Copyright

by

Rebecca Anne Havens

2011

The Report Committee for Rebecca Anne Havens Certifies that this is the approved version of the following report:

# The Rule of Health and "The Prince of Philosophers": The *Hygiasticon* of Léonard Lessius

## APPROVED BY SUPERVISING COMMITTEE:

Supervisor:

Neil Kamil

Julie Hardwick

# The Rule of Health and "The Prince of Philosophers": The *Hygiasticon* of Léonard Lessius

by

Rebecca Anne Havens, B.A.

## Report

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

## **Master of Arts**

The University of Texas at Austin May 2011

### Acknowledgements

Over the past four years, I have had the immense privilege to work with many brilliant scholars who have also been kind and generous mentors to me. With their gentle guidance I was able to strike off into heretofore undiscovered historiographies and primary documents. I would like to first thank Jorge Cañizares-Esguerra, Brian Levack and James Sidbury, who warmly welcomed me to the history graduate program at the University of Texas and then continued to support me as my interests veered off in unexpected directions. I would especially like to thank Neil Kamil, who, for the past two years I have had the amazing good fortune to call my advisor. His considerable patience and sage advice have steered me through some of the darkest moments of graduate school, and gave me the confidence to forge ahead with my master's report.

More than anything else, however, this master's report is a testament to the love and support of my close friends and family. First and foremost, I would like to thank my mother, Sandra Havens, who has spent long hours reading what I know is not light reading material, and who has spent even longer hours on the phone cheering me on and motivating me to do better. My dear friend and former roommate Amelia Erickson has been another cheerleader of mine, and I am eternally grateful for her sarcastic wit, keen eye and nurturing nature. I would like to add a special thanks to Michael Schmidt, who has been more supportive than anyone has a right to ask, and who continues to inspire me to find my peace and happiness. My truly appreciative thanks also to my brother, Michael Havens, as well as my sisters Rachael, Regan and Sydney and my father, Steven Havens for their limitless love and sense of humor. Lastly, thank you Lulu, for seeing me through it all.

## Abstract

## The Rule of Health and "The Prince of Philosophers": *The Hygiasticon* of Léonard Lessius

Rebecca Anne Havens, M.A. The University of Texas at Austin, 2011

Supervisor: Neil Kamil

Léonard Lessius was a Flemish Jesuit whose published works engaged in the most pressing economic, theological, and philosophical debates of the late sixteenth and early seventeenth-centuries. Highly-respected for both his profound intellect and his exemplary integrity and virtue, Lessius, also known as "The Prince of Philosophers" was venerated even in death. Despite his remarkable fame and influence in his own day, Lessius' philosophical contributions and legacy have been largely forgotten by modern historians. This striking lacuna in the historiography illuminates the narrow categories and concerns as well as the serious limitations of modern philosophy and the history of philosophy in particular. This report narrows in on one of these lost philosophical fields and treatises in particular, Lessius's study on diet and health, *Hygiasticon* (Antwerp, 1613). It uniquely, and quite literally, gets at the heart and soul of early modern philosophy: what is natural, what is the relationship between body, mind and soul, and what is necessary for health, wealth, spiritual- and self-improvement.

## **Table of Contents**

Introduction	1
Chapter One: "The Prince of Philosophers"	5
Chapter Two: Dietetics: The Rise and Fall of a Genre	9
The Disappearance of the Genre12	2
Chapter Three: The Hygiasticon18	8
Publication History and Dietary Recommendations18	8
The Ties that Bind: Physiology2	7
Descartes and the New Dualist Physiology	6
Chapter Four: Problems in the Historiography of Early Modern Philosophy and Science	
Conclusion4	7
Bibliography48	8

## Introduction

After suffering from putrid sores, painful boils, rashes and inflammations nearly all his life, on January 15, 1623, sixty-nine year-old Flemish Jesuit Léonard Lessius passed away at his home in Louvain in the Spanish Netherlands. Despite his numerous and chronic physical ailments, he lived a remarkably long, virtuous and productive life. The first half of his life, he was an extremely popular university lecturer. After his retirement, he found a new career and an even wider following writing widely-published and highly-respected treatises on everything from economics to free will, papal authority to moral theology and even health and nutrition. His passing didn't go unnoticed. Justus Lipsius, renowned humanist, eulogized him as "The Prince of Philosophers" and "The Oracle of the Low Country." Pope Urban VIII recalled,

"I knew Léonard Lessius perfectly. I was intimately associated with him in Rome and I have always held him in the highest regard on account of his extraordinary learning. But I esteemed him incomparably more for his virtue. He was a most humble man and endowed with unusual piety. I regard him as holding a high place in heaven."<sup>1</sup>

Within a few short years, Urban VIII created a commission charged with the formal investigation of Lessius' sanctity, virtues, service to God and the Church, and the miracles attributed to his intercession. His remarkable mind was preserved as a relic, and there were soon stories that "The Prince of Philosophers," who had kept death at bay for so long, despite doctors' gloomy prognoses, was himself responsible for healing miracles. Consequently, his tomb and relic were popular destinations for those looking for such miracles. For Lessius and for his contemporaries, intellect, virtue and body were

<sup>&</sup>lt;sup>1</sup> Quoted in Thomas Joseph Campbell, "Translator's Preface" in Léonard Lessius, *The Names of God, and Meditative Summaries of Divine Perfections* (New York: America Press, 1912), 4.

physiologically interconnected and mutually reinforcing, and Lessius' preeminent mind encompassed the very best of reason, spirit and health.

While he was a force to be reckoned with in his own day, history has not been kind to Léonard Lessius. Indeed, history has been far kinder to Lessius' detractors who did their best to expunge Lessius' legacy from the narrative of early modern history and philosophy. First the march towards his beatification was stalled, when, to the Jesuits' dismay, the prelate tasked with compiling Lessius' dossier, Jacques Boonen, was a strident supporter of Jansen and Baius, Lessius' theological adversaries. Boonen quietly refused to carry out his examination and Lessius' dossier remained empty.<sup>2</sup> The most famous Jansenist, Blaise Pascal, wrote scathing denunciations of Lessius' moral theology, particularly his justification of execution. In Pascal's mind, Lessius' impressive mind made a career out of rationalizing immoral state and Jesuit policies. Pascal mocked Lessius as an artful sophist, chastising that, "Nobody need go away in ill humor—nobody without the authority of a grave doctor. Lessius will talk to you like a Heathen on homicide, and like a Christian...on charity. Uniformity, even in evil, would be better than this."<sup>3</sup> Moreover, Lessius' philosophy, rooted as it was in intricate analyses of ancient authorities, was further marginalized with the rise of experimental science and the mind-body dualism of René Descartes in the latter-half of the seventeenth century. By the end of the seventeenth century, as popular opinion increasingly turned against the Jesuits, who were suspected of being too powerful, too wordly, and too rational, Lessius' reputation was among the first on the chopping block.

<sup>&</sup>lt;sup>2</sup> Charles Van Sull, S.J., *Léonard Lessius de la Compagnie de Jésus (1554-1623)*, from the collection "Éditions du Museum Lessianum," (Paris: Giraudon, 1930), 328-341.

<sup>&</sup>lt;sup>3</sup> Blaise Pascal, *The Provincial Letters of Blaise Pascal*, trans. and with intro. by Thomas McCrie (New York: Robert Carter & Brothers, 1850), 274.

At the same time, however, and indeed for some time afterwards, Lessius was a leading intellectual figure in early modern Europe, and his legacy begs to be reassessed within its proper context. Lessius' attitudes towards health and nutrition, as articulated in *Hygiasticon* (Antwerp, 1613), weave together a number of philosophical, scientific and spiritual interests, and a better understanding of Lessius will help to illuminate the intellectual traditions and debates that, though popular and dominant throughout much of the early modern period, have since been neglected or misconstrued. This report will examine, through the lens of the *Hygiasticon*, early modern understandings of the physiology of the spirit, the intellect and health.

While this report focuses on Léonard Lessius' *Hygiasticon*, his corpus illuminates the depth and range of early modern philosophical enquiry. In his treatise *De iustitia et iure* (Antwerp, 1605), for instance, Lessius delves into the nature and ethics of commercial relationships and exchanges, as well as the natural or just role of law and government and the elastic nature and limits of language, truth and honesty. His *Theses Theologia* (Louvain, 1586) and *Defensio potestatis* (Antwerp, 1611) advocate a more flexible reading of scripture and a correspondingly elastic approach to recognizing sacred authority.<sup>4</sup> In *De perfectionibus moribusque divinis* (Antwerp, 1620), Lessius meditates on the attributes of God and divine justice. He also carefully delineated natural, moral and pure and non-pure evil, and their *bonum* inverses.<sup>5</sup> Furthermore, nearly all of Lessius' works ponder the nature and practice of virtue. The fact that these subjects and Lessius' philosophical contributions and legacy have been neglected by modern historians speaks to the narrow categories and concerns as well as the limitations of

<sup>&</sup>lt;sup>4</sup> Stefania Tutino, *Empire of Souls: Robert Bellarmine and the Christian Commonwealth* (Oxford: Oxford UP, 2010), 52-54.

<sup>&</sup>lt;sup>5</sup> William A. Huesman, S.J., *The Doctrine of Leonard Lessius on Mortal Sin* (Rome: Pontificia Universitas Gregoriana, 1947).

modern philosophy and the history of philosophy in particular. This study narrows in on one of these lost philosophical fields and treatises in particular, *Hygiasticon*, Lessius' treatise on diet and health. It uniquely, and quite literally, gets at the heart and soul of early modern philosophy of what is natural, what is the relationship between body, mind and soul, and what is necessary for health, wealth, and spiritual- and self-improvement.

The purpose of this master's report, then, is twofold: first, to call attention to the gap between the history of science and philosophy and the terrain of early modern philosophy, and second, to tell one story which traverses this gap. The writing selected for this thesis which best exemplifies this, Léonard Lessius' *Hygiasticon*, is admittedly an incomplete example. It is neither meant to nor can it encompass the whole of Lessius' life and works, which speak to the range and depth of subjects tackled by early modern philosophers. A more complete account, both of Lessius and of early modern philosophy, must take into consideration Lessius' entire corpus—published and unpublished—as well as the works of his contemporaries and immediate predecessors and successors.<sup>6</sup> It should also avoid falling into what Shapin calls "the hagiographical tradition," and be careful to place Lessius in a broader social, cultural and political context rather than portray him as a disembodied "genius."<sup>77</sup> This, however, is a project far greater than that the spatial limitations of a master's report will allow. It can but sketch areas for further research.

<sup>&</sup>lt;sup>6</sup> Donald Rutherford notes that these are considered the baseline criteria for the increasingly requisite attention to the early modern background for the interpretation of early modern philosophies. See Donald Rutherford, "Innovation and Orthodoxy in Early Modern Philosophy," in *The Cambridge Companion to Early Modern Philosophy*, ed. Donald Rutherford (Cambridge: Cambridge UP, 2006), 11-38.

<sup>&</sup>lt;sup>7</sup> Steven Shapin, Never Pure: Historical Studies of Science as if It was Produced by People with Bodies, Situated in Time, Space, Culture, and Society, and Struggling for Credibility and Authority (Baltimore: Johns Hopkins UP, 2010), 11.

### **Chapter One: "The Prince of Philosophers"**

Located at the crossroads of the Age of Commerce and the Age of Exploration, Antwerp was the flourishing center of European international commerce throughout the first half of the sixteenth century.<sup>8</sup> Spanish silver, Portuguese spices and Venetian merchants made Antwerp the richest city in Europe and it soon grew to be one of the largest.<sup>9</sup> Léonard Lessius was born in the twilight of this golden age, on October 1, 1554, in Brecht, just outside of Antwerp. <sup>10</sup> Born into a middle-class family of farmers and merchants, Lessius was expected to enter into business and make the most of Antwerp's economic boom to bolster the family's fortunes and status. From a young age, however, Lessius demonstrated a precocious devotion to and talent for intellectual pursuits. Known as "the little prophet" while still in the village school, at the age of thirteen, Lessius won a prestigious scholarship to study classics and philosophy at the University of Louvain. In 1572, at the age of seventeen, he obtained his doctorate in philosophy and won the singular honor of *Primus*.

Rather than enter the mercantile fray, Lessius chose to join the Society of Jesus. This was a triumph for the Order, for, as the Jesuit Provincial of Belgium boasted to

<sup>&</sup>lt;sup>8</sup> Fernand Braudel, La Dynamique du Capitalisme (Paris: Arthaud, 1985), 143.

<sup>&</sup>lt;sup>9</sup> W.P. Blockmans, "The Formation of a Political Union, 1300-1600," in *History of the Low Countries*, ed. J.C.H. Blom and E. Lamberts, trans. James C. Kennedy (New York: Berghahn Books, 1999), 121-124.
<sup>10</sup> For biographical information on Leonard Lessius see Charles Van Sull, S.J., *Léonard Lessius de la Compagnie de Jésus (1554-1623)*, from the collection "Éditions du Museum Lessianum," (Paris: Giraudon, 1930); Cecil H. Chamberlain, S.J., "Leonard Lessius," in *Jesuit Thinkers of the Renaissance*, ed. Gerard Smith, S.J. (Milwakee, WI: Marquette UP, 1939), 133-155; C. Meyer, "Leonard Lessius" in *New Catholic Encyclopedia*, vol. viii (New York: McGraw Hill, 1967), 678; Murray N. Rothbard, *Economic Thought Before Adam Smith: An Austrian Perspectiveon the History of Economic Thought* (Cheltenham: Edward Elgar Publishing, 1995); Joseph De Ghellinck, "Leonard Lessius," in *The Catholic Encyclopedia*, vol. ix (New York: Robert Appleton Co., 1910), 192; T.J. Campbell, "Introduction" in Leonard Lessius, *The Names of God and Meditative Summaries on the Divine Perfections* (New York: Harper and Row, 1975); Barry Gordon, *Economic Analysis Before Adam Smith: Hesiod to Lessius* (London: MacMillan, 1975), 244-272; Joseph A. Welgarz, "Leonard Lessius: The Oracle of the Low Countries," paper presented at the Austrain Scholars Conference in Ludwig von Mises Institute, Auburn, Alabama, (March 18, 2005).

