

**EXPLORING CONCEPTS OF CONTAGION AND THE AUTHORITY OF
MEDICAL TREATISES IN 14TH-16TH CENTURY ENGLAND**

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University of Ottawa

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ABSTRACT**EXPLORING CONCEPTS OF CONTAGION AND THE AUTHORITY OF
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Submitted 2012

This thesis examines the authority that historians give to medical treatises as witnesses to what people understood about contagion in fourteenth through sixteenth century England. In particular, it analyses the history, contents, audience, and codicology of six English tractates, four addressing the plague and two addressing the sweating sickness. The central question asked is whether and how historians' reliance on medical texts has limited the historiography of contagious disease.

Plague tractates were specialised and formulaic medical treatises that were stimulated by the 'Black Death' and through which medical practitioners and writers circulated ideas about the causes of, precautionary measures against, and treatments for the plague. Few original texts were written in England before the early seventeenth century; instead, English tractates were translations or adaptations of Continental works, with 'uniquely English' content added to make them appealing to a local audience. When the 'plague tractate' genre was applied to the sweating sickness, its contents, including concepts of contagion, were modified to fit experiences with, and observations of, the latter disease. Although the plague figures prominently in studies of pre-modern disease, separating studies of 'plague tracts' from those addressing other diseases hinders comparative analyses that can reveal much more about contemporary understanding of contagion than do plague studies alone. The socio-political-professional contexts in which the tractates were written and printed in

England affected not only their contents, but also their circulation and, ultimately, their audiences. The tractates reveal as much about the construction of disease for socio-political purposes as they do about contemporary beliefs about disease. In addition, while historians have largely dismissed prefatory dedications as sales tactics, examining the tractates' dedications in light of their codicological features reveals that they were, for the most part, meant to be accessible to audiences that encompassed both elite and non-elite classes.

Rather than being limited to its medical sense, contagion formed part of the larger discourse about the human condition. As a result, medical tractates do not tell the whole story of late medieval and early modern understanding of contagious disease. To better assess historical understanding of disease, a pluri-disciplinary approach is needed.

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NOTE ON PRIMARY SOURCES AND TRANSCRIPTIONS

This thesis draws upon the contents of six contagious disease tractates, four of which are printed and two of which are manuscripts. I have downloaded electronic copies of the four printed texts from *Early English Books* online and, where possible, I have also examined them directly at the British and Bodleian Libraries. I used a modern edited version of *De epidemia*, which is located in Trinity College Cambridge MS R.14.52.¹ I have conducted a physical examination of Thomas le Forestier's 'Treatise on the Venymys Feuer of Pestilens,' which is bound in *British Library Additional Manuscript 27582*, at the British Library. No electronic copy of the manuscript yet exists; in addition to my physical examination, however, I have acquired black and white photographs of the tractate from the British Library, which has facilitated my ongoing study of the tractate's contents.

In transcribing the five unedited tractates, I have retained the original spelling, grammar, punctuation, and capitalization. I have regularized the long s but have left i/j and u/v usage as they are in the original printed texts. Where the original texts use words in short form, I have expanded them; the expansions are indicated with square brackets. The early modern **þ** is represented by þe. In contrast to the modern editions of many tractates, I specifically elected not to modernise the spelling or grammar to maintain the original 'flavour' of each of the texts as well as to accurately reflect early modern English in print.

¹ Lister M. Matheson, "John of Burgundy: Treatises on Plague," in *Sex, Aging, and Death in a Medieval Medical Compendium. Trinity College Cambridge MS R.14.52, Its Texts, Language, and Scribe*, ed. M. Teresa Tavormina, (Tempe: Arizona Center for Medieval and Renaissance Studies, 2006), 2:569-606.

INTRODUCTION

“...When that thy hyghnes and thy grete power is vexed & trobled w[ith] dyv[er]s sykenysse and thy lordeshippes and almost the mydel part of thy realme w[ith] the venyms feuer of pestilens...”¹ So Thomas le Forestier opened his 1485 medical treatise during the first outbreak of a disease previously unknown in England. While infrequently explored by historians beyond the demographic and economic impacts of the ‘Black Death’, contagious disease played a considerable role in the lives of pre-modern people. Plague was not, of course, the only disease that caused widespread illness and mortality; undefined fevers, smallpox, typhus, influenza, and the sweating sickness, unidentified to this day, also took their toll. The combined result was that disease was an ever-present threat that had to be recognised, interpreted, and practically managed. This thesis aims to connect medical and non-medical historiography by contributing to a discussion about the place of, and authority assigned to, medical treatises in assessing what people understood about contagious epidemic disease in fourteenth to sixteenth century England.

In their attempts to reconstruct what the contemporary English population understood and believed about disease, historians typically rely on medical treatises such as contagious disease tractates. These were specialised and largely formulaic medical treatises that were initially stimulated by the ‘Black Death’ and through which medical practitioners and writers disseminated ideas about the causes of plague, prophylactic precautions, and advice on treatment. Relying on medical texts such as these as reliable sources about popular understanding of contagious disease, however, may be misleading. Doing so assumes that

¹ Thomas Le Forestier, “Treatise on the “Venyms Feuer of Pestilens,” *Additional MS 27582*, British Library, fol. 70r.

there is a direct correlation between what the tractates said and what people believed, whereas there is considerable doubt whether the concepts of disease causality and transmission articulated in the tractates were incorporated into people's actual responses to disease. As historians have typically focused on the plague in their discussions of late medieval and early modern disease experiences, the fact that the literary format of the 'plague tractate' was used over time to address other diseases has been largely missed, as have people's responses to other diseases. Paul Slack claims, for example, that "plague literature...can therefore be taken as a whole and plundered for evidence of the conventional view of epidemics held by Englishmen" in the sixteenth and seventeenth centuries.² Such assertions have resulted in a lack of comparative analysis of how different contagious diseases were experienced, understood, and explained, which in turn has led to a modern assumption that the plague experience may be universally applied to all contagious diseases. The socio-political contexts in which the tractates were written and printed affected not only their contents but also their circulation and, ultimately, their audiences, concerns undervalued to date in the historiography. This is particularly relevant for a study of English-language tractates, as pre-seventeenth century English tractates were almost exclusively translations and/or adaptations of Continental works, with 'uniquely English' content and context added to make them appealing to a local audience.

This thesis aims to address several multi-layered questions. Can plague-specific assumptions about contagion be broadly applied or can differences be detected in how the tractates discussed different diseases; if the latter, how might such differences affect historians' ability to retrospectively determine what late medieval and early modern people

² Paul Slack, *The Impact of Plague in Tudor and Stuart England*, (London: Routledge and Kegan Paul, 1985), 24.

understood about epidemic disease? In what ways do English contagious disease tractates reflect religious, socio-political, and professional concerns, and what might a scrutiny of the tractates reveal not only about their underlying non-medical contents, but also about their role as medical texts? How seriously should historians take the tractate authors' claims to be writing for the 'common man and woman,' and what do such claims suggest about the tractates' audiences when explored in light of their codicology? Has historians' reliance on medical texts misled the historiography of contagious disease and writing about contagious disease, and, if so, in what ways? Addressing these questions enables us to revisit our reliance on medical texts as authoritative primary medical sources to guide our judgement of contemporary contagion beliefs.

Chapter 1 provides a brief historiographical narrative to situate scholarly discussions about late medieval and early modern conceptions of contagion within the context of the history of medicine. It also includes an exploration of the challenges inherent in such retrospective studies. After summarising scholarly writing about the plague and the sweating sickness, Chapter 2 examines the contagious disease tractate as a specific type of medical treatise and presents an overview of how theories of contagion were presented in both the earliest 'Black Death'-era tractates and those produced later in England. Through a cross-disease analysis, the chapter explores the explicit and implicit differences and similarities in how the plague and sweating sickness were discussed by the tractate authors. Chapter 3 takes a step back from the medical contents of the tractates to investigate, using a literary criticism lens, the broader socio-political contexts within which the English tractates were written, printed, and disseminated. In doing so, it reflects on how the tractates' non-medical features might have influenced how epidemic disease was depicted, thereby raising the question 'when is a contagious disease tractate more (or less) than a medical treatise?' Chapter 4

focuses on the transmission of medical knowledge in pre-seventeenth century England. It draws upon the English book production and literacy literature to consider the potential and actual audiences served by the tractates. In particular, it situates the authors' prefatory dedications against the tractates' codicological features and printing histories to challenge existing assumptions about the tractates' audiences and the extent to which the texts may, or may not, have reflected popular beliefs about contagious disease. In the conclusion I attempt to address the methodological value and challenges of using contagious disease tractates specifically, and medical texts generally, as authoritative sources by which to make judgements about past disease concepts. The conclusion also offers recommendations about the critical importance of using a pluri-disciplinary approach to better understand the English disease experience.

This study covers England's 'long period of transition' from medieval to early modern times, from the mid 1300s to about 1600.³ This period has been selected to bridge ambiguities about the 'end' of the medieval and 'beginning' of the early modern periods in England, for there are no clear lines between these imposed historical periods to denote that "a narrow strait has been crossed and a new continent entered."⁴ The study begins with the 'Black Death' of 1347-1352 and concludes with the end of the pre-microscope era in 1600.⁵

³ Bertie Wilkinson, "The Historian and the Late Middle Ages in England," in *Essays on the Reconstruction of Medieval History*, ed. Vaclav Mudroch and G.S. Couse, (Montreal: McGill-Queen's University Press, 1974), 133.

⁴ Luis García-Ballester, "Academicism versus Empiricism in Practical Medicine in Sixteenth-Century Spain with Regard to Morisco Practitioners," in *The Medical Renaissance of the Sixteenth Century*, ed. A. Wear, R.K. French, and I.M. Lonie, (Cambridge: Cambridge University Press, 1985), 249. For discussions of the complexities of periodisation, see Jacques Le Goff, *The Medieval Imagination*, trans. Arthur Goldhammer, (Chicago: University of Chicago Press, 1988), 18-23 and Marcus Graham Bull, *Thinking Medieval: An Introduction to the Study of the Middle Ages*, (New York: Palgrave Macmillan, 2005), 42-61.

⁵ Exactly who invented the microscope composed of more than a single lens and when this happened remains controversial, but concluding around 1600 avoids having to address either

Although ‘germ theory’ was not developed until the later nineteenth century, the microscope’s invention combined with other scientific and methodological innovations in the early 1600s and the tendency of post-1600 medical writers to depend on and defer less to the old authorities led to medical advancements that are beyond the scope of this thesis.⁶

This thesis draws upon six English-language tractates, four on the plague and two on the sweating sickness. The plague-specific tractates are translations or adaptations of Continental works; the sweating sickness tractates, on the other hand, are original writings based on eyewitness accounts. Situating these documents within their literary and cultural contexts is crucial to avoid viewing them retrospectively. In analysing the texts, I have attempted to pay attention to what was meant by ‘plague’ or ‘the sweat’ in their contemporary context, rather than making reference to what is now known. At the same time, my intent is to re-examine the texts in a way that elucidates their historical purpose and meaning. Doing so requires making certain assumptions that I hope will not be considered to be ‘presentist.’

After all, medicine

is a situated activity where meanings are not fixed but depend on context and can only be understood in relation both to the macrocontext of the period and its world view and the microcontext of the communication process with its situational aspects and the sociohistorical background facts of the participants.⁷

I take this statement as my starting and ending points; what comes in between seeks to challenge the current historiography and identify new areas of research that will, eventually, improve our appraisal of how disease was experienced and understood in the past.

the issue or its impact on contemporary theories of disease. See Gerard L'Estrange Turner, *Essays on the History of the Microscope*, (Oxford: Senecio, 1980).

⁶ Päivi Pahta and Irma Taavitsainen, “An Interdisciplinary Approach to Medical Writing in Early Modern English,” in *Medical Writing in Early Modern English*, ed. Irma Taavitsainen and Päivi Pahta, (Cambridge: Cambridge University Press, 2011), 3.

⁷ Irma Taavitsainen, “Expanding the Borders of Knowledge,” in *Early Modern English Medical Texts: Corpus Description and Studies*, ed. Irma Taavitsainen and Päivi Pahta, (Amsterdam: John Benjamins, 2010), 11.

CHAPTER 1

RETROSPECTIVELY EXAMINING CONCEPTS OF CONTAGION

Introduction

“The .ii. q[ue]stion is whether pestilence sores be contagious.” So ponders the author of an English plague tract in 1485, before confirming that, indeed, the sores are contagious because they contain infected humours.¹ What this author understood and meant by the word contagious is less easy to discern. Although historians generally agree that late medieval and early modern societies were aware that some diseases were transmitted from person to person, there remains a longstanding debate about whether and how they actually understood the concept of contagion. No definitive answer yet exists; complicating the issue is the question of whom is meant by ‘they’ when discussing what ‘people’ believed or understood.² For the purposes of this thesis, ‘they’ refers to a broad range of common people; while not concrete, this distinguishes ‘lay’ from ‘medical professional’ and crosses social and economic statuses.

