress, and soothsayer!/ She tells fortunes from your eyebrows—it's a crime to leave her out!/ ...And the midwife has complained—we didn't send her quite enough!"<sup>188</sup> When *sagae* and women such as those listed above were not readily available, the women of a family would attend to the sick using their own home remedies. The narrator of the *Laudatio Turiae* mentioned the struggles with infertility that he and his wife Turia faced. She had offered her husband a divorce, so that he could marry a more fertile woman, but he chose to stay married to her. Turia tried various measures to cure her infertility, to no avail. Turia's husband said: "The courses you considered and the steps you attempted to take because of this would perhaps be remarkable and praiseworthy in some other women, but in you they are nothing to wonder at when compared to your other great

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<sup>185</sup> Matthew Dickie, *Magic and Magicians in the Greco-Roman World* (London: Routledge, 2001), 245.

<sup>186</sup> Valerie French, "Midwives and Maternity Care in the Roman World," *Helios: New Series* 13.2 (1986): 73.

<sup>187</sup> Dickie, *Magic and Magicians*, 246.

<sup>188</sup> Plautus, *Braggart Soldier*, 118.

qualities and I will not go into them.”<sup>189</sup> He left the treatment of her sterility in the hands of his wife and other women.

The folk medical remedies for infertility include herbal and mineral, as well as animal-based ingredients. Often these substances were pharmacologically active, while others were thought to work through magical logic. The placebo effect may also have played a role in the remedies’ effectiveness. Cato the Elder, in his work *On Agriculture*, prescribed the urine of those who ate cabbage regularly as a panacea for women’s diseases. “If a woman will warm the privates with this urine, they will never become diseased. The method is as follows: when you have heated it in a pan, place under a chair whose seat has been pierced. Let the woman sit on it, cover her, and throw garments around her.”<sup>190</sup> Cato placed a high value on cabbage, and recommended it for various medical problems, such as wounds and dislocations.<sup>191</sup> Although Cato’s valuation of cabbage may be exaggerated, it may have been effective either through some pharmacological action or through a placebo effect.

Another ancient plant-based remedy is contained in Pliny the Elder’s *Natural History*. He noted: “Even wine contains miraculous properties. One grown in Arcadia is said to produce the ability to bear children in women and madness in men.”<sup>192</sup> John Riddle has argued that the special wine to which Pliny refers is mandrake wine.<sup>193</sup> Mandrake was widely known in classical antiquity for its ability to induce sleep or a relaxed state.<sup>194</sup> As we have

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<sup>189</sup> *So-called Laudatio Turiae*, 27.

<sup>190</sup> Cato, *On Agriculture*, 149.

<sup>191</sup> *Ibid.* 145.

<sup>192</sup> Pliny, *Natural History*, 4:263.

<sup>193</sup> John M. Riddle, “Goddesses, Herbs, Elixirs, and Witches,” (unpubl. manuscript, 2009).

<sup>194</sup> *Ibid.*

seen, stress in women is connected with an increased risk of birth defects, even before conception.<sup>195</sup> As well, stress affects the menstrual cycle. It causes the body to produce cortisol and endogenous opioids, chemicals that curb the production of gonadotropins, hormones necessary for ovulation. Mandrake in small quantities was used to relieve stress, which may have led to the higher rates of conception noted by Pliny.<sup>196</sup>

Another remedy recommended by Pliny to cure infertility in women contains plant and animal based ingredients. Pliny asserted: “Barrenness in women is cured by an eye [of a hyena] taken in food with licorice and dill, conception being guaranteed within three days.”<sup>197</sup> The herb licorice (*Glycyrrhiza glabra*) has been found to contain phytoestrogens, plant based chemicals that mimic the effects of the hormone estrogen when introduced to the human body. Phytohormones are typically used in treating menopausal symptoms, but few studies have been done to evaluate their effects on fertility. However, estrogen plays an important role in the reproductive cycle of women, and an artificial increase in this hormone, if timed correctly, has the possibility of promoting the chances of successful embryo implantation.<sup>198</sup> Dill (*Anethum graveolens, L.*) also has effects on the reproductive system, lengthening the luteal phase of the menstrual cycle. Female rats given extracts of dill exhibited higher progesterone concentrations in the blood, and lengthened estrous cycles.<sup>199</sup>

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<sup>195</sup> Wasser, Sewall, and Soules, “Psychosocial Stress,” 689.