General of the Jesuits at Rome, "We have admitted a young man from Brecht, who is very gifted both mentally and physically and the leading scholar of the university."11 After completing his novitiate, Lessius was sent to Douai, in what is today northern France, to teach philosophy at the Jesuit-run English College. At that time, Douai was a hub of the Counter-Reformation. It was the home of the University of Douai, newly founded by Philip II of Spain (it gained papal approval in 1561) to preserve the purity of the Catholic faith in the wake of Reformation assaults. Additionally, Douai became the refuge of the many Catholics fleeing persecution in England, and throughout the sixteenth-century the University of Douai and the English College were the leading centers of English Catholic education and clerical training.<sup>12</sup> At the age of twenty, Lessius found himself teaching philosophy to around eight hundred students, many of whom were English expatriates, some of whom were Jesuit novitiates or seminarians, and still others who were local laymen. Lessius remained in Douai for eight years, from 1574 until 1582, when he was sent to the highest seat of Jesuit learning, the Roman College, where he was to study theology for two years under two of the most preeminent intellectuals of their day, Robert Bellarmine (1542-1621) and Francisco Suarez (1548-1617).

When his studies were complete in 1584, Lessius returned to the Low Countries, then in the midst of the Spanish-Netherlands war, to take up the Chair of Theology at the new Jesuit College at the University of Louvain. His arrival was postponed, however, by a devastating plague. He was finally able to take up his post in 1585, when the plague had abated and Spanish military victories restored a degree of peace to the region. At

<sup>&</sup>lt;sup>11</sup> Quoted in Chamberlain, "Leonard Lessius," 136.

<sup>&</sup>lt;sup>12</sup> Francis Edwards, S.J., *The Jesuits in England: From 1580 to the Present Day* (Tunbridge Wells, Kent: Burns & Oates, 1985), 30.

Louvain, Lessius caused a number of stirs, beginning with his use of the *Summa* of Thomas Aquinas as the basis of his lectures rather than Peter Lombard's *Sentitiae*, which had long been the standard theological textbook.<sup>13</sup> Thanks to Lessius, the Jesuit College at Louvain was "the main center for those who wanted to learn Aquinas" through the end of the sixteenth century.<sup>14</sup> Lessius was an extremely effective and popular lecturer, however, and a decade later the University followed his lead in 1596 by switching their primary frame of reference from Lombard to the writings of Aquinas.<sup>15</sup>

Indeed, as the popularity of his lectures grew, so did his reputation. He was persuaded to publish some of his lectures as *Theses theologicæ* (Louvain, 1586), which contributed to Catholic Reformation debates surrounding the roles of Divine Grace and Free Will in attaining salvation. This and all his future works quickly became best-sellers throughout Europe and earned him the monikers "Prince of Philosophers" and "Oracle of the Low Countries." His interests and contributions were wide-ranging, including topics such as grace, free will, predestination, moral theology or casuistry, and health and diet. His scope was not limited to the esoteric or theological, however. Though Lessius had long ago forsaken a future in the Antwerp markets, he nevertheless possessed a keen interest in the city's frenzied commercial revolution. He maintained close relationships with many of the largest merchant houses and conducted lengthy investigations of Antwerp's foreign exchange, banking and commercial goods marketplaces and practices. In 1605, he published his observations and analyses in *De iustitia et iure*. This treatise on justice and law contained many of Lessius' most popular and original meditations, and is to this day considered Lessius' greatest intellectual achievement. He tackled subjects

<sup>&</sup>lt;sup>13</sup> Tutino, *Empire of Souls*, 11; see also Chamberlain, "Leonard Lessius," 133-155.

<sup>&</sup>lt;sup>14</sup> Tutino, Empire of Souls, 11.

<sup>&</sup>lt;sup>15</sup> Ibid.

such as a free market, just prices and wages, usury, liquidity preference, interest and exchange rates, and business ethics and contracts.<sup>16</sup> His advice was sought by sovereigns and statesmen, church leaders, merchants and some of the most notable intellectuals of his day.<sup>17</sup> One biographer notes that Archduke Albert of Austria "along with his sword, always kept Lessius' book on justice on the table before him as his most trusted counselor when he held hearings, to show that his decisions were buttressed by the arms of Austria and the wisdom of Lessius."<sup>18</sup> Lessius would continue to lecture regularly as a professor of theology at the Jesuit College in Louvain until his official retirement in 1600, and he continued to publish and give the occasional lecture and consultation until his death in 1623. After his death, Flemish Jesuits clamored to honor and beatify their venerated colleague. They published biographies of Lessius, kept a piece of his brain as a relic, added his name to their martyrology and petitioned the Jesuit superior to search for miracles. In 1641, Pope Urban VIII began a formal investigation of Lessius' sanctity. While Lessius' beatification was successfully blocked by Jansenist opponents, his legacy lived on within Belgium and especially within the Jesuit order.<sup>19</sup>

<sup>&</sup>lt;sup>16</sup> For a more detailed analysis of Lessius' contribution to economic history, see Gordon, *Economic Analysis Before Adam Smith: Hesiod to Lessius*, 244-272; Rothbard, *Economic Thought Before Adam Smith: An Austrian Perspectiveon the History of Economic Thought;* Toon Van Houdt, "Money, Time and Labour: Leonardus Lessius and the Ethics of Lending and Interest-Taking," *Ethical Perspectives* 2:1 (1995): 11-27; Toon Van Houdt, "Tradition and Renewal in Late Scholastic Economic Thought: The Case of Leonardus Lessius (1554-1623)," *The Journal of Medieval and Early Modern Studies* 23:1 (2009): 51-73; Dean Mathiowetz, "The Juridical Subject of 'Interest,'" *Political Theory* 35:4 (2007): 468-493; Wim Decock, "Lessius and the Breakdown of the Scholastic Paradigm," *Journal of the History of Economic Thought* 31:1 (2009): 57-78; T. Van Houdt and W. Decock, *Leonardus Lessius: traditie en vernieuwing* (Anvers: 2005).

<sup>&</sup>lt;sup>17</sup> One scholar notes that that, "Lessius' judgment on most serious scientific matters was sought by the most learned men of his age, Suarez, Vasquez, Molina and others. Paul V, Sixtus V, ...St Francis de Sales, ...St Charles Borromeo...held him in the highest regard." See J.B. Ferreres, *Compendium Theologiae Morlais*, vol. i (Barcelona, 1932), xxviii; quoted in Gordon, *Economic Analysis Before Adam Smith*, 246.
<sup>18</sup> Leonard Schoofs, *De Vita et Moribus R.P. Leonardi Lessii* (Paris, 1644), 38-39; quoted in Gordon, *Economic Analysis Before Adam Smith*, 245-246.

<sup>&</sup>lt;sup>19</sup> Van Sull, *Léonard Lessius*, 328-341.

## **Chapter Two: Dietetics: The Rise and Fall of a Genre**

Of his numerous published works, *Hygiasticon*, Lessius' treatise on health and nutrition, has received the least scholarly attention. His later biographers dismissed it as merely a "curious" aberration from his *real* philosophical and theological work. Yet, *Hygiasticon* was more than a footnote in Lessius' *oeuvre*. Suffering from a panoply of diseases for the whole of his adult-life, health was a deeply personal subject for Lessius, occupying a great deal of his time and energy, and he continued to revise *Hygiasticon* through the final months of his life.<sup>20</sup>

By all accounts, Lessius should have died at the age of twenty-three. In 1577, fresh out of his Jesuit novitiate, Lessius had just taken up his lectureship at the Jesuit College in Douai. The Dutch Revolt took its toll, however, and that year Calvinist civilians and troops had taken control of the city and evicted the Jesuits from their college. On the run, Lessius contracted a mysterious leprosy-like disease from an innkeeper—who later died, and whom Lessius suspected of being a Calvinist. Very quickly, Lessius came down with a fever, his limbs swelled to nearly double their size, and fetid sores covered his body. His condition confounded doctors. They prescribed everything from hot or cold baths to innumerable herbs, plasters, and ointments—all, seemingly in vain. Though he survived, Lessius' never fully recovered, and he began a lifelong struggle with disease and infirmity. He was never free from malady, whether it be severe indigestion, inflammation of the limbs, liver or intestines, incessant headaches, or painful boils.<sup>21</sup> In 1611, he wrote a letter to a German Jesuit colleague, explaining that for the past two years he had suffered from malign humors which seemed to gnaw into

<sup>&</sup>lt;sup>20</sup> Smith, "Leonard Lessius," 154-155.

<sup>&</sup>lt;sup>21</sup> Van Sull, Léonard Lessius, 48-54.

the flesh of both his legs and that as a result he hardly ever left his house. "But," he explained, "I support these miseries with a joyful heart in the hope of a better future."<sup>22</sup> Spurred on by his constant suffering, and searching for answers and hope, Lessius dedicated a great deal of time to reading the most famous medical treatises and fine-tuning his own medical philosophies and dietetic regimen. After years of reading and experimenting with remedies and regimen, he finally hit upon a regimen that seemed to stave off illness and invigorate his mind and spirits. *Hygiasticon*, then, was his personal guide to health and he continued to refine it as he aged and renewed his struggle daily.

Lessius was not alone in his quest for health and longevity, nor in his nearconstant struggle with medical afflictions. Rampant disease and frequent outbreaks of plague and other epidemics devastated European cities throughout the sixteenth and seventeenth centuries.<sup>23</sup> The war-torn Low Countries were particularly hard-hit, with waves of epidemics and famine following the march of troops. A common prayer in the Spanish Netherlands was: "From pestilence, famine, and war, save us, O Lord."<sup>24</sup> In truth, Lessius was fortunate to have survived as long as he did. In 1584, the year Lessius took up a teaching post in Louvain, ten of the eighteen Jesuits on the college faculty there died as a result of plague.<sup>25</sup> Indeed, Lessius wrote *Hygiasticon* not merely for his own benefit but also to alleviate the suffering of many others. The widespread popularity of the treatise indicates that it reflects real medical fears and strategies shared by early modern people throughout Europe. Though composed and first published in Latin, it was

<sup>&</sup>lt;sup>22</sup> Quoted in Van Sull, *Léonard Lessius*, 52.

<sup>&</sup>lt;sup>23</sup> Mary Lindemann, *Medicine and Society in Early Modern Europe*, 2<sup>nd</sup> ed. (Cambridge: Cambridge UP, 2010), chapters 1-2; A. Lynn Martin, *Plague? Jesuit Accounts of Epidemic Disease in the 16<sup>th</sup> Century*, Sixteenth Century Studies, 28 (Kirksville, Mo.: Sixteenth Century Journal Publishers, 1996).

 <sup>&</sup>lt;sup>24</sup> C. Bruneel, "The Spanish and Austrian Netherlands, 1585-1780," in *History of the Low Countries*, ed. J.C.H. Blom and E. Lamberts, trans. James C. Kennedy (New York: Berghahn Books, 1999), 230.
 <sup>25</sup> Smith, "Leonard Lessius," 139.

a runaway best-seller and soon tranlated into English, French, Italian, Spanish, Dutch, Greek and Polish.<sup>26</sup> His English translator recounts that, as soon as the treatise reached English hands, or "not long after...by happy chance, or, to speak better, by gracious providence...," English readers were clamoring for a vernacular translation and to make it more "denizen-like" so that they too could share in the treatise's promise of health and long-life.<sup>27</sup>

*Hygiasticon* was also one of many treatises contributing to the thriving field of dietetics, comprising what is today diet, health, and hygiene. Incorporating aspects of both medicine and philosophy, dietetics has a long history tracing back to the Hippocratic physicians and Aristotle, who proffered natural (as opposed to supernatural) explanations for health, illness, aging and death. The field came into its own, however, during the Renaissance with the rediscovery and proliferation of Galenic texts between 1450 and 1650. Galen, a second-century Greco-Roman physician, elaborated upon Aristotelian and Hippocratic physiological systems based on four "humors"—blood, phlegm, black bile, and yellow bile—and four essential "qualities"—hot, cold, moist, and dry. Galen clarified that illness and death were the result of humoral imbalance, and in order to restore health, one had to restore humoral balance. This could be achieved by consuming or excreting particular combinations of humors and qualities. Diet was key. As a result, during the Renaissance there emerged copious manuals analyzing the humoral qualities of all kinds of food and urging fastidious attention to diet and habits. Historian Ken Albala suggests that this dietetic genre fits neatly within the Renaissance "self-

<sup>&</sup>lt;sup>26</sup> To my knowledge, it was published in Greek (1688), English (1634, 1742, 1778), Spanish (1744, 1880), Dutch (1652, 1681, 1696, 1923), French (1623, 1646, 1701, 1702, 1705, 1752, 1785, 1801, 1831, 1880), Italian (1841, 1845, 1879), and Polish (1765, 1775, 1845). In addition, it was published in numerous latin editions (1613, 1614, 1616, 1623, 1634, 1670, 1673, 1688).

<sup>&</sup>lt;sup>27</sup> Lessius, *Hygiasticon*, "To the Reader."

fashioning" craze. Along with etiquette books, gardening books, and cookbooks, dietetic manuals appealed to readers hoping to "civilize" their morals, manners, and bodily functions as well as improve their health.<sup>28</sup>

#### THE DISAPPEARANCE OF THE GENRE

How, then, did dietetics become left out of the history of medicine? Historian Heikki Mikkeli argues that the reason diet and hygiene disappeared from the literature is because, by the end of the seventeenth century, it had disappeared from the new science of medicine.<sup>29</sup> Sixteenth-century medical humanists recovered Galen's five-fold division of medicine into physiology, pathology, semeiotics, dietetics, and therapeutics. As the seventeenth-century advanced, however, many medical writers became increasingly dissatisfied with the Galenic model and fought to redefine the scope and tasks of the medical field. In 1630, German physician Petrus Lauremberg published Porticus Aesculapi, the first of a growing number of attempts to rid medicine of its preventative component. Health, they argued was the natural state, and the task of medicine was to cure and treat unhealthy bodies rather than care for those already in their healthful natural state. The study and conservation of perfect health, therefore, was not really medicine. Thus, as Mikkeli observes, dietetics "was increasingly relegated to the fringes of academic medicine while physiology, pathology, and therapeutics gained a stronger foothold."<sup>30</sup> This dislocation would be further exacerbated in the late nineteenth and twentieth centuries with the "laboratory revolution," which hailed the ascendancy of

<sup>&</sup>lt;sup>28</sup> Albala, *Eating Right in the Renaissance* (Berkeley: U. of California, 2002), 21.