This historiographical debate on contagion is shaped by more than a difference of scientific opinion. It reflects both the challenges that inherently affect attempts to retrospectively assess pre-modern medical concepts and the evolution of the history of medicine as a discipline, particularly the ways in which some medical historians have judged pre-laboratory knowledge. Beyond the specialist literature, but to an extent also reflecting it, studies of the late medieval and early modern period typically either gloss over or generalise

¹ *Here Begynneth a Litill Boke Necessarye & Behouefull Aȝenst the Pestilence*, (London: William de Machlinia, ca. 1485), STC 2nd ed. 4590, fols.2v-3r. All the texts included here are foliated, rather than paginated in the modern sense.

² The same concern arises with the term ‘popular’ when referring to medical beliefs, books, practices, and so on, as it suggests the converse (negative) side of ‘elite’ or ‘learned’.

medical issues to such an extent as to suggest that little credible medical knowledge existed.

Aside from the actual question of contagion, reviewing the historiographical debate reveals several gaps in the scholarly literature. By focusing on the plague, analyzing medical treatises principally as *medical* texts while overlooking their socio-political contents and contexts, and making assumptions about the treatises' audiences and role in transmitting medical knowledge, historians may have considered the treatises to be more influential than they really were. Before exploring this gap in the context of pre-seventeenth century English medical treatises, I outline below the historiographical debate on late medieval and early modern concepts of contagion, including the framework within which it has taken place.

The challenges of retrospective studies

The history of human disease is as old as the history of humankind. Written evidence of the impact of disease on human societies exists in Mesopotamian literature from the third millennium BC, while Egyptian medical treatises date to the 1600s BC. The Greeks and Romans wrote extensively about their experiences with epidemic disease.³ The Torah, the Bible, and the Qur'an make reference to disease. Disease has shaped military outcomes, influenced royal successions, significantly and quickly reduced populations, and fostered socio-cultural change. The effects of imported diseases on indigenous populations, for example, have received significant scholarly attention, as has the impact of the so-called 'Black Death' on European and Middle Eastern societies.⁴

³ John Aberth, *Plagues in World History*, (Lanham, MD: Rowman & Littlefield, 2011), 3.

⁴ For debates about the impact of European diseases on indigenous populations, see Alfred W. Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492*, 2nd ed., (Westport, CT: Praeger, 2003); Dean R. Snow and Kim M. Lanphear, "European Contact and Indian Depopulation in the Northeast: The Timing of the First Epidemics," *Ethnohistory* 35, no. 1 (1988): 15-33, <http://www.jstor.org/stable/482431>; and Russell

A wide range of sources and methods exist with which to investigate and analyse historical diseases, and scholars undertaking such work represent disciplinary fields as disparate as archaeology, anthropology, medical history, art history, clinical epidemiology, microbiology, demography, and social history, among others. Regardless of the sources or methods used, or whether one has a humanities or scientific perspective, retrospectively diagnosing diseases of the past poses a number of challenges. Present day concerns influence and bias historical analysis of past disease outbreaks, as do the interpretations and re-interpretations of past studies of those outbreaks.⁵ A perhaps greater challenge is the concern that naming or categorising historical diseases and their causes with the labels of modern laboratory-based medicine hinders our ability to make sense of how they were understood and experienced by those who faced them.⁶ “Historically, names reveal presumed causes, presumed manifestations, presumed discoverers, or presumed patients.”⁷ As disease names and identities change over time to reflect contemporary interactions with, beliefs about, and perceptions of them, there is necessarily a discontinuity between diseases of the past and

Thornton, Tim Miller, and Jonathan Warren, “American Indian Population Recovery Following Smallpox Epidemics,” *American Anthropologist* 93, no. 1 (1991): 28–45, doi: 10.1525/aa.1991.93.1.02a00020. For the impact of the plague, see Daniel Williman, ed., *The Black Death: The Impact of the Fourteenth Century Plague*, (Binghamton, NY: Center for Medieval and Early Renaissance Studies, 1982); Slack, *Impact of Plague*; Samuel K. Cohn Jr., *The Black Death Transformed: Disease and Culture in Early Renaissance Europe*, (London: Arnold, 2002); and Joseph P. Byrne, *Daily Life during the Black Death*, (Westport, CT: Greenwood Press, 2006). For a broader discussion of disease’s impact on human society, see Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*, (New York: W.W. Norton, 1997).

⁵ Jon Arrizabalaga, “Problematizing Retrospective Diagnosis in the History of Disease,” *Asclepio* 54, no. 1 (2002): 51-70, <http://hdl.handle.net/10261/5919>.

⁶ Piers D. Mitchell, “Retrospective Diagnosis and the Use of Historical Texts for Investigating Disease in the Past,” *International Journal of Paleopathology* 1, no. 2 (2011): 82, doi:10.1016/j.ijpp.2011.04.002.

⁷ Jacalyn Duffin, *Livers and Lovers: Disease Concepts in History*, (Toronto: University of Toronto Press, 2002), 11.

those of the present.⁸ Laboratory-based identifications, however, continue to provide an impetus for the retrospective diagnosis of diseases that had previously been identified by their symptoms. The result is that diseases are now typically defined by their microbiological identity in such a way that scholars attempt to “explain what past disease ‘really’ was, how it was ‘really’ transmitted, what the past people ‘really’ saw, and what they ‘missed.’”⁹

Retrospectively diagnosing diseases provides little relevant information about past societies’ perceptions and reactions to them. Whether a particular disease was plague or smallpox or leprosy, as defined and named by today’s criteria, is of little import when assessing if late medieval and early modern people believed it to be contagious and took measures against a perceived threat of infection. Retrospectively diagnosing whether people believed a disease to be contagious – or what that term meant to them – is also fraught with difficulty. As Darrel W. Amundsen states, it “is important to be aware how easily we can read back into medieval and early modern discussions of disease, presuppositions conceptually formulated by current nosologies and interpretations of contagion and infection.”¹⁰ Using laboratory, surgical, and pharmaceutical advances made since the nineteenth century as standards of progress, historians often, even if unwittingly, portray late medieval and early modern medical knowledge as “stupid, irrational, or downright barbaric.”¹¹ Even if not using such patronizing language, they can fall into the trap of

⁸ Jon Arrizabalaga, “Medical Causes of Death in Preindustrial Europe: Some Historiographical Considerations,” *Journal of the History of Medicine* 54 (1999): 249-258, doi: 10.1093/jhmas/54.2.241.

⁹ Andrew Cunningham, “Transforming Plague: The Laboratory and the Identity of Infectious Disease,” in *The Laboratory Revolution in Medicine*, ed. Andrew Cunningham and Perry Williams, (Cambridge: Cambridge University Press, 1992), 210.

¹⁰ Darrel W. Amundsen, *Medicine, Society, and Faith in the Ancient and Medieval Worlds*, (Baltimore: Johns Hopkins University Press, 1996), 365.

¹¹ Monica H. Green, “Integrative Medicine: Incorporating Medicine and Health into the Canon of Medieval European History,” *History Compass* 7, no. 4 (2009): 1220, doi:

assessing the knowledge of historical populations through their texts (either contemporary or later interpretations) without fully considering the fact that words or phrases used to describe diseases or concepts in the past may have had very different meanings than do the same words today. Such differences can colour efforts to determine the basis on which past medical theories or beliefs were developed, decisions made, or actions taken.

The importance of using words carefully and taking into consideration their contemporary meanings cannot be overstated; not being cognizant of the contemporary usage of words greatly hinders one's ability to assess what past societies did or did not understand.¹² This imperative has been recognized through the 'linguistic turn,' a shift in intellectual historical enquiry that began during the late twentieth century. The 'linguistic turn' emphasizes the impact of experiences, and hence contexts, on how meanings were produced, reproduced, and transmitted through words. Not only in history, but across all human or social science disciplines, meanings came to be studied as the outcome of "complex social and psychological operations that occur constantly at various levels in culture and society."¹³ This shift in how ideas and meanings are explored stresses the importance of language and writing to the production and dissemination of meaning, given that language itself is an inherent and integral part of all experiences. In essence, without language, concepts do not exist.

10.1111/j.1478-0542.2009.00618.x.

¹² See for example Hans Kellner, *Language and Historical Representation: Getting the Story Crooked*, (Madison: University of Wisconsin Press, 1989).

¹³ Robert M. Stein, "Literary Criticism and the Evidence for History," in *Writing Medieval History*, ed. Nancy Partner, (London: Hodder Arnold, 2005), 67. See also Gabrielle Spiegel, "History, Historicism and the Social Logic of the Text in the Middle Ages." *Speculum* 65, no. 1 (1990): 59-86, <http://www.jstor.org/stable/2864472>. For a perspective which decries the assimilation of the intellectual history of ideas into the literary history of meaning, see William J. Bouwsma, "From History of Ideas to History of Meaning," *Journal of Interdisciplinary History* 12, no. 2 (1981): 279-291, <http://www.jstor.org/stable/203030>.

The intrinsic link between language and concepts is critical to retrospective studies of historical medical beliefs. Consider, for example, the terms ‘health,’ ‘disease,’ ‘contagion’ and ‘medical,’ which are used throughout this thesis. In 1946, the World Health Organization (WHO) constitution defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”¹⁴ This definition remains unchanged in the current WHO constitution. In the late medieval and early modern English context, the concept of health – traced to the Old English *hǣlþ* and the Middle English *helpe* or *helthe* and incorporated into the *regimen sanitatis* – meant equilibrium not just in one’s physical and mental states, but also in one’s spiritual state. Based on Galen’s tenets, health meant maintaining a balance between the four humours, in line with one’s natural temperament. It meant living moderately by appropriately managing the six non-naturals and avoiding the contra-naturals, those factors harmful to life.¹⁵ In short, “man was in good health if his body, its parts and humors, had the temperament proper to them, and when the structures and functions of the organs were intact” and in tune with his spiritual being.¹⁶ The body’s inherent unity with the universe meant that understanding astrology was crucial to

¹⁴ World Health Organization, *Constitution of the World Health Organization*, www.who.int/governance/eb/who_constitution_en.pdf.

¹⁵ Just as the universe was comprised of four basic elements (fire, water, earth, and air) that worked in harmony, the body’s health depended on the harmony of four humours (yellow bile, mucous, black bile, and blood). Each person’s composition was determined by his or her temperament or complexion (choleric, phlegmatic, melancholic, or sanguine). When the body’s waste disposal was inadequate, the humours became imbalanced and illness followed. The non-naturals were the things deemed necessary for life: air/environment, food/drink, exercise/rest, sleep/wakefulness, evacuation/ repletion (including sex), and emotions. The contra-naturals were pathological conditions that produced ill health. See Carole Rawcliffe, *Medicine and Society in Later Medieval England*, (Stroud: Alan Sutton, 1995), 30-39 and Vivian Nutton, “Humoralism,” in *Companion Encyclopedia of the History of Medicine*, ed. W.F. Bynum and Roy Porter, (London: Routledge, 1993), 1:281-291.

¹⁶ Oswei Temkin, “Health and Disease,” in *The Double Face of Janus and Other Essays in the History of Medicine*, (Baltimore: Johns Hopkins University Press, 1977), 423.

understanding how the body functioned.¹⁷ Treating ill health meant treating the patient as a whole being: phlebotomy, purgatives, and herbal remedies were used to restore internal humoral balance, while prayer and repentance restored spiritual balance.

In addition to referring to a deviation from the normal structure or functioning of body's system, organ, or parts that is evidenced by characteristic symptoms, a modern definition of the word 'disease' must take into consideration a wide range of subtleties.¹⁸

Charles E. Rosenberg sums up the complexity by stating that disease is a

biological event, a generation-specific repertoire of verbal constructs reflecting medicine's intellectual and institutional history, an aspect of and potential legitimation for public policy, a potentially defining element of social role, a sanction for cultural norms, and a structuring element in doctor/patient interactions.¹⁹

Today's concept of disease is not socially neutral, but rather entails judgements. In its simplest late medieval and early modern sense, disease had a different meaning than it does today, and referred more commonly to a person's dis-ease, meaning discomfort.²⁰ In short, where health denoted an accordance with nature, disease was contrary to nature. The modern distinction between a disease and its symptoms was rarely made, and then only

¹⁷ By the twelfth century and continuing into the early modern period, physicians who did not use astrology were regarded by many of their peers as incompetent or negligent. Amundsen, *Medicine, Society, and Faith*, 207; Allan Chapman, "Astrological Medicine," in *Health, Medicine and Mortality in the Sixteenth Century*, ed. Charles Webster, (Cambridge: Cambridge University Press, 1979), 275-300.