<sup>196</sup> Riddle, “Goddesses, Herbs, Elixirs, and Witches.”

<sup>197</sup> Pliny, *Natural History*, 69.

<sup>198</sup> David Zava, Charles Dollbaum, and Marilyn Blen, “Estrogen and Progestin Bioactivity of Foods, Herbs, Spices,” *Proceedings of the Society for Experimental Biology and Medicine* 217, no. 3 (March 1998): 375.

<sup>199</sup> M. Monsefi, M. Ghasemi, and A. Bahaoddini, “The Effects of *Anethum Graveolens, L.* on the Female Reproductive System,” *Phytotherapy Research* 20, no. 10 (Oct. 2006): 866-867.

Progesterone levels increase during the luteal phase, allowing a fertilized egg to mature. As the luteal phase needs to be at least 10 days long for pregnancy to occur,<sup>200</sup> lengthening the luteal phase may have helped some women who were not able to conceive because of low progesterone levels or short luteal phases.

A woman seeking to increase her chances of conceiving would ingest the substances listed in the previous example (hyena eyes, licorice, dill). It is not clear from the extant text of the recipes what dosage was required, though women would not have relied upon these remedies if they proved useless. Modern scientific studies are not of use in determining exactly what dose would have been required; time of day, method of preparation, season and part of plant used all make a difference in the concentration of the final drug.<sup>201</sup> Specific knowledge, such as doses and preparation, would have been passed down through oral transmission between women. Male doctors drew from the traditional knowledge of women to include in their medical texts.<sup>202</sup> Since women were knowledgeable about drugs, and male doctors drew this knowledge from them to share with other practitioners, medical magic was originally, and primarily the female way of treating infertility.

Some drugs were not administered orally but rather were applied through fumigation, as with cabbage, or applied to the body externally. Crushed snails were mixed with saffron and applied to a woman's body, presumably on her genital area, in order to promote conception.<sup>203</sup> Current scientific studies recognize the power of crocin, one of the main

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<sup>200</sup> Couchman and Hammond, "Physiology of Reproduction," 38.

<sup>201</sup> Riddle, *Contraception and Abortion*, 52.

<sup>202</sup> *Ibid.* 16.

<sup>203</sup> Pliny, *Natural History*, 8.359.

chemicals in saffron, as a sexual stimulant when injected into male mice in doses as low as 100mg/kg body weight.<sup>204</sup> The active ingredient in similar applications may have been absorbed through the mucous membrane while the poultice remained on the body. Some remedies include active drugs, but that never are directly applied to or ingested by the patient. An amulet made of mistletoe carried by a woman is recommended to promote conception.<sup>205</sup> Mistletoe is recognized as containing phytohormones related to progesterone. It was known to have an impact on the reproductive system, as it was used in recipes to decrease fertility. Since women knew about this power, it was included in an attempt to impact the reproductive cycle in another way and increase fertility.

Some remedies were thought to work on the basis of sympathetic magic, the belief that objects can influence other objects or persons if some sort of magical connection exists between them. The forces that exist between different substances are classified in ways such as like and dislike, attraction and expulsion.<sup>206</sup> The theory of “like cures like,” wherein the cure for a disease is cured by that which caused it, is also considered sympathetic magic. Such magic can be as literal as curing a dog bite with parts of a mad dog or can extend to the use of plants or objects that share characteristics with the symptoms of the disease.<sup>207</sup>

Pliny offered recipes to increase conception rates that used animal reproductive organs. An aborted rabbit fetus was thought to bring renewed fertility to menopausal women

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<sup>204</sup> H. Hosseinzadeh, T. Ziaee, and A. Sadeghi, “The Effect of Saffron, *Crocus Sativus* Stigma, Extract and its Constituents, Safranal and Crocin on Sexual Behaviors in Normal Male Rats,” *Phytomedicine* 15, no 6-7 (June 2008): 493.

<sup>205</sup> Pliny, *Natural History*, 7:13.

<sup>206</sup> Lynn Thorndike, *History of Magic and Experimental Science* (New York: Macmillan Company, 1929), 1:84.