<sup>&</sup>lt;sup>29</sup> Heikki Mikkeli, Hygiene in the Early Modern Medical Tradition (Helsinki: Annales Academiae

Scientiarum Fennicae, 1999), 10-12.

<sup>&</sup>lt;sup>30</sup> Ibid.

clinical medicine and the further exclusion of social, environmental and preventative medicine from the triumphant march of medical science.

This is only a partial explanation, however. It illuminates why medical historians have neglected the once omnipresent field of dietetics, but why has it disappeared from the wider literature on early modern European thought, culture, and society? Why have modern scholars (at least those outside the confines of food and hygiene history) disregarded dietetics as a part of the intellectual or scientific history of early modern Europe?<sup>31</sup>

Scholars Roger Ariew and Alan Gabbey suggest that dietetics should not be limited to the history of medicine, but should be more accurately considered part of the history of early modern *philosophy* as well. To confine dietetics to the study of medicine, they note is anachronistic mistake arising from the fact that *today* the study of the body and the physical world is confined to the concerns of specialized scientists. During the early modern period, however, these strict disciplinary demarcations did not exist, and they were instead "legitimate concerns not just of those one would now describe 'scientists,' but of most of the philosophical community." They echo Rutherford and Shapin's concern that early modern philosophers "shared a much broader conception of the scope of 'philosophy' than is common among philosophers today."<sup>32</sup> This expansive view of early modern philosophy was made possible because much of early modern philosophy and theology was markedly physiological in nature. Even if dietetics was eventually cut out of the *medical* field, it was still very much a *philosophical* affair. For

<sup>&</sup>lt;sup>31</sup> See Albala, *Eating Right in the Renaissance*; Albala, *Food in Early Modern Europe* (Westport, Ct: Greenwood Press, 2003); Mikkeli, *Hygiene in the Early Modern Medical Tradition*; David Boyd Haycock, *Mortal Coil: A Short History of Living Longer* (New Haven: Yale UP, 2008); Gerald J. Gruman, *A History of Ideas about the Prolongation of Life*, Classics in Longevity and Aging Series (New York: Springer, 2003).

<sup>&</sup>lt;sup>32</sup> Roger Ariew and Alan Gabbey, "The Scholastic Background," in *The Cambridge History of Seventeenth-Century Philosophy*, eds. Daniel Garber and Michael Ayers, 425-453.

instance, dietetics provided the lens through which early modern philosophers and readers pondered the "organic soul," a concept Katharine Park explains "is the principle responsible for those life functions inextricably tied to the bodies of living beings and immediately dependent on their organs."<sup>33</sup> The organic soul was responsible for basic bodily functions such as digestion, sensation, reproduction, and also higher faculties such as cognition, memory and imagination. Thus, self-improvement, whether intellectual, moral, physical or spiritual, was tied to understanding and manipulating corporal connections.<sup>34</sup>

Shapin provides a third explanation as to why scholars disregard dietetics. He theorizes that the genre's relative stability and moderating sensibility are to blame: "its advices seem banal and it is not a culture that changes very much over a great sweep of history...there appear to be no real *ideas* at play, certainly nothing as headily intellectual as the changes in medical theorizing ushered in with the Scientific Revolution..."<sup>35</sup> Katharine Park admits that throughout the sixteenth century, there was a general consensus over physiology and the nature of the organic soul and its functions, and that the field was largely static.<sup>36</sup> This body of knowledge was rooted in scholastic traditions stemming from Latin philosophers such as Thomas Aquinas, Duns Scotus, and Albertus Magnus, among others. By the end of the sixteenth century, however, this consensus within dietetics had irreparably shattered. Food historian Ken Albala notes that while, "no one entirely abandoned the tenets of Galenic humoral physiology," when it came to

<sup>&</sup>lt;sup>33</sup> Katharine Park, "The Organic Soul," in *The Cambridge History of Renaissance Philosophy*, eds. Charles B. Schmitt and Quentin Skinner, 6<sup>th</sup> ed. (Cambridge: Cambridge UP, 2003), 464.

<sup>&</sup>lt;sup>34</sup> Park notes that the scholarship on Renaissance psychology focuses almost exclusively on "the debates over immortality and intellection in late fifteenth- and sixteenth-century Italy." Yet, she points out, "to concentrate exclusively on them does not do justice to the much broader set of issues that preoccupied Renaissance writers on philosophical psychology." See Park, "The Organic Soul," 464. <sup>35</sup> Shapin. *Never Pure*, 292.

<sup>&</sup>lt;sup>36</sup> Park, "The Organic Soul," 464.

the details, however, "few dietaries still followed the orthodox Galenic line in this period."<sup>37</sup> Increasingly, the early modern model of the body-soul allowed physicians and practitioners to stress their own observations and experiences as a complement to textual authorities. This was not, however, proto-empiricism, as Katharine Park reminds us, "it remained experiential rather than experimental in character, relying on common experience to suggest and confirm rather than to test proffered explanations."<sup>38</sup> Dietetics, then, became an increasingly dynamic field as scholars began to question ancient authorities and generated and contested new conceptions of the relationship between the body and soul, the "Natural," and the complex ways in which they overlap, fortify, constrain, and inform each other.<sup>39</sup>

The dietetic genre has also suffered, Shapin notes, from a perceived lack of "geniuses." Not only were there few "new" ideas, there were also few innovators or recognizable marks of professional scientific authority. By nature, dietetics was a relatively open field in which both the professional physician and the interested layman had a voice and could speak to personal experience and authority. True, professional physicians maintained their dietary authority, and dietetics was an important part of a physician's practice. The cultural ubiquity of these relatively stable ideas, however, meant that laymen were often as steeped in dietetic philosophies and remedies as the professional physician. This "joint-ownership by experts and laypeople," as Shapin terms it:

"could give physicians great authority, just so long as what they advised counted as common sense. However, the same cultural sharing also presented them with problems in asserting their expert authority, just because their counsel might appear as little *else* than common sense, or even, where it departed from

<sup>&</sup>lt;sup>37</sup> Albala, Eating Right in the Renaissance, 36.

<sup>&</sup>lt;sup>38</sup> Park, "The Organic Soul," 469.

<sup>&</sup>lt;sup>39</sup> See also Ken Albala, "Overview of the Genre," in *Eating Right in the Renaissance*, 14-47.

temperate prudence, as *less* than common sense. From the physician's point of view—though not, of course, from the patient's—dietetics held out limited possibilities for cultural and social distinction...<sup>''40</sup>

This problem of ownership and innovation has also helped to make dietetics less attractive to historians of science and philosophy, as it obscures the origin and ownership of "novel" ideas, the very backbone of traditional hagiographical histories of intellectual or scientific pioneers.

To be sure, *Hygiasticon* and other dietetic manuals elucidate the relative stability and common-sense nature of early modern dietary guidelines and shared authority, but they also shed invaluable light on early modern culture.<sup>41</sup> This is hardly surprising given that the battlegrounds of good health—or "proper" diet, hygiene, and behavior—were loaded with religious, cultural and social significance. For the religiously inclined, they offered opportunities to emulate Christ and the Church Fathers. They also conveyed one's socio-economic status and coded values such as self-discipline or *joie de vie*. Historian Heikki Mikkeli suggests that "diet (or regimen) was a fundamental category by means of which human behavior could be conceptualized."<sup>42</sup> Foucault also saw its potential, stating that, "regimen was a whole art of living" and that it "was supposed to define, in the form of a corpus of knowledge and rules, a way of living, a reflective mode of relation to oneself, to one's body, to food, to wakefulness and sleep, to the various activities, and to the environment."<sup>43</sup> Focusing on health opens a window into the intellectual and popular beliefs and customs relating to both everyday and ideal life. Dietetics thus helps to recover the history of popular culture and "to discover its

<sup>40</sup> Ibid.

<sup>&</sup>lt;sup>41</sup> Albala, *Eating Right in the Renaissance*, 4.

<sup>&</sup>lt;sup>42</sup> Mikkeli, Hygiene in the Early Modern Medical Tradition, 18.

<sup>&</sup>lt;sup>43</sup> Michel Foucault, *The Use of Pleasure*, 101. See also Foucault, *The Care of the Self*, 99-104.

'poetics'... the various rules or principles which underlie everyday life..."<sup>44</sup> Accordingly, an analysis of the constituent elements of health can tell us much about the values of a society as well its strategies for living up to and imposing those values.

<sup>&</sup>lt;sup>44</sup> Peter Burke, *Popular Culture in Early Modern Europe*, 2nd ed. (Burlington, VT: Ashgate Publishing, 1994), xxiii.

## Chapter Three: The Hygiasticon

#### PUBLICATION HISTORY AND DIETARY RECOMMENDATIONS

As a practical working guide for a more popular audience—limited, of course, to those with the time and money to read such publications—it makes sense that dietary manuals were characteristically written in the vernacular.<sup>45</sup> Lessius, by contrast, wrote exclusively in Latin. Furthermore, appended to Lessius' own treatise was his Latin translation of a famous *Italian* dietary treatise. While writing strictly in Latin made his work more inaccessible to popular audiences, it did, however, make it *more* accessible to a wider, yet very specific cosmopolitan audience composed of learned statesmen, lawyers, scholars, and divines, like himself. What Lessius had in mind, in fact, was a specific intellectual class, those, "who do not ordinarily use much exercise of the body, but are altogether intent upon the employments of the mind."<sup>46</sup> Nevertheless, Lessius' attempt to target his audience was foiled by his own popularity, and *Hygiasticon* was translated into a number of vernacular languages not long after its initial publication. Indeed, even anti-intellectuals, those furthest from Lessius' intended circle, lauded, "Henceforth I'll never credit those that say contemplatifs do onely think and pray—sweet exercises!"<sup>47</sup>

Clearly, Lessius' agenda was to educate and to ameliorate individual diets and habits so as to ensure long life, but, more importantly, he wrote, "out of his love to the Commonwealth and public good."<sup>48</sup> This was not simply an individual medical problem, he explained, but a larger religious and economic priority. Many died premature deaths

<sup>&</sup>lt;sup>45</sup> Albala, Eating Right in the Renaissance, 37.

<sup>&</sup>lt;sup>46</sup> Leonardus Lessius, *Hygiasticon*, trans. George Herbert (London: 1633), IV:27, p. 94.

<sup>&</sup>lt;sup>47</sup> Robert Crashaw, "To the Reader, upon this Book's intent," in Lessius, *Hygiasticon*.

<sup>&</sup>lt;sup>48</sup> Lessius, *Hygiasticon*, "Epistle Dedicatorie."

for lack of a proper regimen, yet, he lamented, "had they lived, they might have been ornaments to their country," and "by their learning and worthy deeds have notably benefited the world, and thereby added to their own glory in heaven."<sup>49</sup> As a teacher and consultant, Lessius had noted that temperance and good health stimulated the mind and afforded considerable intellectual benefits "to students of good learning, and to all those whose employments consist in affairs and businesses appertaining to the mind and understanding."<sup>50</sup> He reasoned that poor health polluted the body and clouded the understanding, and that "those things which hinder the functions of the Mind, or obscure them, or make them to become difficult and irksome, are the things which…debase us from attaining to any great measure of perfection either in learning or in exercise of religion or in sanctity of life."<sup>51</sup>

In particular, for Lessius, health had enormous religious repercussions. Ill health, he clarified, was the scourge of monastic and mendicant orders, who, "through ignorance of this matter enjoy little health," and as a consequence they, "remain much hindered in their studies, and in the performance of those offices and functions of the minde, which they most desire, and are bound to do."<sup>52</sup> Thus, his treatise intended to provide "the religious and devout," with "such rules and methods of living as may make them, with greater cheefulness, ease and zeal...apply themselves to the faithful service of the Great God and of our saviour Jesus Christ."<sup>53</sup> By disciplining bodies, Lessius hoped to invigorate minds and souls. These religious concerns were not merely an addendum to the treatise's main purpose. By 1219, Canon law had prohibited monks and priests from

<sup>&</sup>lt;sup>49</sup> Lessius, *Hygiasticon*, I:2, 6.

<sup>&</sup>lt;sup>50</sup> Ibid., I:4, p. 13.

<sup>&</sup>lt;sup>51</sup> Ibid., XI:53, pp. 176-178.

<sup>&</sup>lt;sup>52</sup> Ibid., I:2, pp. 6-7.

<sup>&</sup>lt;sup>53</sup> Ibid., I:4, p. 12.

practicing medicine, putting the Jesuit Lessius on the defensive.<sup>54</sup> "It benefits not a Divine," he admitted, "to busy himself in trifles which appertain to the body…" He qualified, however, that writing a treatise on dietetics was not contrary to his orders. The search for good health, "is not altogether physical, but in great part appertains to divinity and moral philosophy."<sup>55</sup> Furthermore, it was his duty, "to have an eye to those good things whereby we may become acceptable to God and promote our own salvation." Dietetics, and more specifically, "Holy Sobriety," brought "good things" to both body and soul, and, "I did not think it misbeseeming my profession to write…in commendation thereof."<sup>56</sup> In fact, he thought his task, "most befitting a Divine," for, "it is scarce to be believed, with how great alacrity, and with what abundance of inward consolations those men, who addict themselves to sobriety, …attend Divine Service, and the hearing of God's Word, their private devotions and meditations, and…all manner of spiritual exercises."<sup>57</sup>

Having carefully explained why writing about health was a valuable religious endeavor, Lessius then turned to the task of justifying its medical credibility. While Lessius was many things—a lecturer, philosopher, and Jesuit priest—one thing he certainly was not was a physician, nor did he have any sort of professional medical training. His qualifications for writing a medical treatise, therefore, were not readily

<sup>&</sup>lt;sup>54</sup> Guenter B. Risse, *Mending Bodies, Saving Souls: A History of Hospitals* (Oxford: Oxford UP, 1999), 153. Risse notes that, "Monastic healing officially ended alter the Council of Clermont in 1130, when monks were enjoined from practicing medicine since it was believed that this activity detracted from their stated spiritual goals. By 1219 canon law again prohibited religious persons from practicing medicine because of the monetary gain it brought, a rule confirmed by the Fourth Lateran council of 1215. However, severe shortages of trained medical professionals in Western Europe continued to foster the activities of monks who possessed medical knowledge. In addition, although officially barred from practicing, a large group of empirics, Jews, herbalists, barbers, and midwives joined in caring for the bulk of the population." See also W.J. Shields, *The Church and Healing: Studies in Church History* (Oxford: Blackwell, 1982). <sup>55</sup> Lessius, *Hygiasticon*, I:4, p. 11.