¹⁸ Elizabeth A. Martin, ed., *Concise Medical Dictionary*, (Oxford: Oxford University Press, 2010). Mirko D. Grmek points to the fundamental yet subtle differences in English between 'being sick' and 'having a sickness' and in French between 'être malade' and 'être un malade'. There are also differences between the pathological and physiological aspects of a disease, its classification (by aetiology, pathogenesis, or symptoms), and its social or cultural manifestations. "The Concept of Disease," in *Western Medical Thought from Antiquity to the Middle Ages*, ed. Mirko D. Grmek and trans. Antony Shugaar, (Cambridge, MA: Harvard University Press, 1998), 241-242.

¹⁹ Charles E. Rosenberg, "Disease in History: Frames and Framers," *The Milbank Quarterly* 67, Supplement 1 (1989): 1, <http://www.jstor.org/stable/3350182>.

²⁰ University of Michigan, *Middle English Dictionary*, <http://quod.lib.umich.edu/m/med/>.

vaguely. Instead, discussions of what today would be considered diseases were more often lists of the symptoms with which the ailment was associated, such as rashes, fevers, or pain. The names given to a specific disorder often referred to its symptoms or to beliefs about its origins. Both symptoms and ailment were believed to result from humoral imbalance; distinguishing between them made little cognitive sense at the time.²¹

A crucial component in most late medieval and early modern discussions of disease was putrefaction and corruption. This included corruption of the humours, of various parts of the body, of food, and of the environment in which people lived. Disease was envisaged by some as an undefined external entity that was carried in or transmitted through corrupted air and entered the susceptible bodies of people who had unbalanced humours.²² Closely tied to the concept of disease are the words infectious and contagious. Both terms derive from Latin terms – *inficere/infectio* meaning to stain or dye something (and by extension to taint or corrupt it) and *contangere/contāgiōsus* meaning to touch, respectively.²³ The Greek term *μίασμα* is the counterpart to the Latin *inficere*, and from it comes the word miasma. All three terms can imply a pollution of some sort that is transmitted through corrupted air or by direct contact. Thus, “Obtalmia is a sikenez contagious and it passeþ gladly fro one eie to anoþer”²⁴ or “The pestilence, great pockes, and such other contagious infirmities.”²⁵ Although

²¹ Nancy Siraisi, *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice*, (Chicago: University of Chicago Press, 1990), 117; Rawcliffe, *Medicine and Society*, 46. See also Juhani Norri, “Entrances and Exits in English Medical Vocabulary, 1400-1550,” in *Medical and Scientific Writing in Late Medieval English*, ed. Irma Taavitsainen and Päivi Pahta (Cambridge: Cambridge University Press, 2004), 104.

²² Andrew Wear, *Knowledge and Practice in English Medicine, 1550-1680*, (Cambridge: Cambridge University Press, 2000), 106-117.

²³ Oswei Temkin, “An Historical Analysis of the Concept of Infection,” in *Double Face*, 457.

²⁴ Guy de Chauliac, *Grande Chirurgie* (c. 1425 Middle English translation), cited in University of Michigan, *Middle English Dictionary*, <http://quod.lib.umich.edu/m/med/>.

²⁵ *Acts of Parliament*, Act 32 Hen. VIII, c. 42 §3 Concerning Barbers and Chirurgians, cited

historians typically equate ‘contagious’ with transmission by touch or direct human-to-human transmission, in modern medical usage it is more often used to mean a disease transmissible from person to person either directly or indirectly.²⁶ Pinpointing just what the term meant in the late medieval and early modern era is the subject of continued debate. For the purposes of this thesis the concept of contagious is used in its broader late medieval and early modern sense – not as a cause of disease, but rather as the means by which it was transmitted, which is quite different from the post-laboratory concept of a causative microscopic organism.²⁷

Finally, we must consider the term medical. The number of graduating medical students who actively practiced as physicians in England remained relatively small throughout the late medieval and early modern period and few people had regular contact with or could afford university-trained physicians. Instead, the needs of the English population were met by a wide range of practitioners, including surgeons, barbers, apothecaries, midwives, herbalists, wise men and women, charmers and magicians, astrologers, family members, neighbours, priests and ministers, and other local unlicensed

in *Oxford English Dictionary Online*, www.oed.com.

²⁶ The Oxford English Dictionary is not particularly useful here: the first two entries for the word ‘contagious’ emphasise contact: “1. communicating disease or corruption by contact; 2. Communicable or infectious by contact.” In contrast, the word ‘contagion’ is defined as: “The communication of disease from body to body by contact direct or mediate.” *Oxford English Dictionary Online*. R.W. McConchie discusses the inadequacies of the OED in assessing the lexical status of medical words in *Lexicography and Physicke: The Record of Sixteenth Century English Medical Terminology*, (Oxford: Clarendon Press, 1997), 65. For modern medical definitions of contagion/contagious, see *The American Heritage Medical Dictionary*, (Boston: Houghton Mifflin Harcourt, 2007), 181 and Martin, *Concise Medical Dictionary*.

²⁷ In reflecting on historians who deny any pre-modern knowledge of contagion on the basis of a lack of laboratory-based theories, Vivian Nutton notes that they are confusing “an appreciation of contagion *qua* contagiousness with one explanation of its mechanics.” “The Seeds of Disease: An Explanation of Contagion and Infection from the Greeks to the Renaissance,” *Medical History* 27 (1983): 1, PMID: PMC1139262.

and unauthorized practitioners. As such a wide range of practitioners provided care, it is “impossible to arrive at satisfactory criteria for narrowing the definition of medical practice.”²⁸ Rather, the entire cadre of individuals identified and accepted by their communities as healers must be acknowledged as medical practitioners, just as their beliefs and practices must be seen as an integral component of medical knowledge. The role of these practitioners was to take care of health and to cure disease; while in principle the former was considered more important, the increasing influence of university-trained physicians ultimately put greater focus on the curing of illness.²⁹

This comparison demonstrates that considerable differences exist between late medieval and early modern word definitions and those of today. While the retrospective challenges of diagnosing historical diseases and disease concepts stem from the fact that we tend to project our own understandings onto the past, as “we can only think about our experience of disease...in the terms and categories of whichever particular society we are in,”³⁰ they are also tied to the words used and to whom and in what context they were used.

Exploring concepts of contagion: a historical narrative

To add to the complexity of any retrospective historical analysis, one must also consider that the re-interpretation of past interpretations affects current understanding of historical

²⁸ Margaret Pelling and Charles Webster, “Medical Practitioners,” in Webster, *Health, Medicine and Mortality*, 232.

²⁹ Heikki Mikkeli and Ville Martilla, “Change and Continuity in Early Modern Medicine (1500-1700),” in *Early Modern English Medical Texts: Corpus Description and Studies*, ed. Irma Taavitsainen and Päivi Pahta, (Amsterdam: John Benjamins, 2010), 21.

³⁰ Andrew Cunningham, “Identifying Disease in the Past: Cutting the Gordian Knot,” *Asclepio* 54, no. 1 (2002): 14, <http://asclepio.revistas.csic.es/index.php/asclepio/article/viewArticle/133>.

concepts.³¹ Historians generally accept that the phenomenon of contagion – whereby some diseases are transmitted from ill persons to healthy persons, directly or indirectly – was recognized in most late medieval and early modern societies. Whether and how late medieval and early modern peoples understood the mechanism by which contagion occurred is more widely debated.³² The perspectives from which historians judge past concepts of contagion are closely intertwined with the evolution of the history of medicine. Between the seventeenth and mid-twentieth centuries, the history of medicine was written primarily by physicians for medical practitioners and students to trace the evolution of their profession.³³ Bio-bibliographies – which combined an account of a person's life with a discussion of works written by or about that person – highlighted key medical discoveries, celebrated notable ideas and people, emphasised the link between classical and modern medical traditions, reflected contemporary medical concerns, and served as a teaching device.³⁴ The advent of laboratory medicine in the mid-nineteenth century led to a re-conceptualisation of medicine and disease and strengthened the bio-bibliographic approach. Contemporary modern medicine was hailed as the logical end-result of chronological and progressive

³¹ For example, eighteenth- and nineteenth-century studies assigned names to past epidemics which are used by modern historians, even though what those disease names meant in earlier centuries actually bear little resemblance to what they mean today.

Arrizabalaga, "Problematizing Retrospective Diagnosis," 58.

³² Lawrence I. Conrad and Dominik Wujastyk, ed., *Contagion: Perspectives from Pre-Modern Societies*, (Aldershot: Ashgate, 2000), x.

³³ For reviews see Oswei Temkin, "The Meaning of Medicine in Historical Perspective," in *Double Face*, 41-49; Charles Webster, "The Historiography of Medicine," in *Information Sources in the History of Science and Medicine*, ed. Pietro Corsi and Paul Weindling, (London: Butterworth Scientific, 1983), 202-237; and Gert Brieger, "The Historiography of Medicine," in Bynum and Porter, *Companion Encyclopedia*, 24-44.

³⁴ The earliest medical history works include Daniel Le Clerc, *The History of Physick...*, trans. Dr. Drake & Dr. Boden, (London: 1699) and J. Freind, *The History of Physick from the Time of Galen...*, (London: J. Walthoe, 1726).

scientific advances.³⁵ The physician-authors of medical history sought to establish it as a medical speciality while serving the professional purpose of showing medicine as scientific, progressive, authoritative, and an integral part of the advance of Western civilisation.³⁶

Laboratory discoveries led to a proliferation of studies into the nature, causes, prevention, and treatment of infectious diseases. Each emphasized the supremacy of modern science as the key to “the first successful understanding of [disease] ...which replaced the old, unsuccessful and misguided attempts” of late medieval and early modern physicians.³⁷ Girolamo Fracastoro’s 1546 *De contagione et contagiosis morbis et eorum curatione* was credited with being the “first scientific statement of the true nature of contagion, of infection, of disease germs and the modes of transmission of infectious diseases.”³⁸ Fracastoro’s work, historians asserted, had laid the groundwork for the microbiological discoveries which underlay the germ theory of the late nineteenth century.³⁹ While scientific debates continued between those who advocated the germ theory and those who attributed disease to environmental conditions, the eventual broad acceptance of bacteriological theories by the 1930s strengthened medical historians’ beliefs that late medieval and early modern peoples

³⁵ Arrizabalaga, “Problematizing Retrospective Diagnosis,” 51-70.

³⁶ John C. Burnham, *How the Concept of Profession Changed the Writing of Medical History*, (London: Wellcome Institute for the History of Medicine, 1998) and John C. Burnham, “A Brief History of Medical Practitioners and Professional Historians as Writers of Medical History,” *Health and History* 1, no. 4 (1999): 251-258, <http://www.jstor.org/stable/40111358>.

³⁷ Cunningham, “Transforming Plague,” 240.

³⁸ Fielding H. Garrison, “Fracastorius, Athanasius Kircher and the Germ Theory of Disease,” *Science* 31 no. 796 (1910): 500, doi: 10.1126/science.31.796.500-a.

³⁹ Jean Fernel, a sixteenth century Parisian physician, has gained more recent recognition as a pioneer in studies of syphilitic contagion. Jon Arrizabalaga, John Henderson, and Roger French, *The Great Pox: The French Disease in Renaissance Europe*, (New Haven: Yale University Press, 1997), and Linda Deer Richardson, “The Generation of Disease: Occult Causes and Diseases of the Total Substance,” in *The Medical Renaissance of the Sixteenth Century*, ed. A. Wear, R.K. French, and I.M. Lonie, (Cambridge: Cambridge University Press, 1985), 175-194.

had misunderstood disease and its transmission because they had viewed disease through the prisms of humours, miasma, astrology, and sin. As a result, late medieval and early modern people's attempts to prevent and combat disease were also flawed.⁴⁰

Since the mid-twentieth century, the history of medicine has evolved appreciably. Before the mid-century point, physicians concerned with the broader social reform movement and with the unequal distribution of health problems and services had begun to explore the social and economic aspects of medical history, albeit from a largely sociological perspective.⁴¹ Non-physicians from other scientific or humanities fields began to publish articles on medical history-related topics, and a small number of professional historians began to explore the social, intellectual, and cultural aspects of medical history.⁴² Using previously untapped primary sources such as newspapers, popular literature, hospital and public demographic records, diaries, and government documents, and applying new quantitative and qualitative analysis techniques, professional historians began to investigate the historical social and cultural contexts within which medicine had been practiced and diseases

⁴⁰ Charles Joseph Singer, *A Short History of Medicine, Introducing Medical Principles to Students and Non-medical Readers*, (Oxford Clarendon Press, 1928); Fielding H. Garrison, *Introduction to the History of Medicine*, (Philadelphia W.B. Saunders, 1929).