<sup>207</sup> *Ibid.* 1:86-87.

and the uterus or testicles of a rabbit were thought to help women conceive.<sup>208</sup> Rabbits are such prolific breeders that it was thought their fertility could be transferred to an infertile woman through ingestion of the animal's reproductive organs. In addition to any physiological effects that ingestion of animal hormones would have, there was a strong psychological effect in this remedy.

The psychological effect of magic rituals should not be underestimated, even when the substances used in them were of little or no medical value. The power of belief was noted in antiquity. Soranus did not believe in the power of medical magic, however he allowed midwives to use amulets to help ease the mind of the patient, as long as they included no dangerous substances.<sup>209</sup> Such magic could help physicians by calming the patient and alleviating her fears; she might then be more receptive to the advice of the physician.<sup>210</sup> In some cases, the magic used by the midwife could work in conjunction with the medicine of the physician.

Men and women of all classes had recourse to folk medicine, whether they practiced medicine themselves or hired those who did. However, women seem to have relied primarily on this form of medicine to combat infertility. The remedies were made up of a combination of herbal remedies, incantations and sympathetic magic. Fertility was an important concern of those using folk medicine, as shown by the wide variety of methods and references to it.

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<sup>208</sup> Pliny, *Natural History*, 8.167.

<sup>209</sup> Soranus, *Gynecology*, 165.

<sup>210</sup> John Riddle, "Folk Tradition," 41.

## CONCLUSION

The low citizen birthrate and attempts to increase fertility were major concerns of Romans in the late Republic and early Empire. Roman elites created political and social legislation in order to impact the child rearing rates in ancient Rome. Such legislation ranged from land and grain dole reform, to edicts that concerned marriage and the number of offspring. Tiberius Gracchus focused on redistributing the *ager publicus* among the poor landless citizens of Rome. By doing this, he hoped to increase the number of potential soldiers, as well as stabilize the economic situation. After his death, his brother Gaius Gracchus reduced the price of grain for poor citizens; the charge on grain was later abolished. This later impacted the availability of conscripts when Gaius Marius dismissed property qualifications for military service. The *alimenta* system established by Nerva, Trajan and Hadrian served a similar purpose, defraying some of the cost of raising children. Julius Caesar targeted the problem of low fertility by preventing citizen males from consecutively spending more than three years abroad. His successor, Augustus Caesar, created a system of legal regulations about marriage and created a system of rewards and punishments that encouraged child rearing. Infanticide was not considered a major contributor to the low birth rate, and no politician created legislation to restrict it. The variety of methods employed by politicians displays their deep concern about the fertility of the Roman citizen population.

Romans, authors and politicians especially, attempted to discourage women from using contraceptives and abortifacients. Varied literary authors demonized abortionists, and those who attempted to limit fertility, and held them up as the anti-ideal for Roman women.

Seneca favorably contrasted his mother to such women, as she was proud of her fertility and had never tried to hide or destroy it. Ovid wrote of a man who cruelly shamed his courtesan, Corinna, after she procured an abortion; he claimed that other women who did so deserved to die. Lawmakers held a similar view: Ulpian required such women to be sent into exile. Other laws are not extant, but Tacitus and Musonius Rufus referenced the possibility of their existence.

Both folk and standard medicine worked to increase rates of conception, though by different means. Standard medicine regulated sexual activity in order to ensure its productivity. The frequency of male ejaculation was managed in order to preserve the health of the male and to ensure that the sperm was of high quality. Physicians such as Soranus attempted to understand the ovulatory cycle and the period during which a woman was most fertile. Finally, the physical and emotional state of the participants was monitored, as this was thought to affect the embryo produced. Folk medicine used natural substances and magical logic in medicinal remedies, some of which were pharmaceutically active. These remedies were used across a wide swath of the empire, and were collected in such texts as Pliny's *Natural History*.

During the late Republic and early Empire, Roman citizens used various means to promote fertility and childbearing rates. In addition to personal familial concerns, the Roman state required a sustained population in order to maintain its economy and army. The variety of methods represented display how important of a concern increasing fertility was. By ensuring a stable or increasing population, Rome ensured its own stability.

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