<sup>&</sup>lt;sup>56</sup> Ibid., "Epistle Dedicatorie."

<sup>&</sup>lt;sup>57</sup> Ibid., I:4, pp. 11-13.

apparent. His medical knowledge likely owes something to both his general education as well as his later independent study. As Shapin points out, Galenic medical and especially dietetic knowledge was, to a certain degree, considered "common knowledge," the basis of both professional and popular medicine, familiar to laymen as well as physicians. In addition, Lessius would have been introduced to some medical theories as part of his university education. Throughout the fifteenth and sixteenth centuries, the most popular general philosophical textbooks explicated classical and medieval theories which helped the attentive reader to become aware of and subsequently purify the link between their body and soul.<sup>58</sup> The most influential authorities were, of course, Aristotle, Hippocrates and Galen—or at least the numerous ideas medieval commentators attributed to Aristotle, Hippocrates and Galen.<sup>59</sup>

Apart from a rigorous classical education, he possessed an unenviable amount of personal experience with illness and medicine, and, subsequently, an autodidactic mastery of contemporary medical treatments and philosophies. Explaining that, "I have long ago made some good progres in the theory of *physic*," Lessius then dexterously established that his understanding of the body and health was firmly grounded in prevailing medical wisdom and that his recommendations were therefore medically

<sup>&</sup>lt;sup>58</sup> Katharine Park cites the *Margarita philosophica*, written by German Carthusian Gregor Reisch in the 1490s, as the most influential textbook and notes that books X and XI "provide an excellent picture of the ideas concerning the soul accepted by most philosophers in the years before 1500, and by many to the end of the sixteenth century." Katharine Park's emphasis, however, is the development of a "Renaissance psychology," rather than medicine or dietetics. Nevertheless, as Renaissance notions of the intellect and soul were intricately bound up in corporal concerns and theories, Park's category of psychology is an artificial distinction from the overlapping fields of medicine and dietetics. See Katharine Park, "The Organic Soul," 465.

<sup>&</sup>lt;sup>59</sup> The works most often cited were *The nature of man, On regimen* and *A regimen for health* in the Hippocratic corups; Aristotle's *De anima* and *Parva naturalia*; Galen's *Ars medica, De alimentorum facultatibus, De sanitae tuenda*, and *De probis pravisque alimentorum succis*; Katharine Park notes that while the concept of the faculties was ascribed to Aristotle's account of the soul, this notion was, in fact, an invention of later classical and Arabic authors, and would have actually been unfamiliar to Aristotle himself. See Katharine Park, "The Organic Soul," 467-468.

incontrovertible. He would have read the extant Hippocratic corpus, as well as the works of Galen, Celsus and Avicenna. He also would have moved beyond the classical sources and examined influential Renaissance medical textbooks such as Avicenna's *Canon*, Leonhart Fuchs' *Institutiones medicinae*, and Jean Fernel's *Universa medicina* as well as a number of works in the up and coming Renaissance dietetic genre: Joubert's *Erreurs populaires*, Marsilio Ficino's *De vita triplici*, Roger Bacon's *De retardatione accidentium senectutis* and *De conservatione juventutis* Galen's *De marasmo*. All of these would have introduced him to the intricacies of Galenic humoralism. Indeed, *Hygiasticon* is preceded by no less than three letters of approval from famous physicians. Each letter testified that the Lessius' treatise, "is squared out and according to the Physician's rules," and that, "...it whets the vigour of the minde, and leads to old age...." They concluded by providing their stamp of approval: "I hold this work to be most worthy of praise."<sup>60</sup>

Lessius, then, was somewhere between a medical authority and a proselytizing devotee. The advantages of this liminal position were twofold. First, as a well-informed, professionally disinterested layman, Lessius was, to some people *more* reliable than a physician, who had professional biases and strong financial incentives to say whatever patients wanted to hear, or worse, forever keep their patients ill and requiring their services. Lessius had no such incentive. His only motivation was to arrive at the *truth* and promote others' good. Second, Lessius was poised to act as an intermediary, translating specialized inaccessible medical knowledge for the benefit of a general, non-professional audience. This indeed was his intention: to equip the layman with the tools to become his own personal physician. His was a self-help guide to dietetics.

<sup>&</sup>lt;sup>60</sup> Ibid., "The Approbation of John Viringus, Doctor of Physick and Professor."

Such a guide was both unique and necessary, he argued. While dietetics was a popular genre, it was at the same time increasingly exacting and inaccessible. Obsessed with humoral balance, these treatises were riddled with minutiae about the humoral qualities of all kinds of food and drinks, and endless prescriptions to abstain or partake of certain specific foods depending on certain specific humoral imbalances. It was too complex. There were too many rules, he complained, "and exact so much observation and caution about the quality and quantity of meats and drinks; about air, sleep, exercise, seasons of the year, purgations, blood-letting and the like; and over and above prescribe such number of Compound, Opiate, and other kinds of exquisite remedies, as they bring men into a Labyrinth of care in the observation, and unto perfect slavery in the endeavoring to perform what they do in this matter enjoin."61 Yet, even Lessius' own personal history established that these prescriptions rarely saw results and even, "oft times clean contrary to that which was expected."62 Furthermore, "men will have their own minds, eat everything that likes them and to their fill: they will shape their diet according to the ordinary usage of the world and give in everything satisfaction to their sensuality and appetite." He argued that if diets were too strict then they became counterproductive, as it was impossible to follow a diet all of the time, and when a person eventually lapsed, they would be more likely to over-indulge and become discouraged and consequently have an even more difficult time resuming their impossibly strict diet. Thus, Lessius explained, many people decided to opt out of this dietary-medical regime, "imagining all to be well with them, as long as they feel nothing plainly to the contrary." With time, however, "crude and ill humors are not only increased by continuance, but become putrefied and of a malignant temper so that upon every...inconvenience or

<sup>&</sup>lt;sup>61</sup> Lessius, *Hygiasticon*, I:1, p. 1-2.

<sup>&</sup>lt;sup>62</sup> Ibid., I:1, p. 2.

excess, they are inflamed and break out into mortal sicknesses and diseases."<sup>63</sup> He affirmed that, "I myself have observed many excellent men on this ground only snatched away by death in the prime of their age; who undoubtedly had they used the right course of preserving their health, might have many years prolonged their lives."<sup>64</sup>

It was important, therefore, for the layman to free himself from the mechanical slavery of rules and exceptions, which was a poor substitute for a better understanding and self-regulation of their own bodies, humors, and health. Indeed, it seems that many people found this self-help approach successful, or at least found its promise attractive. One recommendation, prefacing an English edition, introduces readers to the allure of self-help:

"Hark hither, Reader: wouldst thou see Nature her own Physician be? Wouldst see a man all his own wealth, his own musick, his own health? A man, whose sober soul can tell How to wear her garments well, Her garments that upon her fit As garments should do, close and fit? A well-cloth'd soul, that's not opprest Nor choakt with what she should be drest?"<sup>65</sup>

Mikkeli notes that this self-help principle, "was often connected to the principle of the healing power of nature (*vis medicatrix naturae*)," and that anyone, "can heal her- or himself, if she or he only knows the operations of the body and therefore can instinctively follow the natural means of staying healthy."<sup>66</sup>

Therefore the secret to health and long life, Lessius revealed, was a regimen governed by nature rather than a detailed set of universal rules. Health was understood to

<sup>&</sup>lt;sup>63</sup> Ibid., I:1, p. 5-6.

<sup>&</sup>lt;sup>64</sup> Ibid.

<sup>&</sup>lt;sup>65</sup> Ibid., "To the Reader, upon this Book's intent."

<sup>&</sup>lt;sup>66</sup> Mikkeli, Hygiene in the Early Modern Medical Tradition, 93.

be the natural state of humoral balance. This could be achieved by regulating external influences, known as non-naturals because they were extraneous and not a natural part the body. Non-naturals affected the natural body and could restore or damage health. Non-naturals were divided into six categories: air, food and drink, movement and rest, sleep and waking, surfeit and purgation, and the passions. The guiding principle of Lessius' regimen was the return to a natural balance through minimization of nonnaturals: in other words, temperance-eating and drinking only that which the body naturally requires to sustain itself and no more. What was natural depended on the person. Corporal needs and humoral sensitivities varied, "according to the diversity of complexions in sundry persons," and whether they be strong or weak, young or old, contemplative or active.<sup>67</sup> Each man had to rationally determine the needs of his body and subsequently regulate his diet and activities so as to meet those needs without overindulging or disrupting what was natural. This required not only attention to food and drink, but also a broader understanding of diet, "it doth likewise reach unto the care and ordering of all things; such as are, immoderate heat and cold, overmuch labor and the like; through the excess whereof there grows any inconvenience in bodily health, or disturbance in the operations of the mind."68 This "right ordering of the diet and a certain moderation," he reassures his reader, "is in no way troublesome, nor breeding weakness or distemper; but on the contrary very easy to be undergone, and such as brings strength and vigor in both mind and body."69 Indeed, he attributed his own perseverance, in life and in work, to his strict adherence to a sober regimen,

"Whereby I myself have for so many yeares past been kept not only sound in body, but swift to all operations and exercises of the mind: although I have all this

<sup>&</sup>lt;sup>67</sup> Lessius, Hygiasticon, II:6, p. 16-17.

<sup>&</sup>lt;sup>68</sup> Ibid., I:5, pp. 15-16.

<sup>&</sup>lt;sup>69</sup> Ibid., I:3, p. 9. Italics are Lessius'.

space labored under many corporal inconveniences, and before I entered into this course, was so far gone, as by the judgment of very skilfull physicians I was not like to have lived above two years at the most."<sup>70</sup>

Moreover, Lessius assured his reader that his success story was not unique. "The same good effects that it wrought in me," he explained, "have made a number of our Society and sundry others abroad happy proof of [the same good effects], maintaining themselves in constant health and cheerfulness by this means..."<sup>71</sup> Furthermore, Lessius' own dietary role model, the Italian Luigi Cornaro, died just two years shy of 100, providing further evidentiary proof, "and confirms it by his own example: for he began to keep this stint at thirty-six years old."<sup>72</sup>

Lessius departed from the dietetic genre in emphasizing quantity rather than quality. In truth, Lessius explains, the body required very little. For most people, twelve to fourteen ounces of food a day, "and as many, or but a few more ounces of drink would suffice."<sup>73</sup> This was the "just allowance" which was established by the ancient church fathers, "who had the largest experience of these matters and best knew what was requisite in this kind for Nature."<sup>74</sup> He noted that there were infinite examples of holy men who, "kept themselves to this stint, or it may be less…and yet nevertheless they lived exceeding long and healthfully, in the height of labors and afflictions both of their minds and bodies."<sup>75</sup> Where dietetic manuals were principally interested in cataloguing the humoral qualities of various foods and calculating and manipulating their interactions in pursuit of a healthy humoral balance, Lessius could care less. It didn't matter what kind of meat a man eats, he explains, "for almost all sorts of meats…do well agree with

<sup>&</sup>lt;sup>70</sup> Lessius, *Hygiasticon*, I:3: pp. 7-8.

<sup>&</sup>lt;sup>71</sup> Ibid., I:3: pp. 7-8.

<sup>&</sup>lt;sup>72</sup> Ibid., III:21, p. 55.

<sup>&</sup>lt;sup>73</sup> Ibid., III:14, p. 45.

<sup>&</sup>lt;sup>74</sup> Ibid., III:15, p. 55.

<sup>&</sup>lt;sup>75</sup> Ibid., III:15, p. 53-54.

good and healthfull constitutions, if so be the right quantity and measure be kept."<sup>76</sup> The best diets, however, are those that are plain and simple and thus easiest for the stomach to digest. In particular, Lessius sang the praises of *panada*, or gruel made of bread, water, and broth boiled together. It was light and easy on the digestion, humorally mild, "breeds abundance of good blood," and was "little subject to putrefaction and corruption, as many other sorts of meats be, which do easily corrupt in the stomach."77 Avoiding meat altogether, as Plutarch recommends, is not a bad idea Lessius suggests, as the body is ideally supported by bread and water and "the solicitous pursuit of costly sorts of flesh and fish, serving only for enticement and nourishment of gluttony, is altogether needless."78 He adds that the Japanese, Chinese, Africans and Turks seldom eat meat and "they live very long and healthfully," as do "many husbandmen and others of the mechanic trades, who ordinarily feed on bread, butter, pottage, puse, herbs, cheese, and the like...they live long not only with health, but with strength."79 However, he did not push this position further and instead insisted, "but we allow all sorts of meats that are agreeable to Nature, and that measure and quantity, which is most convenient and proportionable to the stomach, and best conducing to health."80

#### THE TIES THAT BIND: PHYSIOLOGY

It was often thought in the early modern period that the greatest danger to health was gluttony, when, as Lessius explained, "the Just Measure is enormously overshot," and the necessities and limitations set by nature were disregarded. The consequences of

<sup>&</sup>lt;sup>76</sup> Ibid., III:16, p. 57.

<sup>&</sup>lt;sup>77</sup> Ibid., III:18, p. 63.

<sup>&</sup>lt;sup>78</sup> Ibid., III:18, p. 64.

<sup>&</sup>lt;sup>79</sup> Ibid., III:18, p. 66.