⁴¹ As Henry E Sigerist noted in 1936, the history of medicine encompasses and contributes to “political history, social history, economic history, history of religion, and what not.” “The History of Medicine and the History of Science,” *Bulletin of the History of Medicine*, 4 (1936): 6. His book *Civilization and Disease*, (Chicago: University of Chicago Press, 1943) was one of the first to explore the mutual impacts of civilisation and disease.

⁴² This largely reflects shifts in Anglophone countries. Into the 1980s, French medical history was dominated by physicians and focused on science, partly because members of the *Annales* school were slower to explore medicine's social and cultural issues. Toby Gelfand, “The *Annales* and Medical Historiography: *Bilan et Perspectives*,” in *Problems and Methods in the History of Medicine*, ed. Roy Porter and Andrew Wear, (London: Croom Helm, 1987), 15-39. Pre-modern medical history was also until the 1970s primarily written by physicians, most of whom had little formal historical training. Randolph S. Klein, “The History of Medicine in Tudor Times: An Historiographical Survey,” *The Historian* 33, No. 1 (1970): 365–384, doi: 10.1111/j.1540-6563.1970.tb00387.x.

experienced.⁴³ By the late twentieth century, a further shift in the professional identity of those engaged in medical history was evident: in addition to professional historians, history of medicine scholars included medical sociologists, medical anthropologists, and social scientists whose research focused on the experiences of patients, the contributions of non-professional medical providers, and the role of health, disease, and health care within a broader social and economic context.⁴⁴ John C. Burnham notes that professional historians and other non-physician academics have in particular broadened the study of the history of disease to include its relationship to culture, society, and geography.⁴⁵ The impact of infectious diseases on society, for example, has received significantly more public attention following the popular success of Frederick F. Cartwright's *Disease and History* and William H. McNeill's *Plagues and Peoples*, both of which exemplified the approaches brought to the history of medicine by non-physicians.⁴⁶ The number of scholarly publications about disease and its influence on societal change increased significantly following the publication of these two books. Drawing on a range of primary sources, the focus of many of them moved away from science – the bailiwick of the physician-as-historian – to epidemiology, cultural and social responses to symptoms and diseases, and, especially, to the immediate and long-term consequences of diseases such as the plague, smallpox, tuberculosis, cholera, yellow fever, and HIV/AIDS, among others.

The expansion of the history of medicine discipline to include scholars from other

⁴³ Burnham, *Concept of Profession*, 62. This somewhat simplifies the transition. Interest in social and cultural medical history was detectable by the 1920s, but beginning in the 1940s the number of socio-cultural studies on the history of medicine and disease greatly increased. Arrizabalaga, "Problematizing Retrospective Diagnosis," 52-53.

⁴⁴ Burnham, "Brief History," 260. These shifts began much earlier among pioneers in the field, but the pace of change increased significantly in the 1970s.

⁴⁵ *Ibid.*, 271.

⁴⁶ Frederick F. Cartwright, *Disease and History*, (New York: Dorset Press, 1972); William H. McNeill, *Plagues and Peoples*, (New York: Doubleday, 1976).

disciplinary backgrounds meant not only the introduction of a broader range of sources and modes of analysis, but also shifts in discourse. Beginning in the 1960s and 1970s, the post-modern, anti-establishment writings of philosopher-social theorist Michel Foucault influenced how studies of the medical profession were undertaken, with physicians' misuse of power becoming a common theme.⁴⁷ Some history of medicine scholars also couched their studies around the social construction of disease, which posits that illness is a social phenomenon that exists within a context in which knowledge and power are closely intertwined. Written ideas about disease were deemed to be more reflective of the socio-cultural position and context of the person writing about them than to contemporary medical conceptions of disease.⁴⁸ In this sense, some historians claimed, disease and illness do not exist in and of themselves but are rather culturally constructed. Thus, François Delaporte, in discussing Paris's 1832 cholera outbreak, stated "disease does not exist. It is therefore illusory to think that one can 'develop beliefs' about it to 'respond' to it. What does exist is not disease but practices."⁴⁹ Other scholars, while acknowledging the necessity of placing medical history studies within an appropriate context, reject social constructivism and seek instead to frame their work within a balance of biological, epidemiological, economic, and socio-cultural considerations.⁵⁰

⁴⁷ Burnham, *Concept of Profession*, 115.

⁴⁸ For reviews of the social construction of illness and its various disciplinary manifestations, see Jens Lachmund and Gunnar Stollberg, ed., *The Social Construction of Illness: Illness and Medical Knowledge in Past and Present*, (Stuttgart: Franz Steiner, 1992) and Arrizabalaga, "Problematizing Retrospective Diagnosis," 51-70.

⁴⁹ François Delaporte, *Disease and Civilization: The Cholera in Paris, 1832*, trans. Arthur Goldhammer, (Cambridge MA: MIT Press, 1986), 6.

⁵⁰ For an informative discussion of the argument against the social construction of disease, see Rosenberg, "Disease in History" and Charles Rosenberg and Janet Golden, ed., *Framing Disease: Studies in Cultural History*, (New Brunswick NJ: Rutgers University Press, 1992). See also James T. Patterson, "How Do We Write the History of Disease?" *Health and History* 1, no. 1 (1998): 8, <http://www.jstor.org/stable/40111315>, and Warwick Anderson,

Even with such changes to the ways in which medical history was approached and studied, however, many medical historians' assessments of late medieval and early modern understanding of contagious disease continue to be shaped by the laboratory and by a persistent belief that in the pre-laboratory era, people could not know about microscopic organisms and therefore could not comprehend the process by which infection and contagion actually worked.⁵¹ While acknowledging that a plurality of ideas existed about disease causation, they make a clear conceptual and definitional distinction between miasma and contagion – between the transmission of disease through corrupted air and the transmission of disease by contact – and see the two as mutually exclusive. Contagionist theories, they contend, only gained traction after the mid-sixteenth century.⁵² In academic works that address the plague, the distinction between miasma and contagion is further bolstered by the contention that since contemporary records rarely if ever mention rats or fleas, there was no comprehension of the role that they might play in disease transmission.⁵³ While classical non-medical writers such as Thucydides and Lucretius had noted that during epidemics

“Disease, Culture and History,” *Health and History* 1, no. 1 (1998): 31

<http://www.jstor.org/stable/40111316>. Andrew Wear suggests that social constructivism was less applicable to pre-seventeenth century medical writing, because “much of the medical knowledge of this time was socially constructed only in the weak sense that it was produced by human beings, or at most of being a convenient way for a group of practitioners to claim an expertise and hence monopoly of practice.” *Knowledge and Practice*, 4.

⁵¹ Conrad and Wujastyk, *Contagion*, x.

⁵² Irma Naso, “Les hommes et les épidémies dans l’Italie de la fin du Moyen Age : les réactions et les moyens de défense entre peur et méfiance,” in *Maladies et Société (XIIIe-XVIIIe siècles): Actes du colloque de Bielefeld*, ed. Neithard Bulst et Robert Delort, (Paris: Centre National de la Recherche Scientifique, 1989), 307-326.

⁵³ Several art historians, however, have pointed to the number of plague images that include mice or rats to counter the contention that people made no connection between the disease and the presence of rodents before the late nineteenth century. See in particular Pamela Berger, “Mice, Arrows, and Tumors: Medieval Plague Iconography North of the Alps,” in *Piety and Plague: From Byzantium to the Baroque*, ed. Franco Mormando and Thomas Worcester, (Kirksville, MO: Truman State University Press, 2007), 23-63 and Sheila Barker, “Poussin, Plague, and Early Modern Medicine,” *The Art Bulletin* 86, No. 4 (2004): 659-689, <http://www.jstor.org/stable/4134458>.

disease was spread from the sick to the healthy, the concept of contagion by contact was not explicitly included in the Hippocratic or Galenic corpus upon which much of the late medieval and early modern medical tradition was based.⁵⁴ As a result, the supposition exists that “humoral theory itself may have had a negative impact on contagion theory, since the humoral system, especially with the doctrine of miasma in play, was already sufficient to explain the spread of disease” and thus forestalled further discussion about the concept of contagion.⁵⁵ Vivian Nutton points out, however, that Girolamo Fracastoro’s mid-sixteenth century writings on contagion were not original but rather reformulated Galen’s earlier, lesser known, writings.⁵⁶

Much of the debate about whether late medieval and early modern peoples understood contagion revolves around philological questions, particularly given the fact that although past notions of contagion often incorporated the modern medical meaning, they were seldom limited to this sense and included a number of aspects, such as heredity, which are inconsistent, if not incompatible, with modern usage of the word. Vivian Nutton, for example, contends that even when the Latin word *contagio* can be translated as the English word contagion, “what was meant was not the transmission of disease, but rather an emanation, an effluxion, a breath, a poison, a putrid effusion, an excrement, or a miasma, or in moral terms, a pollutant or contaminant.”⁵⁷ Historians have also pointed to late medieval

⁵⁴ James Longrigg, “Epidemic, Ideas and Classical Athenian Society,” in *Epidemics and Ideas: Essays on the Historical Perception of Pestilence*, ed. Terrence Ranger and Paul Slack, (Cambridge: Cambridge University Press, 1992), 21-44; M. Beretta, “The Revival of Lucretian Atomism and Contagious Diseases during the Renaissance,” *Medicina nei secoli* 15, no. 2 (2003):129-54, PMID: 15309812.

⁵⁵ Conrad and Wujastyk, *Contagion*, xiv.

⁵⁶ Vivian Nutton, “The Reception of Fracastoro’s Theory of Contagion: The Seed That Fell Among Thorns?” *Osiris* 6 (1990): 196-234, <http://www.jstor.org/stable/301787>.

⁵⁷ *Ibid.*, xii. Such contentions may be based, in part, on too literal modern understanding of the original Latin and Greek terminology.

and early modern lists of contagious diseases as evidence that the concept of contagion, in its modern sense, was not understood, because these lists included maladies that today are known to not be transmissible from person to person.⁵⁸

Distinctions between miasma and contagion are downplayed by other scholars. Some historians proclaim that “our ancestors were convinced that certain epidemics (especially the plague) were contagious,” without, unfortunately, explaining what they mean by contagious.⁵⁹ Others suggest that late medieval and early modern peoples “were happy to combine the two theories [since]...both miasma and contagion were thought to arise from ill-defined processes of corruption and putrefaction...and thus had the same root.”⁶⁰ By contrast, Annemarie Kinzelbach’s study on Latin and vernacular writings about epidemic disease in late medieval and early modern Germany demonstrates that a number of different words (infection, poison, contagion) were used interchangeably to imply the notion of contagiousness and that their contextual use, rather than their literal translations, are key to understanding the texts.⁶¹ Kinzelbach’s largely philological study concludes that the inhabitants of late medieval and early modern imperial German towns used both concepts without seeing them as mutually exclusive, but rather as supportive of each other.⁶² In perhaps the most compelling argument against the historiographical separation of miasma

⁵⁸ Making the discussion more confusing, scholars provide different lists of diseases traditionally viewed as contagious. See for example, Temkin, “Concept of Infection,” 460; Mirko Grmek, “Le concept d'infection dans l'Antiquité et au Moyen Age : les anciennes mesures sociales contre les maladies contagieuses et la fondation de la première quarantaine à Dubrovnik,” *RAD Jugoslavenske Akademije Znanosti i Umjetnosti*, no. 384 (1980): 25; and Nutton, “Seeds of Disease,” 15-16.

⁵⁹ Robert Jütte, “The Social Construction of Illness in the Early Modern Period,” in Lachmund and Stolberg, *Social Construction of Illness*, 31.

⁶⁰ Slack, *Impact of Plague*, 28.

⁶¹ Annemarie Kinzelbach, “Infection, Contagion, and Public Health in Late Medieval and Early Modern German Imperial Towns,” *Journal of the History of Medicine and Allied Sciences* 61, no. 3 (2006): 369-389, doi:10.1093/jhmas/jrj046.

⁶² *Ibid.*, 377-78.

and contagion, Jon Arrizabalaga contends that theories which suggested transmission of disease by air or by contagion were not contrary, but were rather successive stages of a disease's dissemination along a broad spectrum of possibilities.⁶³ In his analysis of medical treatises written by university-trained physicians in the western Mediterranean region during the 'Black Death', Arrizabalaga found that most of the authors distinguished between major and minor levels of disease transmission. The former entailed transmission of the disease from place to place, while the latter represented human-to-human transmission, which itself could occur by three different modes: breath, skin perspiration, or gaze. Their suggested preventive measures were, as a result, not simply based on a recommendation to flee – as is commonly assumed – but were rather quite complex and aimed at identifying places which were or could be protected from infected air, correcting or purifying the infected air, keeping the body resistant to infection, and avoiding contact with infected people.⁶⁴

A further point of historiographical contention has been an implied differentiation between late medieval and early modern medical and lay beliefs.⁶⁵ A number of medical historians suggest that even if late medieval and early modern medical theory could not

⁶³ Jon Arrizabalaga, "Facing the Black Death: Perceptions and Reactions of University Medical Practitioners," in *Practical Medicine from Salerno to the Black Death*, ed. Luis García-Ballester et al, (Cambridge: Cambridge University Press, 1994), 259-260.

⁶⁴ *Ibid.*, 262-287. A similar debate exists within the study of Muslim concepts of contagion. In a recently published book, Justin K. Stearns contests the historiographical tradition of using Andalusī medical treatises as examples of 'heretical' exceptions to the wider Muslim scholarship which denies contagion. Rather, he suggests that Ibn al-Khatīb's claim that those Muslim prophetic traditions which denied contagion should be ignored or re-interpreted in the face of empirical evidence actually demonstrates that there was a "debate on the issue of contagion, rather than...a confrontation between conservative scripturalism and rational empiricism." *Infectious Ideas: Contagion in Premodern Islamic and Christian Thought in the Western Mediterranean*, (Baltimore: Johns Hopkins University Press, 2011), 69.

⁶⁵ Rather than meaning 'non-clerical,' in this context the word 'lay' refers to "non-professional, not expert, especially with reference to law and medicine." *Oxford English Dictionary Online*. The word 'lai' in Middle English was used in the sense of 'unlearned, uneducated.'" *Middle English Dictionary*.

account for contagion, the lay population certainly understood it – in essence suggesting that there was a battle between “common sense and evidence over theory and stupidity.”⁶⁶ According to these historians, rather than reflecting contemporary medical theory, health measures implemented by urban health boards across late medieval and early modern Europe in the wake of recurrent outbreaks of epidemic disease were based on empirical experience, even if in the end they were ineffectual. This approach thereby makes a distinction between supposedly erroneous professional medical miasmatic theories and correct lay administrative beliefs in contagion.⁶⁷ Ann G. Carmichael, for example, concludes that “How a physician could believe that the disease of an individual patient was contagious depended upon acceptance of a very different view of plague experience from that guiding [public] health officers.”⁶⁸ These different viewpoints, she contends, caused those in decision-making positions to vacillate between the very different plague management recommendations made by physicians (who focused almost exclusively on classical diagnostic and therapeutic issues) and the public health authorities (who were more interested in stopping the transmission of the disease from one person to another). Non-medical accounts have also been used by medical historians to explore late medieval and early modern understanding of contagious disease, often contrasting lay perceptions of disease causation and transmission

⁶⁶ Cunningham, “Transforming Plague,” 240.

⁶⁷ Carlo M. Cipolla, *Public Health and the Medical Profession in the Renaissance*, (Cambridge: Cambridge University Press, 1977); Carlo M. Cipolla, *Cristofano and the Plague: A Study in the History of Public Health in the Age of Galileo*, (London: Collins, 1973); Ann G. Carmichael, “Epidemics and State Medicine in Fifteenth-Century Milan,” in *Medicine from the Black Death to the French Disease*, ed. Roger French, et al., (Aldershot: Ashgate, 1998), 221-247.

⁶⁸ Ann G. Carmichael, “Contagion Theory and Contagion Practice in Fifteenth-Century Milan,” *Renaissance Quarterly* 44, no. 2 (1991): 215. Carmichael distinguishes between those physicians who were under the control of the College of Physicians and the ducal physicians, who, presumably because they were exposed to more enlightened lay viewpoints, demonstrated a much earlier commitment to a contagion principle.

with contemporary medical theories. In his analysis of the history of human understanding of epidemic disease, for example, Charles De Paolo draws on a single text – Boccaccio’s *Decameron* – to explore how the plague was understood in the mid-fourteenth century:

The plague experience of 1348 demanded an accurate record, and Boccaccio assumed the dual role of witness and of historian. His account of the public reaction to the plague’s relentless devastation resonates throughout the *Introduction*. Initial counter-measures, though rigorous, are misdirected, all wisdom and ingenuity failing to halt its spread...Generally, public services...based on arcane theories has little effect.⁶⁹

De Paolo begins his discussion of Boccaccio’s observations with a brief description of the “interesting variations on the idea of contagion” that were contained in medical treatises – thereby basing his positive assessment of Boccaccio’s lay knowledge against the morass of contemporary medical knowledge. Such views continue to present Fracastoro’s work as a pivotal watershed between late medieval and early modern misconceptions and modern understanding of contagion, thereby suggesting that even though lay administrators might have believed in contagion, they still could not have understood it before the mid-sixteenth century.⁷⁰ Other scholars, by contrast, argue that university medical learning was authoritative, accepted within the broader lay community, and contributed to the development of administrative measures designed to address the threat of plague. In other words, miasmatic and contagionist beliefs co-existed within medical and lay populations.⁷¹

Outside of what is largely specialist medical history literature, there continues to be a general lack of attention paid to experiences with, and more particularly the understanding

⁶⁹ Charles De Paolo, *Epidemic Disease and Human Understanding: An Historical Analysis of Scientific and Other Writings*, (Jefferson, NC: McFarland, 2006), 68.

⁷⁰ There is little agreement, however, on either the actual influence of Fracastoro’s works on contemporary theories and practical actions or on their originality. See Nutton, “Fracastoro’s Theory,” 196-234; Nutton, “Seeds of Disease,” 1-34; and Norman Howard-Jones, “Fracastoro and Henle: A Re-Appraisal of Their Contribution to the Concept of Communicable Diseases,” *Medical History* 21, no. 1 (1977): 61-68, PMID: PMC1081895.

⁷¹ Arrizabalaga, “Perceptions and Reactions;” Kinzelbach, “German Imperial Towns.”

of, contagious disease within the broader historiography of Western Europe. This reflects the continued sidelining of medical history – or health history – as a specialty topic that is often given short shrift in general studies of late medieval and early modern Europe.⁷² Instead, although late medieval and early modern medical history has become an impressive specialist sub-discipline which has drawn attention to the “landscape of health, disease, and the intellectual and social infrastructures attending them,”⁷³ discussions of health or medicine by non-specialists remain either largely cursory or broadly generic. John H. Arnold’s 2008 book *What is Medieval History?* for example, which is touted as “an account of what writing on medieval history is like today,”⁷⁴ touches on a wide range of themes such as trade, commerce, labour, literacy, social status and social structures, gender, religion, power, politics and rebellion, law and order, culture, and images, but does not address health, medicine, or disease, or even death and dying. He makes reference to the ‘Black Death’, but related to its demographic and economic impacts. Likewise, P.J.P. Goldberg’s social history of medieval England includes a chapter about the impacts of the ‘Black Death’, but only cursory mention of two other diseases over the 300 year span covered by the book, and none at all of medicine, medical practitioners, or knowledge of and reactions to health threats.⁷⁵

⁷² A notable exception is Andrew Cunningham and Ole Peter Grell, *The Four Horsemen of the Apocalypse: Religion, War, Famine, and Death in Reformation Europe*, (Cambridge: Cambridge University Press, 2000).

⁷³ Green, “Integrative Medicine,” 1219. Medieval medical history developed as a distinct sub-specialty in the mid-nineteenth century, but is largely ignored by the broader medical historiography. Although it continues to focus on philological studies of texts, Monica H. Green contends it is about more than the bio-bibliographical highlighting of key canons, developments, and personalities which have contributed to modern medical progress. Rather, like the current work being done by other professional historians, linguists, sociologists, and anthropologists, it is producing significant contributions to the social and cultural histories of medicine in the late medieval and early modern eras. “Integrative Medicine,” 1225-1226.

⁷⁴ John H. Arnold, *What is Medieval History?* (Cambridge: Polity Press, 2008). The quote is taken from the book’s back cover.

⁷⁵ P.J.P Goldberg, *Medieval England: A Social History 1250-1550*, (London: Hodder Arnold,

The *Internet Medieval Sourcebook*, which contains hundreds of primary sources about medieval life, includes only five texts related to health, disease, or medicine.⁷⁶

One result of the sidelining of health and medicine is that medical coverage in the general historiography is largely superficial or fallacious. Typical commentary in the generalist literature repeats the most outrageous beliefs purportedly held by late medieval and early modern peoples, taken out of context but presented as universal fact, and in doing so disregards any understanding of contagion: “Its [plague’s] causes – a great rain of worms and serpents in China? A foul miasma spread through the air? God’s vengeance? – were as poorly understood as the precautions that might be taken against it.”⁷⁷ While such rhetoric does not influence the specialist literature, it does promulgate among general historians the assumption that pre-modern societies had no understanding of contagion and implemented nonsensical prophylactic measures. While this thesis will not resolve the debate about late medieval and early modern understanding of contagion, it is clear that there is room to re-examine the evidence to determine if the debate itself has been limited.

Conclusion

Both within and outside the medical specialist literature, historians have tended to draw their conclusions about whether and how late medieval and early modern peoples understood the concept of contagion largely from medical texts. Examples of this approach include a

2004). The book contains a few references to hospitals but does not tie them to health, disease, or medicine.

⁷⁶ Fordham University, *Internet Medieval Sourcebook*, <http://www.fordham.edu/Halsall/>.

Last modified 4 November 2011, the IMS contains the following texts: (i) Procopius’s account of the Plague of 542; (ii) an excerpt from Ibn Sina’s (Avicenna) 11th century medical treatise; (iii) a late 13th century University of Paris course in medicine; (iv) Salerno’s nutrition treatise; and (v) Margery Kempe’s description of childbirth.

⁷⁷ Nicholas Vincent, *A Brief History of Britain: 1066-1485, The Birth of a Nation*, (London: Constable and Robinson, 2011), 335.

number of studies on Fractastoro's writings and on specialised medical treatises such as plague tractates. When they compare the contents of medical texts to administrative ordinances and other records designed to address disease threats, historians generally present the medical texts as authoritative sources of knowledge. However, relying on medical texts to tell us of how people understood and reacted to contagious disease is problematic on several levels. It assumes that medical texts had widespread influence and contributes little to discussions about whether or how the concepts of disease aetiology articulated in them were incorporated into practitioners' methods of treatment or into the public's actual responses to disease. Comparisons between medical texts and administrative documents, usually put emphasis on their differences or similarities, rather than on the interplay between them. Relying on medical texts also fails to give sufficient acknowledgement to the extent to which the texts themselves may be translations or adaptations of still older documents and/or written by authors who had no direct experience with the diseases that they described. While there is a growing corpus of literature on pre-modern concepts of contagion, the historiography, by focusing on medical texts – which themselves often focus on the plague to the exclusion of other diseases – has placed undue emphasis on the theoretical content of those texts without giving sufficient weight to the diseases they address, the historical context in which they were written, their underlying non-medical content, or their relationship to non-medical sources. Overlooking these issues has restricted the debate.

Using a selection of English-language contagious disease tractates, the chapters that follow explore these issues to determine if historians' focus on medical treatises has limited their assessments of late medieval and early modern understanding of contagious diseases.

CHAPTER 2

CONTAGION, CONTAGIOUS DISEASE TRACTS, AND THE *PESTE'S* SHADOW

Introduction

“And...the other souerayne remedy preseruatyue is to flye the corrupte ayre, accordyng to the prouerbe, Longe, cito tarde. Flye be tymes, flye farre, and come slowelye agayne.”¹ In his medical treatise of 1544, Thomas Phayer offers this advice to readers seeking to escape the contagion of plague. Such advice, based upon an accepted association between corrupt air and disease, was an integral part of late medieval and early modern textual medical advice. Modern assumptions about pre-seventeenth century concepts of contagion are based, for the most part, on written historical texts, including religious doctrine and scholarship, administrative records, and medical treatises. Of the latter texts, plague tractates – specialised and formulaic medical treatises that were stimulated by the ‘Black Death’ of 1347-52 – have been particularly useful for exploring contemporary medical practitioners’ ideas about the causes of plague, prophylactic precautions, and treatment advice. Recurrent outbreaks of disease encouraged the continued widespread dissemination, translation, and adaptation of the tractates through to the seventeenth century. Hundreds, if not thousands, of tractates were written in both Latin and vernacular languages, each containing advice about how to treat or avoid epidemic disease. Since the early twentieth century, a large number of these tractates have been examined. Using content analysis in particular, historians have extracted invaluable information about the evolution of intellectual medical theory, especially related to the aetiology, prevention, and treatment of epidemic disease.