<sup>&</sup>lt;sup>80</sup> Ibid., IV:26, p. 92.

intemperance, Lessius warned, were more far-reaching and devastating than was commonly appreciated. He was convinced, however, that a basic understanding of the workings of the body illuminated the full enormity of the vice's corruptive effects. Lessius' subsequent enumeration of those unwelcome effects illuminates the prevailing conceptions of how the body works and a core medical and philosophical tradition predicated upon the notion of a heavily inter-dependent body, mind, and soul. Early modern physicians and philosophers wove classical and medieval medical theories into a (now notoriously) uniform medical framework. According to this model, the body was composed of three souls which were divided along a hierarchy of "faculties." At the lower end was the "vegetative soul" which was responsible for digestion, growth, reproduction and other basic bodily functions. Next, the "sensitive soul" was responsible for movement, the senses and the appetites. The "intellective soul" accounted for the rational faculties such as intellect, memory and will.<sup>81</sup> Not surprisingly, this model understood the body-soul relationship to be quite close, "substantially united" in fact, and sometimes dangerously close to being inseparable.<sup>82</sup> It was the third soul, the "intellective soul" which was considered immaterial and able to survive the death of the body. It would also survive the Cartesian Revolution largely intact, although it was thereafter known as the "mind" rather than the intellective soul, and recast as fundamentally disconnected from its sensitive and vegetative counterparts, which

<sup>&</sup>lt;sup>81</sup> For a summary and flow chart of the faculties and souls, see Katharine Park, "The Organic Soul," 466-467.

<sup>&</sup>lt;sup>82</sup> The twelfth-century Aristotelian commentator, Averroes, declared that the body and soul were inseparable, and thus, when the body died so did the soul, as it could not exist without the body and therefore was not immortal. In 1513 the Lateran Council demanded that all Christian philosophers disprove this heretical notion. See Tad Schmaltz, "The science of mind," in *The Cambridge Companion to Early Modern Philosophy*, ed. Donald Rutherford, 138.

collectively constituted the material mechanistic body.<sup>83</sup> According to this perspective, there was a clear disciplinary divide between medicine and philosophy, reflecting the impermeable division of body and mind, object and subject. The *Hygiasticon*, however, elucidates the alternative medico-philosophical tradition, which asserted the unity of body, mind and soul and therefore the unity of medicine, philosophy and religion.

First, Lessius clarified that an immoderate regimen taxed and eventually corrupted the vegetative soul. When food is consumed in quantities greater than that required by nature, it overwhelms the stomach and indeed, can rot and become "crudities," which as "the mother of all diseases," breed "swellings, grippings, collicks, obstructions, pains in the reins and the stone...and much corruption in that Chylus or juice, out of which the blood is made."84 Those who do not live temperately "do every day add some crude humor, which being sucked in by the veins as by a sponge, is afterwards dispersed through the whole body." When the digested food, or chylus or juice, is crudely digested or has crudities in it it first "fills the brain and bowells with many phlegmatic and bilious excrements"; second, "breeds many obstructions in the narrow passages of the bowells"; third, "corrupts the temper of the whole body"; and fourth, "stuffs the veins with putrid humors, whereof proceed very grievous diseases."85 Thus burdened and weakened, the body was more vulnerable to even the slightest onslaught of non-naturals. Indeed, these crudities and ill humors built up, and in time "corrupt and putrify and cast a man upon mortal infirmities; and are the very true ground why most men die so much before their time."86

<sup>&</sup>lt;sup>83</sup> Ibid. Schmaltz also notes that Descartes himself had trouble placing the appetites and other sensory faculties in his mind-body dichotomy. See René Descartes, *Descartes' Conversation with Burman*, trans. John Cottingham (Oxford: Clarendon, 1976).

<sup>&</sup>lt;sup>84</sup> Lessius, *Hygiasticon*, III:19, p. 67-68; V:29, p. 99.

<sup>&</sup>lt;sup>85</sup> Ibid., V:31, p. 106-107.

<sup>&</sup>lt;sup>86</sup> Ibid., IV:28, p. 95.

Additionally, Lessius noted, what affected the vegetative soul soon permeated the sensitive and intellective souls as well, "in as much as the vegetative part is ordained to the service of these other, and therefore ought to be of furtherance and help, and no way a hindrance unto them in their several functions and operations." He instructed the reader that, "both Nature and Reason exact that the Vegetative part in a man…should be so ordered and cherished as that there should arise no offense or damage thereby to the Animal and Reasonable [Sensitive and Intellective] parts of the soul"<sup>87</sup> A proper regimen, therefore, freed the vegetative faculties to naturally regulate the humors of the body, and as "she doth do order and dispense all things, as neither any disease arise in the body nor any impediment follows to the superior offices and duties of the soul."<sup>88</sup>

Indeed, a natural diet upheld and strengthened the natural interdependence of body, mind and soul. Disconnection was the tragic consequence of the strain of instability and excess. Grief ensues, Lessius explained, when "the temper is overthrown by the violence of that which is contrary to it, and the bond of Nature is forcibly broken." The followers of temperance avoided a painful violent death, instead "the Temper is inwardly dissolved little and little and the body's innate heat and humidity are naturally extinguished," and "pass away without sense of grief: inasmuch as the bond that knits together their soul and body, is unloosed, not by any violence used to Nature, but by a simple resolution and consumption of their Radical Humor."<sup>89</sup> This peaceful, "natural" death was a ubiquitous notion tracing back to Aristotle, and subsequently promulgated by medieval and early modern physicians and philosophers. The concept was first outlined in Aristotle's two treatises, *On Longevity and Shortness of Life* and *On Youth and Old* 

<sup>&</sup>lt;sup>87</sup> Ibid., III:9, p. 31.

<sup>88</sup> Ibid., III:10, p. 35.

<sup>&</sup>lt;sup>89</sup> Ibid., VII:40, p. 139-143.

*Age, on Life and Death and on Breathing*, Aristotle posits that the essence of life was an "innate heat" imbued by the fiery soul and this vital heat was distributed throughout the body by blood and gradually consumed with age. Food was necessary to replenish the innate heat, but, over time, the internal flame grows weaker and natural death was the result of its eventual exhaustion. By contrast, an unnatural death, such as by violence or disease, caused the internal flame to be suddenly extinguished. Later Classical and Arabic philosophers added that life was the product of both heat and moisture. The human body was most often likened to an oil lamp, in which a finite quantity of life oil or "radical moisture" was burned or consumed throughout life by the internal flame or "vital heat." Once again, food, which became flesh, provided the necessary fuel to maintain the heat. Over time, however, the body's ability to digest became weaker, and so the body became increasingly cold and dry. Gradually, the radical moisture was consumed and the internal flame burned out.<sup>90</sup>

According to Lessius, a poor regimen took a heavy toll on the sensitive or animal soul, from which, "all the vigor of the body in sense and motion is derived."<sup>91</sup> Indeed, without proper temperance and regimen, the whole body became sluggish and the senses deadened. He explained,

"Ill humors do dry up the muscles and the nerves, through which the spirits have their course and passage: whereby it comes to passe that the animal spirits (from which, as from the most general and immediate instrument of the soul, all the vigour of the body in sense and motion is derived) cannot freely take their course, nor govern and order the body as they ought. And hence comes that weakness and lumpishness of the body, and that dullnes of the senses, the animal spirits being as it were intercepted in their passage by this excess of humors."<sup>92</sup>

<sup>&</sup>lt;sup>90</sup> Albala, *Eating Right in the Renaissance*, 53; Gerald J. Gruman, A History of Ideas About the Prolongation of Life, 120; Haycock, Mortal Coil, 19-22.

<sup>&</sup>lt;sup>91</sup> Lessius, *Hygiasticon*, III:12, p. 40.

<sup>&</sup>lt;sup>92</sup> Ibid..

The way to health, then, was "to forbear spurring of Nature on beyond craving and expel the contracted humors," so that "the spirits may have free and uninterrupted passage through the several parts of the body and the mind may also be constantly prepared and apt for every motion and service of the body."<sup>93</sup> A good diet and natural balance of humors enhanced sight, hearing, smelling, and touching and further promises that, "the most ordinary meats, and dry bread itself do better taste and relish as sober man, and yield him greater pleasure, that the greatest dainties that can be do to those who are given to gluttony."<sup>94</sup>

Lessius cautioned, however, not to trust regimen to taste and appetite, unlike earlier treatises, which assured readers that nature communicated its needs by stimulating appetite and therefore that which was tasty was good for the health.<sup>95</sup> By contrast, Lessius warns that the appetite was "deceitful" because, "oftentimes it longs after more than is any way proportionable to either of these fore-mentioned ends, that is to say, more than is fitting either for the nourishment of the bodie, or for the matter of propagation."<sup>96</sup> Instead, a man's diet should be guided not by appetite, but by reason, "which looks what and how much is proportionable for the conservation of the Body and the performance of the duties and services belonging to the Mind."<sup>97</sup> Thus, Lessius reflects broader shifts in the dietetics genre. Whereas fifteenth and sixteenth-century dietetic manuals were descriptive in nature, discussing the qualities of food and bodily appetites, by the end of the sixteenth-century, dietetic manuals demanded that appetites be disciplined and the body rationalized. Reason came to dominate taste.<sup>98</sup> Furthermore, this drive to rigorously

<sup>93</sup> Ibid.

<sup>&</sup>lt;sup>94</sup> Ibid., VIII:42-44, pp. 145-149.

<sup>&</sup>lt;sup>95</sup> Albala, Eating Right in the Renaissance, 177.

<sup>96</sup> Ibid., XII:60, p. 193.

<sup>&</sup>lt;sup>97</sup> Ibid., XII:58, pp. 190-191.

<sup>&</sup>lt;sup>98</sup> Albala, Eating Right in the Renaissance, 177.

follow a healthy regimen followed an overarching early-modern preoccupation with *regere*. As historian Ken Albala notes, "a growing consciousness of regulation, order, and rational government at a personal level," was articulated in terms that paralleled "the rationalization of political states," and was deployed "in tandem with the use of political metaphors is a fear of physical insurrection brought on by disorderly diet as well as its opposite fear of tyranny and excessive regulation."<sup>99</sup>

Moreover, the appetites presented a real test of virtue, "for it is no great glory to shew temperance in the absence of temptations, but to keep hunger on foot at a banquet and to restrain the greediness of the belly in the midst of provoking dainties."<sup>100</sup> Rather than allow the diet to become the slave of the appetites, the appetites must be manipulated to reinforce a natural, rational regimen. Through dedicated meditation, a man could bring the superior intellect of his mind to bear down upon the appetite, and thus curb and redirect appetite in accordance with nature. He explained: "And this veriliy was excellently contrived by Gods ordinance, to the end that we should learn thereby, so much the more to contemne delicacies, and to content our selves with simple and plain fare. This matter therefore is often to be thought upon, and the Fancie by continuall meditation accustomed thereunto."<sup>101</sup> For the most tempting foods, Lessius recommended that, "we should pretend that these are filthy, sordid, evil-flavored and detestable…" Eventually, he argued, the pretense will become reality and the appetite will agree with nature.<sup>102</sup>

Indeed, Lessius emphasizes that training the fancy or imagination was a crucial component of health. One of the rewards of a temperate diet was that, "it doth much

<sup>&</sup>lt;sup>99</sup> Ibid., 217.

<sup>&</sup>lt;sup>100</sup> Ibid., II:8, p. 25.

<sup>&</sup>lt;sup>101</sup> Ibid., III:42, p. 75.

<sup>&</sup>lt;sup>102</sup> Ibid., III:42, p. 74.

abate and diminish the affections and passions." It was particularly important for those whose humoral dispositions were prone to anger and melancholy, "for it doth take away from them their excess and inordinate violence." <sup>103</sup> He explained that sobriety remedied such mischiefs, "partly subtracting and partly correcting the Humors of the body, which are the causes of them... For, that the Humors are the causes of such passions, is both a received ground amongst all physicians and philosophers, and manifest by experience."<sup>104</sup> Left unchecked, these excess humors would "be set on fire in the brain...easing frenzies and madness...continual hunger and lust...and causeth that the fancie apprehends all things as having enmity, bringing sorrow and full of darkness."<sup>105</sup> The sober man, however, was "calm, affable, courteaous, cheerfull, tractable, and moderate in all things."<sup>106</sup> With his passions quieted, he was more spiritually free and able "to keep his mind in quiet, to perform the services of the mind about divine mysteries with case and pleasure, or to come to any eminent degree of holiness."<sup>107</sup>

Finally, Lessius tackled the intellective soul, warning that the gluttonous build up of crudities and ill humors was particularly destructive for the contemplative classes—his intended audience. With "the whole force of Nature and of the spirits as it were enthralled in concoction and digestions [of food]," the gluttonous could not "much or long intend hard and difficult businesses appertaining to the mind." The head "becomes full fraught with vapors which do overcloud the mind, and if a man intend his thoughts much, cause pain and grief."<sup>108</sup> Moreover, the majority of his time was then preoccupied with the care of the body, "which is in very truth to make the Soul become the servant of

<sup>&</sup>lt;sup>103</sup> Ibid., IX:46, p. 152.

<sup>&</sup>lt;sup>104</sup> Ibid., IX:46, p. 153.

<sup>&</sup>lt;sup>105</sup> Ibid., IX: 47, p. 153.

<sup>&</sup>lt;sup>106</sup> Ibid., IX:48, p. 160.

<sup>&</sup>lt;sup>107</sup> Ibid., XI:51, pp. 173-174.

<sup>&</sup>lt;sup>108</sup> Ibid., VII:38, pp. 132-133.

the Flesh, that is, a Slave to its own Vassal."<sup>109</sup> The return to a natural state of health, however helped the intellectual faculty be clearer and more effortless, "inasmuch as it removes those things which breed impediment to the exercises of faith, and to the functions of the intellectual faculty, or make them full of difficulty, unpleasant and tedious."<sup>110</sup> Faithful adherents "tend unto the highest pitches of wisdom and virtue...whereof some are very admirable in all men's eyes through the abundance of their writings, and their surpassing learning."<sup>111</sup>

More importantly, the health of the intellectual faculty directly contributed to spiritual wealth. For along with bringing "very pleasant" rewards such as longevity, a robust mind, and being cheerful, quick, and vigorous in all employments, it also brought with it "a very great spiritual commodity." For with the humors being balanced according to nature, "and then the affections and perturbations of our minds being calmed, we can with great ease and pleasure give ourselves to prayer, meditation of divine matters, reading of scripture, and the works of the Holy Fathers."<sup>112</sup> Furthermore, with improved and balanced intellectual and sensitive faculties, the spirit was free to become stronger and more elevated:

"For we cannot love any good thing or profit in the love thereof, nor hate any evil thing or grow in the hatred thereof, except it be proposed by the Understanding, so as it may move the Affections: Whereupon he that is so disposed by heavenly Grace, as that heavenly matters are always in his mind (as it was in the Apostles and in other Apostolical men) will easily condemn all earthly things, and so by degrees from a great measure of holiness attained here below, mount up to the enjoyment of a glorious Crown of everlasting bliss in Heaven...that those things which hinder the functions of the Mind, or obscure them, or make them to become difficult and irksome, are the things which...debase us from attaining to any great

<sup>&</sup>lt;sup>109</sup> Ibid., VII:38, p. 134.