¹ Thomas Phayer, *The Kegiment of Life (sic)*...,(London: Edward Whitchurche, 1546), STC 2nd ed. 11969, fols.11r-11v.

Implicit in such analysis, based largely on the plague's predominance in late medieval and early modern experiences with and discourses on disease, is the supposition that "[faced] with such a bewildering array of epidemic diseases, contemporaries naturally had some difficulty distinguishing between them."² Historians have likewise equated many late medieval and early modern references to epidemics or pestilence to the plague. As a result, although plague tractates were adapted over time by both medical and non-medical writers to address other epidemic diseases, and in spite of the increasing body of academic literature that discusses them, no systematic study has yet compared the plague-specific and non-plague tractates.³ As a result, historians have made assumptions about late medieval and early modern concepts of disease and contagion that may not be supported by a cross-disease analysis. In examining how contagion was discussed in English-language tractates, I explore whether tractate authors made distinctions in their discussions of two diseases, the plague and the sweating sickness.⁴ I also question historians' reliance on 'plague tractates' as discourses about non-plague diseases.

Discerning diseases: the historiographical debates

The words 'pestilence,' 'plague,' and 'epidemic' (*pestilentia*, *peste*, and *epidemia*) were, scholars often claim, used by late medieval and early modern people to designate any

² Paul Slack, *The Impact of Plague in Tudor and Stuart England*, (London: Routledge and Kegan Paul, 1985), 25.

³ I call this genre 'contagious disease tractates' to recognise their use for various diseases.

⁴ A significant corpus of studies also exists on syphilis, including discussion of contemporary views on its contagious nature. "It was plain enough to such people [those who were involved in treatment or prophylaxis], whatever the origins of the disease, that it was passed from person to person. It was, in short, infectious or contagious." Jon Arrizabalaga, John Henderson, and Roger French, *The Great Pox: The French Disease in Renaissance Europe*, (New Haven: Yale University Press, 1997), 234. However, as the venereal nature of syphilitic transmission was recognized fairly early on, it is not addressed in this thesis.

severe epidemic that affected man or beast.⁵ A closer look at some English sources suggests that this was not necessarily the case. Contemporary chroniclers referred to the ‘Black Death’ and recurring plague epidemics as ‘great mortality,’ ‘pestilence,’ or ‘plage.’ These terms were not used to describe other diseases. Henry Knighton, for example, writing in the late fourteenth century, referred to the ‘*generalis mortalitas hominum*’ for the initial plague epidemic; for the second pandemic of 1361, he used the terms ‘*secunda mortalitas*’ and noted “*que dicebatur Pestis Secunda.*” Both phrases distinguished the disease from other diseases while also linking the second epidemic to the first one.⁶ Thomas Walsingham called the recurrent plague epidemics ‘*magna pestis*,’ ‘*pestilencia*,’ or ‘*mortalitas*’ in the early fifteenth century.⁷ Both chroniclers either used different words such as *epidemia* to discuss outbreaks of other diseases or qualified their use of the word *peste* with identifiers such as dysentery (*dissenteria*) when discussing non-plague diseases.⁸ For the year 1413, Walsingham notes “*Hoc anno plures peste percussi uel epidemia uiuere desierunt,*” suggesting he was uncertain that the disease from which many died had been plague. Unfortunately, English-language translations of the Latin chronicles oftentimes simply use the term ‘plague’ or ‘a plague’ for any reference made to epidemic disease in the chronicles,

⁵ Oswei Temkin, “Health and Disease,” in *The Double Face of Janus and Other Essays in the History of Medicine*, (Baltimore: Johns Hopkins University Press, 1977), 426; Christiane Nockels Fabbri, “Continuity and Change in Late Medieval Plague Medicine: A Survey of 152 Plague Tracts from 1348 to 1599,” (PhD diss., Yale University, 2006), 6, ProQuest (3214261); Ann G. Carmichael, “Universal and Particular: The Language of Plague, 1348-1500,” in *Pestilential Complexities: Understanding Medieval Plague*, ed. Vivian Nutton, (London: The Wellcome Trust Centre for the History of Medicine, 2008), 19.

⁶ G.H. Martin, ed. and trans., *Knighton's Chronicle*, (Oxford: Clarendon Press, 1995).

⁷ John Taylor, Wendy R. Childs and Leslie Watkiss, ed. and trans., *The St Albans Chronicle: The Chronica Maiora of Thomas Walsingham*, Vol. I (1376-1394) and II (1394-1422), (Oxford: Clarendon Press, 2003).

⁸ The online *Middle English Dictionary* provides several quotations containing the term ‘plague of pestilence,’ which implies that this disease was singled out as different from others.

thereby adding to the confusion about late medieval and early modern understanding of epidemic disease.⁹ English-language chronicles of the fifteenth and sixteenth centuries distinguished the plague from other disease outbreaks through the use of terms like ‘the grete pestelens,’ ‘another great pestelens’ or ‘the thyerde pestylaunce’ for plague and phrases such as ‘Al so the same yere men and bestys were grettely infectyd with pockys’ for non-plague diseases.¹⁰ The sweating sickness, on the other hand, was known and written about contemporaneously as ‘the swette’, ‘hote ylles’, the ‘hote sicknes’, ‘stopgallant’, and ‘the posting sweat,’ suggesting that people could and did differentiate between plague and at least some other epidemic diseases.¹¹

The assumption that late medieval and early modern peoples could not distinguish between the many epidemic diseases that they faced may stem, in part, from modern historians’ inability to definitively diagnose those diseases by today’s standards. Using a wide range of sources, including archaeology, texts, and art, modern diagnosticians and historians have long debated the classification of late medieval and early modern epidemics, particularly the plague. When the disease information contained in past records do not correspond with what is known about modern diseases, attempts to interpret that information and apply labels to the diseases that affected past populations becomes difficult and

⁹ For example, Taylor, Childs, and Watkiss translate Walsingham’s ‘*Eodem anno fuit epidemia tempore estiuali que multos hac luce priuauit*’ as ‘This same year plague struck during the summer, robbing many of their lives’ even though Walsingham clearly uses the words *pestilencia* or *pestis* elsewhere in the chronicle when referring specifically to plague. *St Albans Chronicle*, Vol. II. A close comparison of the original Latin with the translations is therefore crucial for identifying the distinctions made by the chroniclers.

¹⁰ See for example James Gairdner, ed., *The Historical Collections of a Citizen of London in the Fifteenth Century*, (London: Royal Historical Society, 1876; repr., New York: Johnson Reprint, 1965) and John Gough Nichols, ed., *Chronicle of the Grey Friars of London*, (London: Royal Historical Society, 1852; repr. New York: Johnson Reprint, 1968).

¹¹ See the two chronicles noted above, among others.

controversial.¹² Although this thesis makes no attempt at retrospective diagnosis, and uses the disease terms ‘plague’ and ‘sweating sickness’ for simplicity, the historiographical debates that exist around both diseases clearly demonstrate the caution that must be taken in interpreting historical texts from the point of view of modernity to understand past disease.¹³

It is unlikely that any other disease in the history of mankind has received as much attention from as many disciplines and using as many different methodologies as has the plague. Few aspects of the historiography of the plague remain undisputed. Particularly contentious has been the question whether the historical plague, which caused the death of upwards of 40% of the European and Middle Eastern populations between 1347 and 1352 before reappearing regularly over the four centuries that followed, was in fact the disease that we now know as plague. While most scholars addressing the ‘Black Death’ specifically or disease in the late medieval and early modern period generally subscribe to the view that recurrent late medieval and early modern plague epidemics were caused by the same bacillus as the modern plague – particularly in light of the similarity of the most telling symptom, the bubo – some scholars concerned with retrospective diagnosis and with anomalies between late medieval and early modern and more recent plagues dispute this conclusion.¹⁴ Much of

¹² For an excellent overview of the use of written records to study diseases of the past, see Piers D. Mitchell, “Retrospective Diagnosis and the Use of Historical Texts for Investigating Disease in the Past,” *International Journal of Paleopathology* 1, no. 2 (2011): 81-88, doi:10.1016/j.ijpp.2011.04.002. Of course, when we cannot apply our own biases to past diseases, we are offered an opportunity to create different approaches and to see new things – a methodological advantage that has rarely been taken up in the historiography.

¹³ Debates about leprosy provide a similar example for the medieval period.

¹⁴ For works that support the plague’s identity, see Slack, *Impact of Plague*; Rosemary Horrox, ed. and trans., *The Black Death*, (Manchester: Manchester University Press, 1994); Jacqueline Brossollet et Henri Mollaret, *Pourquoi la peste? Le rat, la puce et le bubon*, (Paris: Découvertes Gallimard, 1994); J. Ruffié et J.-C. Sournia, *Les épidémies dans l’histoire de l’homme : essai d’anthropologie médicale*, (Paris: Flammarion, 1995); and Frédérique Audouin-Rouzeau, *Les chemins de la peste : le rat, la puce, et l’homme*, (Rennes: Presses Universitaires de Rennes, 2003). For contrary views, see Graham Twigg, *The Black*

the recent work to identify the late medieval and early modern plague has taken place in the fields of microbiology and medical archaeology, using molecular techniques such as DNA sequencing.¹⁵ Lester Little recently summarised the past century's debates about the plague and makes the case that microbiological work has definitively concluded that pre-modern plague was caused by *Yersinia pestis*, the bacillus that is responsible for modern plague.¹⁶

Similar to studies of the plague, albeit to a lesser degree, the historiography of the sweating sickness is fraught with debate, particularly related to its aetiology, its source, how it spread through England, and its impact on English society. The disease was characterised by the sudden onset of fever, headache, bodily pain, excessive heart rate, and profuse perspiration. The disease was remarkable not for its total mortality, which was relatively low, but for the suddenness and concentration of deaths typically over a one week period. An initial 1485 outbreak was followed by outbreaks in 1507/8, 1511, 1517, 1528/9, and 1551, each lasting six to eight weeks. Although contemporary records demonstrate that the disease

Death: A Biological Reappraisal, (London: Batsford, 1984); Samuel K. Cohn Jr., "Epidemiology of the Black Death and Successive Waves of Plague," in Nutton, *Pestilential Complexities*, 74-100; and Susan Scott and Christopher J. Duncan, *Biology of Plagues: Evidence from Historical Populations*, (Cambridge: Cambridge University Press, 2001).

¹⁵ Florent Sebbane, et al., "Adaptive Response of *Yersinia Pestis* to Extracellular Effectors of Innate Immunity during Bubonic Plague," *Proceedings of the National Academy of Sciences of the United States of America* 103, no. 31 (2006): 11766-11771, <http://www.jstor.org/stable/30051606>; Michel Drancourt et al., "Detection of 400-Year-Old *Yersinia Pestis* DNA in Human Dental Pulp: An Approach to the Diagnosis of Ancient Septicemia," *Proceedings of the National Academy of Sciences of the United States of America* 95, no. 21 (1998): 12637-12640, <http://www.jstor.org/stable/46111>; Didier Raoult et al., "Molecular Identification by 'Suicide PCR' of *Yersinia Pestis* as the Agent of Medieval Black Death," *Proceedings of the National Academy of Sciences of the United States of America* 97, no. 23 (2000): 12800-12803, doi: 10.1073/pnas.220225197. For criticisms, see M. Thomas P Gilbert, et al. "Absence of *Yersinia Pestis*-Specific DNA in Human Teeth from Five European Excavations of Putative Plague Victims," *Microbiology* 150 (2004): 341-354, doi: 10.1099/mic.0.26594-0.

¹⁶ Lester Little, "Plague Historians in Lab Coats," *Past and Present* 213, no. 1 (2011): 267-90, doi:10.1093/pastj/gtr014.

occurred across northern Europe in 1528, it was largely confined to England.¹⁷

While the number of scholarly articles published about the disease is relatively small when compared to those written about the plague, the sweating sickness has garnered more attention than most other diseases of the period, in large part because of its continued mysteriousness. The majority of these articles were published either in the nineteenth century or after 1990; virtually all focus on the disease's symptoms and attempt – thus far unsuccessfully – to make a definitive modern identification.¹⁸

Both the plague and the sweating sickness were discussed by contemporary medical and non-medical writers who, in distinguishing the two diseases from the myriad other diseases that regularly affected late medieval and early modern populations, continuously sought to explain their causes and suggest how they might be treated. The sweating sickness's apparent predilection for rich adult young men (hence the name 'stop gallant,' among others) and the institutionalised male clergy, at least in the initial outbreaks, clearly marked it among contemporary writers as a disease worthy of note. Although predominantly rural, each

¹⁷John A. H. Wylie and Leslie H. Collier, "The English Sweating Sickness (*Sudor Anglicus*): A Reappraisal," *Journal of the History of Medicine and Allied Sciences* 36, no. 4 (1981): 426, doi: 10.1093/jhmas/XXXVI.4.425.

¹⁸In addition to Wylie and Collier, see J.F.C. Hecker, *Epidemics of the Middle Ages*, trans. B.G. Babington, (London: George Woodfall and Son, 1844); Charles Creighton, *A History of Epidemics in Britain*, vol. 1, *From A.D. 664 to the Extinction of Plague*, (Cambridge: Cambridge University Press, 1891); R.S. Gottfried, *Epidemic Disease in Fifteenth Century England: The Medical Response and the Demographic Consequences*, (New Brunswick, NJ: Rutgers University Press, 1978); Alan Dyer, "The English Sweating Sickness of 1551: An Epidemic Anatomized," *Medical History* 41, no. 3 (1997): 362–384, PMID: PMC1044802; J.R. Carlson and P.W. Hammond, "The English Sweating Sickness (1485-c.1551): A New Perspective on Disease Etiology," *Journal of the History of Medicine and Allied Sciences* 54 (1999): 35-51; Mark Taviner, Guy Thwaites, and Vanya Gant, "The English Sweating Sickness, 1485-1551: A Viral Pulmonary Disease?" *Medical History* 42 (1998): 96-98, PMID: PMC1043971; Eric Bridson, "The English 'Sweate' (*Sudor Anglicus*) and Hantavirus Pulmonary Syndrome," *British Journal of Biomedical Science* 58, no. 1 (2001): 1-6; Edward McSweegan, "Anthrax and the Etiology of the English Sweating Sickness," *Medical Hypotheses* 62, no. 1 (2004): 155–157, doi:10.1016/S0306-9877(03)00303-7.

outbreak gained notoriety as it spread into the royal court, religious houses, and cities.¹⁹

The ultimate identity of either disease, of course, has little impact on other considerations, such as how late medieval and early modern people understood or responded to them. To better understand how these diseases were discussed in contemporary medical literature, scholars have relied, to a large extent, on contagious disease tractates.

Historiography of contagious disease tractates

Bibliographic studies by Karl Südhoff, Arnold Klebs, Dorothea Waley Singer, and Anna Montgomery Campbell have produced catalogues, transcriptions, and edited versions of plague tractates from modern-day Germany, Italy, France, Spain, and the British Isles.²⁰ Dominick Palazzotto's study of twenty-four of the earliest plague tractates concludes that

¹⁹ "It is to be noted, that this mortalitie fell chieflie or rather upon men, and those of the best age as between thirtie and fortie years." Raphael Holinshed, *Chronicle of England, Scotland and Ireland*, vol. 3, ed. John Hooker, (London, 1586; repr. New York: AMS Press, 1965), 482. Thomas le Forestier's 1485 treatise on the disease does not support the age observation, as he refers to victims as "young and old and of all manner of ages." Thomas Le Forestier, "Treatise on the "Venymys Feuer of Pestilens," *Additional MS 27582, British Library* fol. 70v. The initial outbreak in 1485 killed two London Lord Mayors and four aldermen in one week. Dyer states "any disease which was spread approximately uniformly amongst all social groups and ages would appear to contemporary observers as unusually hard on just those groups which sweat was said to target." "Epidemic Anatomized," 375.

²⁰ Karl Südhoff, "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348," *Archiv für Geschichte der Medizin* 2-19, (1907-1927); Arnold C Klebs and E. Droz, *Remedies against the Plague: The Earliest French Tracts Printed in the Fifteenth Century: Facsimiles, Notes, and List of All the Incunabula on Plague*, (Paris: E. Droz, E. Nourry, 1925); Arnold C. Klebs and Karl Südhoff, *Die Ersten Gedruckten Pestschriften*, (Munich: Verlag der Munchener Druck, 1926); Dorothea Waley Singer, "Some Plague Tractates (Fourteenth and Fifteenth Centuries)," *Proceedings of the Royal Society of Medicine* 9 (1916): 159–212; Dorothea Waley Singer, "Survey of Medical Manuscripts in the British Isles Dating from Before the Sixteenth Century," *Proceedings of the Royal Society of Medicine* 12 (1919): 96-107; Dorothea Waley Singer and Annie Anderson, *Catalogue of Latin and Vernacular Plague Texts in Great Britain and Eire in Manuscripts Written before the Sixteenth Century*, (London: William Heineman Medical Books, 1950); Anna Montgomery Campbell, *The Black Death and Men of Learning*, (New York: Columbia University Press, 1931; New York: AMS Press, 1966). Citations refer to AMS Press edition.

regardless of the authors' actual experience with the plague, each tractate contained a "perplexing confusion" of traditional theory, observation, and experience-based therapeutic practices. This ambiguity was, according to Palazzotto, "a product of the traditional medieval separation of theory from practice and the lack of a quantitative, measurable experimental method to test theory."²¹ More recently, Christiana Nockels Fabbri's detailed analysis of 152 representative plague tractates reveals that the medical discourse of the tractates combined scholastic humoralism with practical experience and shaped contemporary preventive public health strategies.²² Ann G. Carmichael's examination of Latin tractates written before 1500 concludes that even though treatises written after 1400 no longer made direct reference to the 'Black Death', later epidemics were associated with it by the consistent mention of buboes.²³ Other studies have examined the contents and dissemination of individual or subsets of tractates, most often by era, location, or religion.²⁴ Taken together, such studies reveal

²¹ Dominick Palazzotto, "The Black Death and Medicine: A Report and Analysis of the Tractates Written between 1348 and 1350," (PhD diss., University of Kansas, 1973), 234, ProQuest (7412609).

²² Fabbri, "Continuity and Change," 16.

²³ Carmichael, "Universal and Particular," 37.

²⁴ Michael Dols, "Al-Manbijī's 'Report of the Plague': A Treatise on the Plague of 764-65/1363-64 in the Middle East," in *The Black Death: The Impact of the Fourteenth Century Plague*, ed. Daniel Williman, (Binghamton, NY: Center for Medieval and Early Renaissance Studies, 1982), 65-76; Lister M. Matheson, "Médecin sans Frontières? The European Dissemination of John of Burgundy's Plague Treatise," *ANQ: A Quarterly Journal of Short Articles, Notes and Reviews* 18, no. 3 (2005): 19-31, doi: 10.3200/ANQQ.18.3.19-30; Lister M. Matheson, "John of Burgundy: Treatises on Plague," in *Sex, Aging, and Death in a Medieval Medical Compendium. Trinity College Cambridge MS R.14.52, Its Texts, Language, and Scribe*, ed. M. Teresa Tavormina, (Tempe: Arizona Center for Medieval and Renaissance Studies, 2006), 2:569-606; Jon Arrizabalaga, "Facing the Black Death: Perceptions and Reactions of University Medical Practitioners," in *Practical Medicine from Salerno to the Black Death*, ed. Luis García-Ballester et al., (Cambridge: Cambridge University Press, 1994), 237-288; Melissa P. Chase, "Fevers, Poisons, and Apostemes: Authority and Experience in Montpellier Plague Treatises," *Annals of the New York Academy of Sciences* 441, no. 1 (1985): 153-170, doi: 10.1111/j.1749-6632.1985.tb14580.x; Ron Barkai, "Jewish Treatises on the Black Death (1348-1500): A Preliminary Study," in *Medicine from the Black Death to the French Disease*, ed. Roger French et al., (Aldershot:

features of the tractate genre which distinguish it from other contemporary medical texts.

Unlike the case-based medical *consilia* written by and for physicians before 1348, physicians and medical writers typically wrote their tractates based on first-hand experience or second-hand knowledge about the plague for (they claimed) the benefit of the general public.²⁵ Gentile da Foligno, a physician and writer working in Perugia and Padua in 1348, wrote several *consilia* for different audiences that reflected his experiences with the practical problems of combating the plague.²⁶ Jacme d'Agramont, a Catalonian physician, wrote his 1348 treatise for the people of Lérida based on reports about the plague.²⁷ Ibn Khātimah, a Muslim author from Almería (Andalusia), wrote his 1349 treatise for a friend.²⁸ Some tractates were written in Latin, while others were written in vernacular languages.

The tractates were typically divided into three sections: causes and signs, often based on theoretical or astrological premises; preventative measures; and therapeutic remedies. The texts were framed around traditional Galenic medical principles. The earliest treatises often contained little discussion of disease symptoms, except those that could be specifically treated. Many contained a long list of preventative and therapeutic remedies, including

Ashgate, 1998); George R. Keiser, "Two Medieval Plague Treatises and their Afterlife in Early Modern England," *Journal of the History of Medicine and Allied Sciences* 58, no. 3 (2003): 292-324, doi: 10.1093/jhmas/jrg002.

²⁵ On the *consilia*, see Jole Agrimi and Chiara Crisciani, *Les consilia médicaux*, trans. Caroline Viola, (Turnhout, Belgium: Brepols, 1994).

²⁶ A. Philippe, *Histoire de la peste noire, d'après des documents inédits*, (Paris : à la direction de Publicité Médicale, 1853): 220-280; Lynn Thorndike, "Consilia and More Works in Manuscript by Gentile da Foligno," *Medical History* 3, no. 1 (1959): 8-19, PMID: PMC1034443.

²⁷ Jacme d'Agramont, "Regiment de Preservacio a Epidimia o Pestilencia e Mortaldats," trans. M.L. Duran-Reynals and C.E.A Winslow, *Bulletin of the History of Medicine* 23 (1949): 57-89. While d'Agramont has been called the first plague tractate author (C.E.A. Winslow and M. L. Duran-Reynals, "Jacme d'Agramont: The First of the Plague Tractates," *Bulletin of the History of Medicine* 22 (1948): 748-766), he actually spoke to several diseases.

²⁸ Justin K. Stearns, *Infectious Ideas: Contagion in Premodern Islamic and Christian Thought in the Western Mediterranean*, (Baltimore: Johns Hopkins University Press, 2011).

herbals and dietary and lifestyle advice based on the framework of Galen's six non-naturals.

Although the later tractate authors provided more detail about disease symptoms, in part to distinguish the plague from other epidemic diseases, the tractate structure largely remained consistent. The uniformity of the tractates' arrangement and, to a large extent their contents, points to the evolution of a specific genre of medical writing that was predicated less on innovative theories and the sharing of locally-specific information than on extensive borrowing, often verbatim, from the earliest treatises written in the mid-fourteenth century.²⁹

No original contagious disease tractates appear to have been written in England in any language before the late fifteenth century. Instead, beginning in the late 1300s, Continental treatises were copied and disseminated in Latin or translated or adapted as part of the increased Middle English vernacularisation of academic, scientific, and surgical texts.³⁰ As few English tractates were original, there is a general scholarly assumption that they simply repeated the views of the Continental originals and added nothing unique. As a corpus, they

²⁹ Unattributed translation, adaptation, and copying were common in late medieval and early modern Europe. They reflected the "great store on the authority and authenticity bestowed on a text by the *auctor*. In this view, texts were given truth and authority by dint of having been written long ago by famous men." Alistair Pennycook, "Borrowing Others' Words: Text, Ownership, Memory, and Plagiarism," *TESOL Quarterly* 30, no. 2 (1996): 205, <http://www.jstor.org/stable/3588141>.

³⁰ Irma Taavitsainen and Paivi Pahta, "Vernacularisation of Medical Writing in English: A Corpus-Based Study of Scholasticism," *Early Science and Medicine*, 3, no. 2 (1998): 159, <http://www.jstor.org/stable/4130415>; Faye Marie Getz, "Charity, Translation, and the Language of Medical Learning in Medieval England," *Bulletin of the History of Medicine* 64, no.1 (1990): 1-17; Linda Ehram Voigts, "Scientific and Medical Books," in *Book Production and Publishing in Britain 1375-1475*, ed. Jeremy Griffiths and Derek Pearsall, (Cambridge: Cambridge University Press, 1989), 345-402. Learned treatises and medical receipts were disseminated in a mixture of Latin, English, and Anglo-Norman by the thirteenth century. Tony Hunt, *Popular Medicine in Thirteenth Century England: Introduction and Texts*, (Cambridge: D.S. Brewer, 1990). In England, the vernacularisation of remedies, herbals, and medical guidebooks began in the Anglo-Saxon period, much earlier than on the Continent. Linda E. Voigts, "Anglo-Saxon Plant Remedies and the Anglo-Saxons," *Isis* 70, no. 2 (1979): 250-268, <http://www.jstor.org/stable/230791>. See also Peregrin Horden, "What's Wrong with Early Medieval Medicine?" *Social History of Medicine* 24, no. 1 (2011): 5-25, doi: 10.1093/shm/hkp052.

have received less scholarly attention than have the Continental treatises. Examining them thus provides an opportunity for comparative analysis and for the application of a cross-disease examination to explore differences between plague and non-plague tractates.