<sup>&</sup>lt;sup>110</sup> Ibid., XI:52, p. 175.

<sup>&</sup>lt;sup>111</sup> Ibid., XI:52, p. 173.

<sup>&</sup>lt;sup>112</sup> Ibid., XI:55, p. 183.

measure of perfection either in learning or in exercise of religion or in sanctity of life..."<sup>113</sup>

The was exemplified by the Holy Fathers, who "being most abbstinent, were always fresh in their minds...with so great solace of mind that they deemed themselves to be in Paradise...and became admirable to all the world..." and God rewarded their unhindered holiness, "so the world might know how acceptable their kind of life was with God, and be provoked to the honor and imitation of them."<sup>114</sup>

## DESCARTES AND THE NEW DUALIST PHYSIOLOGY

Later anatomical enquiry would corroborate Lessius' counsels. In November 1635, William Harvey autopsied the recently deceased Thomas Parr, who was said to have lived 152 years and nine months. After a careful examination of Parr's stomach and intestines, Harvey deduced that Parr's remarkably long life was a result of "living frugally and roughly, and without cares, in humble circumstances." Indeed, Harvey found that "all the internal organs seemed so sound that had he changed nothing of the

<sup>&</sup>lt;sup>113</sup> Ibid., XI:53, pp. 176-178.

<sup>&</sup>lt;sup>114</sup> Ibid., XI:51, pp. 171-173. Lessius' inattention to women perhaps obscures a concomitant counter-shift among women religious. The moderating impulses of scholars, physicians and theologians was distinctly at odds with the "extravagant asceticism" that, as Carolyn Walker Bynam observes, was concomitantly embraced by many religious women in the later Middle Ages and Renaissance periods. "It seems likely," she explains, "that women's religiosity was a reaction against the moderation urged by church leaders, against new efforts to make a place-but a secondary place-for women and for the laity within a Christian universe." Instead of moderate, steady and contemplative, "pious women elaborated a religiosity that was in no way moderate, a sense of self that was in no way secondary. Instead, immoderate and frantic." Bynam attributes this phenomenon, and, possibly the wider popularity of dietetics as well, to "the growing sense that a worldly role such as craftsman or married woman might have a rule of life defining it and might win for its practitioners merit before God...reflected in what some scholars have called the 'rise of lay spirituality." See Carolyn Walker Bynam, Holy Feast and Holy Fast (Berkeley: University of California, 1987), 238.

routine of his former way of living, in all probability he would have delayed his death a little longer." Harvey blamed Parr's *premature* death on sudden changes to his regimen: moving from the fresh country air to smoky, congested London and, more importantly, switching from a plain and sober diet to one that was richer and more varied.<sup>115</sup> Though Harvey's discovery of the twofold circulation of the blood would help to overturn Galenic physiology, he did not question its underlying dietetic principles.

One of Lessius' successors in the study of dietetics was the currently more widely renowned philosopher, René Descartes. Though he espoused some of the same tenets of dietary discipline and temperance as Lessius, he diverged from Lessius' Galenic model as the rationale for his dietetic principles. René Descartes, like Lessius, was equally convinced that health and longevity could be guaranteed by adhering to a proper regimen. Indeed, prolonging his own life became an obsession of Descartes, beginning in 1637, perhaps when he first noticed his hair turning grey. He wrote to his friend Constantyn Huygens saying that, as his hair was quickly graying, from then on his principal subject of study would not be philosophy, but instead the search for a method of delaying the aging process.<sup>116</sup> By 1645, he wrote to William Cavendish that, "the preservation of health has always been the principal end of my studies."<sup>117</sup> Descartes' regimen would have been quite familiar to Lessius: eating and drinking sparingly, moderate exercise, careful control of emotions, and embracing "peace and tranquility."<sup>118</sup> He did, however,

<sup>&</sup>lt;sup>115</sup> Geoffrey Keynes, *The Life of William Harvey* (Oxford: Clarendon, 1966), 224; cited in Haycock, *Mortal Coil*, 13-14.

<sup>&</sup>lt;sup>116</sup> "Letter to Huygens of 5 October 1637," in *Descartes. Oeuvres et Lettres*, ed. André Bridoux (Paris: Gallimard, 1953), 972. Cited in G.A. Lindeboom, *Descartes and Medicine* (Amsterdam: Rodopi N.V., 1978), 95.

<sup>&</sup>lt;sup>117</sup> Oeuvres de Descartes, 12 vols. Plus supplement, ed. Charles Adam and Paul Tannery (Paris: Leopold Cerf, 1897-1913), vol. IV, p. 329, l. 16-19. Cited in Richard B. Carter, *Descartes' Medical Philosophy: The Organic Solution to the Mind-Body Problem* (Baltimore: Johns Hopkins UP, 1983), 7.

<sup>&</sup>lt;sup>118</sup> However, Descartes uniquely rejected the almost universal acceptance of blood-letting as a medical treatment. Carter, *Descartes' Medical Philosophy*, 7.

loudly and frequently express his irritation with the "still rudimentary" state of medicine.<sup>119</sup> He complained "but whatever is known therein is almost nothing in comparison with what remains to be known." He even suggested that "we might be freed from very many diseases, as well of the body as of the mind, and even also perhaps from the weaknesses of old age had we but knowledge enough of their causes and of all the remedies wherewith Nature hath furnished us."

By mid-seventeenth century, however, the brain and nervous system were subject to increasing anatomical investigation. Descartes himself studied anatomy, and even dissected live animals.<sup>120</sup> In his *Descriptions of the Human Body*, Descartes laid out his physiological model, in which the mind had control over the machine-like body. He believed that the human body was "a compound organism that continued to live because the mind to which it is connected as a whole is concerned with health," and that everyone had the ability to correct their body by using their mind.<sup>121</sup> Furthermore, the mind could be the source of cure for at least some physical ailments.<sup>122</sup> While Descartes believed that the universe was radically divided into two separate realms—that of mind and that of matter—he had a difficult time neatly applying this dualism to the "compound human body," with its hazy borders between body, feeling and soul.<sup>123</sup> Yet, for Descartes, the mechanistic body simplified things considerably. Indeed, he was fond of comparing the body to a clock,

<sup>&</sup>lt;sup>119</sup> René Descartes, *Discourse on Method*, 101-102. See also Steven Shapin, "Descartes the Doctor: Rationalism and its Therapies," *The British Journal for the History of Science* 33:2 (2000): 131-154. <sup>120</sup> Lindeboom, *Descartes and Medicine*, 39-41, 91-92.

<sup>&</sup>lt;sup>121</sup> Lindeboom, Descartes and Medicine, 91-92; Carter, Descartes' Medical Philosophy, 109-112.

<sup>&</sup>lt;sup>122</sup> Carter, Descartes' Medical Philosophy, 20.

<sup>&</sup>lt;sup>123</sup> Lindeboom, Descartes and Medicine, 55-56.

"made up of wheels and counterweights, [it] observes all the laws of nature no less exactly when it is badly made and does not keep good time, as when it completely satisfies the desire of the maker, so in the same way, if I consider man's body as being a machine, so built and composed of bones, nerves, muscles, veins, blood and skin, that although it had no mind in it, it would still move in all the same ways that it does at present, when it does not move by the direction of its will, or consequently, with the help of the mind, but only the dispositions of its organs..."<sup>124</sup>

Gone are the vegetative and animal souls and vital spirits of Aristotle and Galen. Instead, the body, like a clock, functions "entirely from the disposition of the organs—no more nor less than do the movement of a clock or other automaton, from the arrangement of its counterweights and wheels."<sup>125</sup> According to Lindeboom, Descartes had no interest in qualities, internal heat "or any special laws of the living organism…he had no eyes for final causes or any teleology in the organism."<sup>126</sup> However, he was a fan of the dietetic genre because, as Haycock explains, if the body works like a machine, "why should not the careful soul, through prudent diet, frequent exercise and careful repair be capable of extending its operation and effecting its repair—indefinitely?"<sup>127</sup> Descartes was confident that by following his careful regimen he could postpone his own death indefinitely. This did not prove to be the case as, 1650 he died suddenly of pneumonia at the age of fifty-three while visiting Queen Christina of Sweden. It was widely reported that if he had not taken that ill-advised trip to Stockholm, and instead stuck to his familiar

<sup>&</sup>lt;sup>124</sup> Descartes, *Oeuvres et Lettres*, trans. André Bridoux, ed. Gallimard (Paris: 1953), 329.

<sup>&</sup>lt;sup>125</sup> Steno, Nic, Discours de Monsieur Stenon, sur l'Anatomie du cerveau. A Messieurs de l'Assemblée, qui se fait chez Monseiur Thevenot. Paris: 1669, Photostatic reprint with Preface and Notes by Edv. Gotfredsen. Nordisk Verlag. Arnold Busck Copenhagen, 1950. Quoted in Lindeboom, Descartes and Medicine, 60.

<sup>&</sup>lt;sup>126</sup> Lindeboom, Descartes and Medicine, 61.

<sup>&</sup>lt;sup>127</sup> Haycock, Mortal Coil, 39.

climate, diet and habits, "he might instead live a thousand years to perfect his Philosophy."<sup>128</sup>

<sup>&</sup>lt;sup>128</sup> Samuel Hartlib, "Ephemerides," 1650, Part 2 (February to May): The Hartlib Papers, Sheffield University, 28/1/54A-B. Quoted in Haycock, *Mortal Coil*, 41.

## Chapter Four: Problems in the Historiography of Early Modern Philosophy and Science

As a popular and influential lecturer, author and consultant, Lessius left his mark on a number of stages of early modern history. Yet, today Lessius is known to only a handful of scholars, and his legacy is all-but tucked away in the highly-specialized province of economic history. Thus, if Lessius' absence from the literature is not a faithful reflection of his place in early modern intellectual circles, then this lacuna surely speaks more to the direction of the History of Philosophy as a field. In other words, as historian Steven Shapin reminds us, "the stories historians tell, owe as much to the currents funning through their culture as they do those they seek to tell about."<sup>129</sup> Tracing the contours of prevailing narratives in the history of philosophy helps explain the general exclusion of Léonard Lessius from scope of early modern history. By the same token, reinserting Lessius into the story of early modern philosophy and those of historians.

Beginning in the 1960s and 1970s, and further propelled by the pioneering works of Thomas Kuhn, Michel Foucault, and Bruno Latour among others,<sup>130</sup> historians of philosophy and science have increasingly taken a post-modern turn away from the positivist and realist historical traditions and turned instead towards a sociology of knowledge. Kuhn's *The Structure of Scientific Revolutions*, for instance, rejected the notion that science progressed linearly through the efforts of savant revolutionaries heroically deposing ignorant and speculative scientific assumptions. On the contrary,

<sup>&</sup>lt;sup>129</sup> Shapin, Never Pure, 13.

<sup>&</sup>lt;sup>130</sup> See Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: U. of Chicago, 1962); Michel Foucault, *The Order of Things* (New York: Pantheon, 1970); Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton: Princeton UP, 1979).

Kuhn argues, the scientific model was more often cooperative and productive rather than individualistic and destructive. In Kuhn's notion of scientific revolutions (or paradigm shifts), knowledge is produced and validated by a particular scientific community. Consequently, he recommends that historians turn their attention to a scientific *community* rather than individual revolutionaries, and thereby study the provisional nature of knowledge and the social conditions of scientific structural change.

While this epistemological-turn has significantly revised our understanding of early modern science and philosophy, in practice, this interpretive lens tends to warp early modern science and philosophy to fit neat epistemological categories and dichotomies such as "rationalist" versus "empiricist."<sup>131</sup> Not only do these categories and dichotomies define communities of knowledge, they also reduce the wide-ranging interests of early modern philosophers. Indeed, these categories and dichotomies, argues historian Donald Rutherford, "have tended to reflect a bias in the history of philosophy toward epistemology and metaphysics and away from ethics, political philosophy, and theology." These are the philosophical subjects which interested Lessius, and while they are today understood to be separate and academically subordinate fields of study, in the early modern period, these areas of practical philosophy were understood to be fundamentally interconnected and within the boundaries of philosophical inquiry. If Lessius has been forgotten, it is because scholars have forgotten much of early modern philosophy.

The narrowness of this epistemological turn is, perhaps, a byproduct of modern philosophy's self-identified close ties with Cartesian dualism and the modern self-

<sup>&</sup>lt;sup>131</sup> Historian Michael Ayers has noted that, "the distinction between 'rationalists' and 'empiricists' has come under attack as a construct of Kantian criticism." See Michael Ayers, "Theories of Knowledge and Belief," in *The Cambridge History of Seventeenth-Century Philosophy*, eds. Daniel Garber and Michael Ayers, 2 vols (Cambridge: Cambridge UP, 1998), 1004.

reflexive subject of knowledge. According to philosopher Richard Rorty, Déscartes' "distinctively modern" notion of the mind as an "inner arena with its inner observer" made it possible "to pose the problem of the veil of ideas, the problem which made epistemology central to philosophy."<sup>132</sup> Michel Foucault, in his genealogy of the modern subject, also sees Descartes as the dawn or foundation of the Enlightenment "subjectivization," and the new link between self-reflection and the discourse of truth.<sup>133</sup> These historical perspectives are by nature self-reflexive. They are also clear examples of what Steven Shapin and Simon Schaffer term "member's account, and its associated selfevident method," in which scholars see themselves and their historical subjects as members of a shared culture, and history becomes an unreflective search for our own culture's "self-evident" universal truths.<sup>134</sup> Thus, the history of philosophy is a retrospective look at modern philosophy, just as the history of science searches the past for traces of modern science. Often, when there is an effort to study philosophical and scientific communities, these communities are not studied for their own sake, but instrumentally, in the service of fleshing out the thoughts and positions of Descartes and other knights of philosophical rationalism and skepticism, or the triumph of experimental It is only recently that scholars have begun to recognize that this philosophy. "hagiographical tradition" imparts very narrow representations of early modern philosophical communities and interests.<sup>135</sup> In order to grasp the wider range of interests,

<sup>&</sup>lt;sup>132</sup> Richard Rorty, *Philosophy and the Mirror of Nature*, 54.

<sup>&</sup>lt;sup>133</sup> Michel Foucault, *The History of Sexuality, Vol. II: The Use of Pleasure*, trans. Robert Hurley (New York: Vintage, 1984); and Foucault, *The History of Sexuality, Vol. III: The Care of the Self*, trans. Robert Hurley (New York: Vintage, 1986). Foucault defines subjectivization as "the procedure by which one obtains the constitution of...a subjectivity which is of course only one of the given possibilities of organization of a self-consciousness"; quoted in *Michel Foucault: Politics, Philosophy, Culture: Interviews and Other Writings*, ed. Lawrence D. Kritzman., trans. Alan Sheridan et al. (New York: Routledge, 1988), 253.

<sup>&</sup>lt;sup>134</sup> Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle and the Experimental Life* (Princeton: Princeton UP, 1985), 4-6.

<sup>&</sup>lt;sup>135</sup> Shapin, Never Pure, 11.

debates, and communities, historians need to look beyond the "members" and begin to investigate the past as "strangers."

Thus, scholars must turn their attention to those that have typically been excluded from membership in the community of modern philosophy and science. Among the most glaring exclusions are those of Lessius and a host of other scholastic philosophers and theologians. With its famously labyrinthine logic, interminable distinctions and obsession with reconciling ancient wisdom with Christian philosophy and contemporary problems, scholasticism is, at first glance, alien. As historian Michael Edwards notes, "since the middle of the seventeenth century...the philosophy of the [scholastic] schools has suffered from something of an image problem."<sup>136</sup> Early modern scholasticism has often been dismissed as an obsolete medieval tradition practiced only by a few hold-outs, those out of sync with the progressive march towards humanism and ultimately empiricism and skepticism.<sup>137</sup> A partial explanation lies in the seventeenth-century demise of scholasticism and the ascendancy of the new philosophical directions emerging from scientific and Cartesian revolutions.<sup>138</sup> Indeed, modern scholars often reflexively

<sup>&</sup>lt;sup>136</sup> Michael Edwards, "Aristotelianism, Descartes, and Hobbes," *The Historical Journal* 50:2 (2007): 449-464.

<sup>&</sup>lt;sup>137</sup> For examples of similar characterizations, see Bernard Williams, *Descartes: The Project of Pure Enquiry* (Harmondsworth: Penguin, 1978); John Cottingham, *Descartes* (Oxford: Oxford UP, 1986) and "A New Start? Cartesian Metaphysics and the Emergene of Modern Philosophy," in *The Rise of Modern Philosophy: The Tensions Between the New and Traditional Philosophies from Machiavelli to Leibniz*, ed. Tom Sorell (Oxford: Oxford UP, 1993); Roger Scruton, *Modern Philosophy: An Introduction and Survey* (New York: Allen, 1994); Anthony Grafton and Eugene F. Rice, Jr., *The Foundations of Early Modern Europe, 1460-1559* (New York: W.W. Norton and Co., 1970, 1994); Jonathan Bennett, *Learning from Six Philosophers: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume,* 2 vols. (Oxford: Oxford UP, 2001); Jonathan Israel, *Radical Enligtenment* (Oxford: Oxford UP, 2001).

<sup>&</sup>lt;sup>138</sup> Economic historian Barry Gordon notes a similarly notes that Lessius' economic achievements were undermined by the demise of scholastic economic thought and the rise and domination of mercanitilism. As the seventeenth-century progressed, Physiocracy and Mercantilism or Classical Economics increasingly dictated the terms and scope of economic analysis. Furthermore, Barry Gordon notes the "regressive" nature of Physiocracy and Mercantilism, which attracted and rewarded sophists who "cared little for analysis in the abstract and were frankly derisory concerning the careful distinctions and often tedious legalistic logic of the moralists. In the process, some valuable analytical initiatives of the latter were neglected." See Gordon, *Economic Analysis Before Adam Smith*, 271.

adopt the critiques and characterizations drawn by scholasticism's opponents, history's eventual "winners." Early modern scholasticism, however, was not a medieval holdover; neither was it archaic or stagnant. Instead, as Edwards notes, it was "a significant and complex tradition in its own right" and deserving "a more sophisticated and nuanced account of how it related to the 'new philosophy' of Hobbes, Descartes, and their contemporaries."139 This calls for not only further study of scholastic philosophers and schools, like Lessius and the University of Louvain, but also reorienting the map of early modern science and philosophy in such a way that decenters modern philosophical presumptions and categories. Correcting this balance, Shapin argues, means not only shedding antecedent judgments but also correcting the way in which we understand truth itself. Truth, today, is generally considered to be the domain or product of "expertise and rigorous policing exerted on members by the institutions in which expertise lives." While intellectuals from antiquity through the nineteenth century recognized expertise as a source of truth, Shapin argues, they did not limit truth and knowledge to the domain of expertise. Instead, according to Shapin, "They had other conceptions of knowledge apart from expertise: conceptions of virtuous and sacred knowledge attached to special persons inhabiting special bodies..."<sup>140</sup> In this way, scholars such as Lessius, who frequently engaged in debates over the meaning of virtue and whose claims to authority rested to a significant degree on their own claims to virtue, were, in fact, engaged in epistemological debates as well, and should be recognized as such by historians. In short, scholars must rid themselves of their presuppositions and modern values and instead analyze scholasticism—and early modern philosophy more widely—on its own terms. Lessius provides such a window into this alternative intellectual tradition which was more than

<sup>&</sup>lt;sup>139</sup> Edwards, "Aristotelianism, Descartes, and Hobbes," 450.

<sup>&</sup>lt;sup>140</sup> Shapin, Never Pure, 257.

simply the precursor to philosophical rationalism or scientific empiricism, and was, in fact, more popular for longer than its philosophical competitors for much of the early modern period.

## Conclusion

Steven Shapin and Simon Schaffer observed that the history of science is written by the winners, but that historians have an obligation to re-evaluate the "losers" in order to understand the terms and context of scientific debates. While Lessius' beatification process has stalled, his central position in early modern scientific and philosophical circles need not be overlooked. Indeed, if historians wish to understand the breadth and rich texture of early modern philosophy and science, Lessius' corpus is a fertile starting place. *Hygiasticon*, his treatise on health and nutrition illuminates the suppleness of early modern scholastic enquiry and its increasing integration of non-textual sources of authority, such as personal experience. Additionally, Hygiasticon illuminates the interweaving of physiology, philosophy and spirituality, and the concomitant disciplinary haze. Finally, it reveals the rise of an early modern emphasis on personal discipline intellectually, spiritually, and physically-and that the appearance of these strategies and discourses parallels the emergence of state and Counter-Reformation disciplinary These struggles and themes are incompletely understood today, and will be agendas. better understood once modern historians begin to look and think beyond the categories and interest of the "winners" such as Descartes. While the "winners" perspective and the Cartesian Revolution are certainly not inconsequential, they are but one side of the story. Lessius certainly presents a valuable window into another.

## **Bibliography**

- Albala, Ken. *Eating right in the Renaissance*. Berkeley: University of California Press, 2002.
- Alter, H. J. "Descartes before the horse: I clone, therefore I am: the hepatitis C virus in current perspective." *Annals of internal medicine* 115, no. 8 (1991): 644.

Arblaster, Paul. A history of the Low Countries. New York: Palgrave Macmillan, 2005.

Ariew, R. "Descartes and the tree of knowledge." Synthese 92, no. 1 (1992): 101-116.

----. Descartes and the last Scholastics. Ithaca, NY: Cornell University Press, 1999.

- Ariew, R., and A. Gabbey. "The scholastic background." The Cambridge History of Seventeenth Century Philosophy 1. Cambridge: Cambridge University Press, 1998: 425–453.
- Ayers, M. "Theories of knowledge and belief." *Cambridge History of Seventeenth Century Philosophy* 2. Cambridge: Cambridge University Press, 1998.
- Bennett, Jonathan Francis. Learning from six philosophers: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume. Oxford: Clarendon Press, 2003.
- Blom, J. C. H., and Emiel Lamberts. *History of the Low Countries*. New York: Berghahn Books, 2006.
- Boia, Lucian. Forever young: a cultural history of longevity. Chicago: Reaktion Books, 2004.
- Boileau, David A., *Tradition and renewal: philosophical essays commemorating the centennial of Louvain's Institute of Philosophy*. Leuven: Leuven University Press, 1992.
- Bossy, John. Christianity in the West, 1400-1700. Oxford: Oxford University Press, 1985.
- Bossy, John, and Simon Ditchfield. *Christianity and community in the West: essays for John Bossy*. Burlington, VT: Ashgate Publishing, Ltd., 2001.
- Bourgogne, Antoine de, and Toon Houdt. Linguae vitia et remedia. Leuven: Brepols, 1999.
- Braudel, Fernand. La dynamique du capitalisme. Paris: Arthaud, 1985.
- Burke, Peter. *Popular culture in early modern Europe*. Burlington, VT: Ashgate Publishing, Ltd., 2009.

- Bynum, Caroline Walker. *Holy feast and holy fast: the religious significance of food to medieval women*. Berkeley: University of California Press, 1988.
- Campbell, Thomas Joseph. The Jesuits, 1534-1921: a history of the Society of Jesus from its foundation to the present time. New York: The Encyclopedia Press, 1921.
- Campi, Emidio, S. De Angelis, A. Grafton, eds. *Scholarly knowledge: textbooks in early modern Europe*. Zurich: Librairie Droz, 2008.
- Cañizares-Esguerra, Jorge and Erik R. Seeman, eds. *The Atlantic in global history*, 1500-2000. New York: Pearson Prentice Hall, 2007.
- Carter, Richard Burnett. Descartes' medical philosophy: the organic solution to the mind-body problem. Baltimore: Johns Hopkins University Press, 1983.
- Cottingham, John. *The Cambridge companion to Descartes*. Cambridge: Cambridge University Press, 1992.
- ———. Descartes. New York: Wiley-Blackwell, 1986.
- ----. "A New Start? Cartesian Metaphysics and the Emergence of Modern Philosophy." *The Rise of Modern Philosophy: The Tensions between the New and Traditional Philosophies from Machiavelli to Leibniz,* ed. Tom Sorrell. Oxford: Clarendon Press, 1993: 145–66.
- ———. Reason, will, and sensation: studies in Descartes's metaphysics. Oxford: Oxford University Press, 1994.
- Cruz, Anne J., and Mary Elizabeth Perry, eds. *Culture and control in counterreformation Spain*. Minneapolis: University of Minnesota Press, 1992.
- da Silva, P. J.C. "Early Jesuit Society's Science of Soul: Reflections on History and Epistemology of Psychology." *Circumscribere: International Journal for the History of Science* 3, no. 0 (2008): 1–10.
- Davis, Natalie Zemon. Society and culture in early modern France : eight essays. Stanford: Stanford University Press, 1975.
- Debus, Allen G. The French Paracelsians : the chemical challenge to medical and scientific tradition in early modern France. Cambridge: Cambridge University Press, 2002.
- Decock, Wim. "Lessius and the Breakdown of the Scholastic Paradigm." *Journal of the History of Economic Thought* 31, no. 1 (2009): 57-78.
- Delumeau, Jean, and Thierry Wanegffelen. *Naissance et affirmation de la Réforme*. Paris: Presses universitaires de france, 1998.
- Denis, Valentin. Catholic University of Louvain, 1425-1958. Leuven: Catholic University of Leuven, 1958.
- Descartes, René. The passions of the soul. New York: Hackett Publishing, 1989.

----. Oeuvres et lettres, ed. and André Bridoux. Paris: Gallimard, 1949.

- Descartes, René, and Frans Burman. *Descartes' conversation with Burman*. Oxford: Clarendon Press, 1976.
- Descartes, René, and Princess Elisabeth of Bohemia. *The correspondence between Princess Elisabeth of Bohemia and René Descartes*, trans. Lisa Shapiro. Chicago: University of Chicago Press, 2007.
- Dobson, Mary J. Contours of Death and Disease in Early Modern England. Cambridge: Cambridge University Press, 2003.
- Duncan, G. "Mind-body dualism and the biopsychosocial model of pain: what did Descartes really say?" *Journal of Medicine and Philosophy* 25, no. 4 (2000): 485.
- Edwards, Francis. The Jesuits in England: from 1580 to the present day. New York: Burns & Oates, 1985.
- Edwards, Michael. "Aristotelianism, Descartes, and Hobbes." *The Historical Journal* 50, no. 2 (2007): 449-464.
- Engelhardt, H. T. "From philosophy and medicine to philosophy of medicine." *Journal of Medicine and Philosophy* 11, no. 1 (1986): 3.
- Evennett, Henry Outram and John Bossy. *The spirit of the Counter-Reformation*. South Bend, IN: University of Notre Dame Press, 1970.
- Feingold, Mordechai, ed. Jesuit science in the Republic of Letters. Cambridge, MA: Massachusetts Institute of Technology Press, 2003.
- Fleming, Julia. "When 'meats are like medicines': Vitoria and Lessius on the role of food in the duty to preserve life." *Theological Studies*, 69 (2008): 99-115.
- Forster, Robert, and Orest A. Ranum. *Medicine and society in France : selections from the Annales, economies, sociétés, civilisations, volume 6.* Baltimore: Johns Hopkins University Press, 1980.
- Foucault, Michel. *The history of sexuality: The use of pleasure*, trans. Robert Hurley. New York: Vintage Books, 1986.
- ————. *The history of sexuality: The care of the self*, trans. Robert Hurley. New York: Vintage Books, 1986.
- ————. *The order of things: an archaeology of the human sciences.* New York: Vintage Books, 1970.
- Foucault, Michel, and Lawrence D. Kritzman. *Politics, philosophy, culture: interviews* and other writings, 1977-1984. Psychology Press, 1990.
- Francks, Richard. *Modern philosophy: the seventeenth and eighteenth centuries.* Montreal: McGill-Queen's Press, 2003.

- French, Roger Kenneth. Medicine before science: the rational and learned doctor from the Middle Ages to the Enlightenment. Cambridge: Cambridge University Press, 2003.
- Fuchs, Thomas, and Marjorie Glicksman Grene. *The mechanization of the heart: Harvey and Descartes*. Rochester, NY: University of Rochester Press, 2001.
- Furdell, Elizabeth Lane. *Publishing and medicine in early modern England*. Rochester, NY: University of Rochester Press, 2002.
- ----. Textual healing: essays on medieval and early modern medicine. New York: Brill, 2005.
- Garber, Daniel, and Michael Ayers. *The Cambridge history of seventeenth-century philosophy*. Cambridge: Cambridge University Press, 2003.
- Gaukroger, Stephen, John Andrew Schuster, and John Sutton, eds. *Descartes' natural philosophy*. New York: Psychology Press, 2000.
- Ghellinck, Joseph de. "Leonard Lessius." *The Catholic Encyclopedia*. Vol. 9. New York: Robert Appleton Company, 1910.
- Gilman, Sander L. Diets and dieting: a cultural encyclopedia. New York: Psychology Press, 2008.
- Gordon, Barry J. Economic analysis before Adam Smith: Hesiod to Lessius. New York: Palgrave Macmillan, 1975.
- Gruman, Gerald Joseph. A history of ideas about the prolongation of life. New York: Springer Publishing Company, 2003.
- Gunton, Colin E. *The Cambridge companion to Christian doctrine*. Cambridge: Cambridge University Press, 1997.
- Hankins, James. *The Cambridge companion to Renaissance philosophy*. Cambridge: Cambridge University Press, 2007.
- Haycock, David Boyd. *Mortal coil: a short history of living longer*. New Haven: Yale University Press, 2008.
- Hays, J. N. *The burdens of disease: epidemics and human response in western history*. New Brunswick, NJ: Rutgers University Press, 2010.
- Höpfl, Harro. Jesuit political thought: the Society of Jesus and the state, c. 1540-1630. Cambridge: Cambridge University Press, 2004.
- Huesman, William A. *The doctrine of Leonard Lessius on mortal sin.* Rome: Pontifica Università Gregoriana, 1947.
- Israel, J. I. Radical Enlightenment: Philosophy and the Making of Modernity 1650-1750. New York: Oxford University Press, 2002.

- Jonsen, Albert R., and Stephen Edelston Toulmin. *The abuse of casuistry: a history of moral reasoning*. Berkeley: University of California Press, 1990.
- Kennedy, L.A. "Early Jesuits and Immortality of the Soul." *Gregorianum* 69, no. 1 (1988): 117-131.
- Keynes, Geoffrey, and Sir Geoffrey Keynes. *The life of William Harvey*. Oxford: Clarendon Press, 1966.
- Knox, Thomas Francis. The first and second diaries of the English College, Douay: and an appendix of the unpublished documents. London: D. Nutt, 1878.
- Kosso, Cynthia, and Anne Scott. The nature and function of water, baths, bathing, and hygiene from antiquity through the Renaissance. New York: Brill, 2009.
- Kraye, Jill, Risto Saarinen, and European Science Foundation. *Moral philosophy on the threshold of modernity*. New York: Springer Science & Business, 2005.
- Kretzmann, Norman. The Cambridge history of later medieval philosophy: from the rediscovery of Aristotle to the disintegration of scholasticism, 1100-1600. Cambridge: Cambridge University Press, 1988.
- Kuhn, Thomas S. *The structure of scientific revolutions*. Chicago: University of Chicago Press, 1996.
- Langholm, Odd Inge. The legacy of scholasticism in economic thought: antecedents of choice and power. Cambridge: Cambridge University Press, 1998.
- Latour, Bruno. Science in action. Cambridge, MA: Harvard University Press, 1987.
- ----. We have never been modern. Cambridge, MA: Harvard University Press, 1993.
- Leder, D. "Medicine and paradigms of embodiment." *Journal of Medicine and Philosophy* 9, no. 1 (1984): 29.
- Leemans, Johan. More than a memory: the discourse of martyrdom and the construction of Christian identity in the history of Christianity. Leuven: Peeters Publishers, 2005.
- Lessius, Léonard. Hygiasticon seu vera ratio valetudinis bonae et vitae una cum sensuum, iudicii et memoriae integritate ad extremam senectutem conservandae: Auctore Leonardo Lessiu...Subiungitur Tractatus Ludovici Cornari Veneti, eodem pertinens, ex Italico in Latinum sermonem ab ipso Lessio translatus. Antwerp: ex offic. Plantin, 1613.
- ———. A treatise of health and long life with the future means of attaining it: in two books. London: Ayer Publishing, 1743.

- ———. Médecine philosophique et universelle, pour tous le états. ... Enrichi d'observations des médecins les plus célèbres, auxquelles on a joint un traité sur la sobriété de Lessius et de. Paris: L. Prudhomme, 1799.
- ———. De Ivstitia Et Ivre caeterisque Virtutibus Cardinalibus: Libri IV. Antwerp: Masius, 1605.
- ———. *The Virtues Awakened: From the Treatise on Perfect Happiness.* Whitefish, MT: Kessinger Publishing, 2010.
- Lindeboom, Gerrit Arie. Descartes and medicine. Amsterdam: Rodopi, 1979.
- Lindemann, Mary. *Medicine and Society in Early Modern Europe*. Cambridge: Cambridge University Press, 2010.
- Maryks, Robert A. Saint Cicero and the Jesuits: the influence of the liberal arts on the adoption of moral probabalism. Burlington, VT: Ashgate Publishing, Ltd., 2008.
- Mathiowetz, Dean. "The Juridical Subject of `Interest'." *Political Theory* 35, no. 4 (2007): 468 -493.
- Matthews, M. R. The scientific background to modern philosophy: Selected readings. New York: Hackett Publishing Company, 1989.
- McHugh, Tim. Hospital politics in seventeenth-century France : the crown, urban elites, and the poor. The history of medicine in context. Burlington, VT: Ashgate Publishing, Ltd., 2007.
- Mikkeli, Heikki. *Hygiene in the early modern medical tradition*. Helsinki: Finnish Academy of Science and Letters, 1999.
- Miller, Frederic P, Agnes F Vandome, and John McBrewster. *Leonardus Lessius*. New Brunswick, NJ: VDM Publishing House Ltd., 2011.
- Moss, Stéphanie, and Kaara L. Peterson. *Disease, diagnosis, and cure on the early modern stage*. Burlington, VT: Ashgate Publishing, Ltd., 2004.
- Nischan, Bodo, John M. Headley, Hans Joachim Hillerbrand, and Anthony J. Papalas. Confessionalization in Europe, 1555-1700: essays in honor and memory of Bodo Nischan. Burlington, VT: Ashgate Publishing, Ltd., 2004.
- O'Malley, John W. The first Jesuits. Cambridge, MA: Harvard University Press, 1993.
- ———., ed. *The Jesuits: cultures, sciences, and the arts, 1540-1773.* Toronto: University of Toronto Press, 1999.

- Park, Katharine. *Doctors and medicine in early Renaissance Florence*. Princeton: Princeton University Press, 1985.
- ————. Medicine and society in medieval Europe, 500-1500. Cambridge: Cambridge University Press, 1992.
- ————. "The criminal and the saintly body: autopsy and dissection in Renaissance Italy." *Renaissance quarterly* 47, no. 1 (1994): 1–33.
- Pellegrino, E. D. "Medicine, history, and the idea of man." *The ANNALS of the American Academy of Political and Social Science* 346, no. 1 (1963): 9.
- Perkins, Wendy. *Midwifery and medicine in early modern France : Louise Bourgeois*. Exeter, Devon, UK: University of Exeter Press, 1996.
- Rice, Eugene F., and Anthony Grafton. *The foundations of early modern Europe*, 1460-1559. New York: W.W. Norton, 1994.
- Risse, Guenter B. *Mending bodies, saving souls: a history of hospitals*. Oxford: Oxford University Press, 1999.
- Rorty, Richard. *Philosophy and the mirror of nature*. Princeton: Princeton University Press, 2009.
- Rosenberg, Charles E. Right living: an Anglo-American tradition of self-help medicine and hygiene. Baltimore: Johns Hopkins University Press, 2003.
- Rothbard, Murray Newton. Economic thought before Adam Smith: Austrian school of economists. Burlington, VT: Ashgate Publishing, Ltd., 1995.
- Rowen, Herbert Harvey. The Low Countries in early modern times. New York: Walker, 1972.
- Rutherford, Donald. *The Cambridge companion to early modern philosophy*. Cambridge: Cambridge University Press, 2006.
- Schaefer, Daniel. Old Age and Disease in Early Modern Medicine. New York: Pickering & Chatto Publishers, Ltd., 2011.
- Schmaltz, Tad M. "Descartes and Malebranche on mind and mind-body union." *The Philosophical Review* 101, no. 2 (1992): 281–325.
- ————. "Cartesian causation: body-body interaction, motion, and eternal truths." *Studies In History and Philosophy of Science Part A* 34, no. 4 (2003): 737–762.
- ————. Receptions of Descartes: Cartesianism and anti-Cartesianism in early modern Europe. New York: Psychology Press, 2005.

- ---. "The science of mind." *The Cambridge companion to early modern philosophy* (2006): 136.
- Schmitt, Charles B., Quentin Skinner, and Eckhard Kessler. *The Cambridge history of Renaissance philosophy*. Cambridge: Cambridge University Press, 1991.
- Scruton, Roger. Modern Philosophy. New York: Random House, 2004.
- Selwyn, Jennifer D. A paradise inhabited by devils: the Jesuits' civilizing mission in early modern Naples. Burlington, VT: Ashgate Publishing, Ltd., 2004.
- Shapin, Steven. "Descartes the doctor: rationalism and its therapies." *The British Journal* for the History of Science 33, no. 2 (2000): 131–154.
- ————. A social history of truth: civility and science in seventeenth-century England. Chicago: University of Chicago Press, 1994.
- Shapin, Steven, Simon Schaffer, and Thomas Hobbes. Leviathan and the air-pump: Hobbes, Boyle, and the experimental life : including a translation of Thomas Hobbes, Dialogus physicus de natura aeris by Simon Schaffer. Princeton: Princeton University Press, 1985.
- Shields, W.J. The Church and Healing: Studies in Church History. Oxford: Blackwell, 1982.
- Sigerist, Henry E. Landmarks in the history of hygiene. Oxford: Oxford University Press, 1956.
- Siraisi, Nancy G. *History, medicine, and the traditions of Renaissance learning.* Ann Arbor, MI: University of Michigan Press, 2007.
- ----. The clock and the mirror: Girolamo Cardano and Renaissance medicine. Princeton: Princeton University Press, 1997.
- Smith, Gerard, ed. Jesuit Thinkers of the Renaissance. Essays Presented to John F. McCormick, SJ, by His Students on the Occasion of the Sixty-Fifth Anniversary of His Birth. Marquette, MI: Marquette University Press, 1939.
- Solomon, Howard. Public welfare, science, and propaganda in seventeenth century France the innovations of Théophraste Renaudot. Princeton: Princeton University Press, 1972.
- Solomon, Julie Robin, and Catherine Gimelli Martin. Francis Bacon and the refiguring of early modern thought: essays to commemorate The advancement of learning (1605-2005). Burlington, VT: Ashgate Publishing, Ltd., 2005.

- Sorell, T. The rise of modern philosophy: the tension between the new and traditional philosophies from Machiavelli to Leibniz. New York: Oxford University Press, 1993.
- Taunton, Ethelred Luke. The history of the Jesuits in England, 1580-1773. London: Lippincott, 1901.
- Temkin, Owsei. "On second thought" and other essays in the history of medicine and science. Baltimore: Johns Hopkins University Press, 2002.
- Tetel M. "Doctor Franu' cois Rabelais. Healer of body, anatomist of knowledge." *JAMA* : the journal of the American Medical Association 216, no. 1 (1971): 81-4.
- Tutino, Stefania. *Empire of Souls: Robert Bellarmine and the Christian Commonwealth*. Oxford: Oxford University Press, 2010.
- Van Berkel, Klaas, Albert Van Helden, and L. C. Palm. A history of science in the Netherlands: survey, themes, and reference. London: Brill, 1999.
- Van Houdt, Toon. "'Lack of money': a reappraisal of Lessius' contribution to the scholastic analysis of money-lending and interest-taking." *The European Journal of the History of Economic Thought* 5, no. 1 (1998): 1.
- Van Houdt, Toon, and Wim Decock. *Leonardus Lessius: traditie en vernieuwing*. Leuven: Maria-Elisabeth Belpaire, 2005.
- Van Sull, Charles. Léonard Lessius de la Compagnie de Jésus, (1554-1623). Leuven: Édition du Museum Lessianum, 1930.
- Vanpaemel, G.H.W. "Jesuit Science in the Spanish Netherlands." Jesuit Science in the Republic of Letters, ed. Mordechai Feingold. Cambridge, MA: Massachusetts Institute of Technology Press, 2003: 389-432.
- Vigarello, Georges., and Jean. Birrell. Concepts of cleanliness : changing attitudes in France since the Middle Ages. Cambridge: Cambridge University Press, 1988.
- Walter, John, and Roger Schofield. Famine, Disease and the Social Order in Early Modern Society. Cambridge: Cambridge University Press, 1991.
- Williams, Bernard Arthur Owen. *Descartes: the project of pure enquiry*. New York: Psychology Press, 2005.
- Wright, John P., and Paul Potter. *Psyche and soma: physicians and metaphysicians on the mind-body problem from antiquity to Enlightenment*. Oxford: Clarendon Press, 2000.