The English tractates: reflecting on plague, the sweating sickness, and contagion

I tested Paul Slack's contention that plague literature can be plundered for evidence of the conventional English view of all epidemic diseases by examining six tractates, including translated, adapted, and original texts. As the four plague-specific tractates exist in a relatively large number of manuscripts or print editions, I considered them to be typical of the texts in circulation. Medical treatises on the sweating sickness are rarer: only two English treatises specifically addressing the disease are known before 1600. Both were written in response to the authors' direct observations and experiences. Table 1 provides an overview of the salient features of each tractate.

De epidemia is considered to be "the parent of a whole host of variants and descendants, and provides a key to much of the [tractate] literature" in England.³¹ Contagious disease tractates disseminated in English before the sixteenth century were usually direct translations or adaptations of this 1365 Latin treatise written by Liège-based physician John of Burgundy. At least fifty manuscript copies survive, and are commonly found in medical miscellanies aimed at both university-trained physicians and rural doctors or lay practitioners. Copies also exist among the collections of barber-surgeons and clergymen. The tractate survives in three main forms: a Long Version, a four-chapter abridged text, and individual adaptations.³²

³¹ Singer, "Some Plague Tractates," 161.

³² Linda Ehrsam Voigts, "The 'Sloane Group': Related Scientific and Medical Manuscripts

The tractate entitled *Here begynneth a litill boke necessarye & behouefull aȝenst the Pestilence* was, in 1485, one of the earliest books printed in England in English. The English versions of the treatise assign its authorship to Bengt Knutsson or Knud Mikkelsen, Swedish and Danish bishops, respectively. More recent scholarship suggests that the text is an unattributed adaptation of University of Montpellier chancellor Johannes Jacobi's 1373 tractate. The English translation and initial printing of the text corresponded with the first sweating sickness outbreak. It was printed seven times and distributed by three different London printers between 1485 and 1536.³³ The English and Latin versions of the '*Litill Boke*' tractate are known collectively as the 'Canutus' plague tractate.

Circa 1475, the Latin long version of *De epidemia* was re-translated and adapted by Thomas Moulton, a Dominican friar. The printed version of the tractate used in this thesis was included in a larger medical miscellany *The Myroure or Glasse of Helthe*, which began circulating around 1530. Printed more than twenty times by 1580, *The Myroure or Glasse of Helthe* has been noted by some historians as "the most popular medical work of the sixteenth century."³⁴ Moulton's tractate is the first known appearance of *De epidemia* in print.

from the Fifteenth Century in the Sloane Collection," *British Library Journal* 16, no. 1 (1990): 26–57; Matheson, "Médecin sans Frontières?"; Matheson, "John of Burgundy;" Kari Anne Rand, "A Previously Unnoticed Fragment of John of Burgundy's Plague Tract and Some Connected Pest Regimens," *Notes and Queries* 53, no. 3 (2006): 295, doi: 10.1111/j.1540-6563.1970.tb00387.x.

³³ Singer, "Some Plague Tractates;" K.F. Russell, "Bengt Knutsson: 'Bisshop of Arusiens', and His 'Litol Boke for the Pestilence'," *Australian and New Zealand Journal of Surgery* 10, no. 1 (1940): 3-7, doi: 10.1111/j.1445-2197.1940.tb07130.x; Keiser, "Plague Treatises;" Joseph P. Pickett, "A Translation of the 'Canutus' Plague Treatise," in *Popular and Practical Science of Medieval England*, ed. Lister M. Matheson, (East Lansing: Colleagues Press, 1994), 265-269; and Matheson, "Médecin sans Frontières?"

³⁴ Paul Slack, "Mirrors of Health and Treasure of Poor Men: The Uses of the Vernacular Medical Literature of Tudor England," in *Health, Medicine and Mortality in the Sixteenth Century*, ed. Charles Webster, (Cambridge: Cambridge University Press, 1979), 237.

Table 1: English contagious disease tractates: overview of characteristics

Tractate / Author (au)/ Translator (tr)	Original Treatise	English Versions
<i>De epidemia</i> / Edited; mid-late 15 th c. ms; (au) John of Burgundy: physician; (tr) unknown ³⁵	Latin, 1365, Liège; 38+ mss produced in England late 14 th -15 th c.	50+ mss of varying content & translations to 16 th c.
<i>Litill boke...</i> / Unedited; 1485; print; (au) Johannes Jacobi: royal & papal physician; chancellor U. Montpellier; (tr) unknown ³⁶	Latin, 1373, Montpellier; untitled Latin version circulated in England in ms & print (5 mss and 3 print editions extant).	Two anon. translations before end 15 th c.; 7 editions (1485-1536); 4 mss (15 th - 16 th c.); 3 rd translation & print in name of Thomas Paynel (1534)
<i>... dyuers causes how the pestilence may be gendred</i> / Unedited; 1531; print; (tr & au) Thomas Moulton: Dominican friar; likely provincial ³⁷	Adaptation of Latin long version of <i>De epidemia</i> (see above)	B.L. Sloane MS 3489 (c. 1475); print: <i>The Myrour or Glasse of Health</i> ; 20+ editions (1530-80)
<i>A Goodly Bryefe Treatise of the Pestylence</i> / Unedited; 1546; print; (tr) Thomas Phayer: MP, lawyer, & physician (later an M.D.) ³⁸	Nicholas de Houssemaine, <i>Régime contre la peste</i> , French, Troyes, c.1520	Printed in <i>This is the Regiment of Life...</i> ; at least 9 editions (1543-1596)
<i>Venyms Feuer of Pestilens</i> / Unedited; late 15 th c. ms; (au) Thomas le Forestier : Norman M.D.; London ³⁹	English, 1485, London; British Library Add. MS 27582; Latin & French versions printed in Rouen (1490 & 1495)	
<i>A Boke, or Counseill Against the...Sweate</i> / Unedited; 1552; print; (au) John Caius: M.D.; royal physician; London ⁴⁰	English, 1552, London; print; Latin version printed in Louvain (1556).	

In 1544, physician, lawyer, and Member of Parliament Thomas Phayer published a large volume of medical works which contained his translation of a plague tractate.⁴¹ An expanded edition of the book was published in 1553, and was one of the most frequently

³⁵ Matheson, “John of Burgundy.”

³⁶ *Here Begynneth a Litill Boke Necessarye & Behouefull Aȝenst the Pestilence*, (London: William de Machlinia, ca. 1485), STC 2nd ed. 4590.

³⁷ Thomas Moulton, *This is the Myrour or Glasse of Helth*, (London: Robert Wyre, c.1531), STC 2nd ed. 18214a.

³⁸ Phayer, *Kegiment (sic) of Life*.

³⁹ Le Forestier, “Venymys Feuer.”

⁴⁰ John Caius, *A Boke, or Counseill Against the Disease Commonly Called the Sweate*, (London: Richard Grafton, 1552), STC 2nd ed. 4343.

⁴¹ The French plague tractate had previously been published in Troyes c.1520. Keiser, “Plague Treatises,” 312. Most scholars suggest that Phayer wrote the tractate.

reprinted medical texts of the sixteenth century. The tractate was reprinted as late as 1722.⁴²

The *venyms feuer of pestilens*, written by Norman physician Thomas le Forestier, is the sole clinical eyewitness account of England's 1485 sweating sickness outbreak.⁴³ Although similar to the *Litill Boke* and clearly drawing upon the tradition of *De epidemia*, the treatise is one of the first tractates originally composed in English. It was expanded and printed in Latin and French in Rouen.⁴⁴ The original English text exists in a single manuscript copy.

Based on his observations of the sweating sickness outbreak of 1551, John Caius, a royal physician and council member of the College of Physicians, wrote *A Boke or Counseill Against the Sweate*. Caius's treatise is considered to be the most authoritative treatise on the sweating sickness and the earliest extensive treatise on a single disease written and printed in English. It was printed in 1552; an expanded Latin version was printed in Louvain in 1556.⁴⁵

'Black Death' era university-trained physicians attributed the causes of the plague to two major categories: (i) primary universal or remote causes (either natural or supernatural but typically celestial), and (ii) secondary particular or near causes, including both individual and environmental or terrestrial aspects. While medieval Christian philosophy placed God at

⁴² Rick Bowers, *Thomas Phaer and The Boke of Chyldren*, (Tempe: Arizona Center for Medieval and Renaissance Studies, 1999); Keiser, "Plague Treatises;" Philip Schwyzer, "Thomas Phaer (1510?–1560)," *Oxford Dictionary of National Biography Online*, ed. P. Carter, (Oxford: Oxford University Press, 2004), doi:10.1093/ref:odnb/22085.

⁴³ Continental works about the 1528/9 epidemic are summarised in J.F.C. Hecker, *Epidemics of the Middle Ages*, trans. B.G. Babington, (London: George Woodfall and Son, 1844) and John L. Flood, "'Safer on the Battlefield than in the City': England, the 'Sweating Sickness', and the Continent," *Renaissance Studies* 17, no. 2 (2003): 147-176, doi: 10.1111/1477-4658.00015.

⁴⁴ Thomas le Forestier, *Traite de la Peste*, (Rouen, 1496; facs. with intro. by Gustave Panel, Rouen: Imprimerie Leon Guy, 1909); Singer, "Some Plague Tractates;" C.H. Talbot and E.A. Hammond, *The Medical Practitioners in Medieval England: A Biographical Register*, (London: Wellcome Historical Medical Library, 1965); Keiser, "Plague Treatises." The text is noted in the sweating sickness historiography.

⁴⁵ See Vivian Nutton, "John Caius and the Linacre Tradition," *Medical History* 23, no. 4 (1979): 373-391, PMID: PMC1082578. Caius's work is cited in the sweating sickness historiography.

the centre of all events, and although insinuations of divine retribution were not uncommon in moralistic writings and sermons from the time of the ‘Black Death’, the earliest tractate authors did not typically describe epidemic disease as an act of God. Rather, they favoured non-divine astrological or celestial interpretations. Any universal event such as pandemic was believed to have a universal cosmological cause, even if the specific near causes varied.⁴⁶ Most early tractate authors thus established a causal chain, starting with the universal/celestial and ending with the particular/terrestrial. Later tractate authors typically followed this pattern.

Some English tractates repeated the prognostications of the older Continental treatises, and most noted that astrological influences were, at least, a distant or antecedent cause of disease (see Table 2). The long version of *De epidemia* began with an astrological prologue, while the *Litill Boke* noted that unusual climatic or astrological events foreshadowed the plague. The 1345 conjunction of Saturn and Jupiter, often cited as a primary cause of the ‘Black Death’, was specifically noted by Moulton. Phayer blamed Saturn and Mars, while le Forestier and Caius saw planetary conjunctions as far causes of disease (see Table 2).

By the sixteenth century, causal explanations of epidemic disease were commonly framed in religious terms: plague was the scourge of God, a divine punishment for human sin. The older translated tractates did not attribute the plague to divine retribution; Moulton and Phayer, however, emphasised God’s will as the primary cause of disease.⁴⁷ On the other hand, while le Forestier noted that original sin was the ultimate cause of man’s troubles, he did not belabour the point of divine will.⁴⁸ Caius pointedly elected to not discuss the issue.⁴⁹

⁴⁶ Arrizabalaga, “Perceptions and Reactions,” 248-250.

⁴⁷ Moulton, *Glasse of Helth*, fol.Avv; Phayer, *Kegiment of Life (sic)*, fol.2r.

⁴⁸ Le Forestier, “Venymys Feuer,” fol.70v.

⁴⁹ Caius, *Sweat*, fol.39r.

If prognostications and unusual weather patterns warned of pestilence, if certain planetary conjunctions or constellations triggered earthly illnesses, or if God's wrath wrought disease upon man, the 'infected and venomous air' was proclaimed to be an important – if not the most important – direct cause of epidemic disease, as is shown in Table 3. Bad smells were a sign of putrefaction and therefore of corrupted air, which the Hippocratic text *On the Nature of Man* had already deemed to be a cause of disease. Galen had likewise described pestilence as "a disease arising from corruption of the air, and attacking all or a great many people, resulting in the death of many."⁵⁰ The putrefaction and stench of infected wounds, dead bodies, and butchers' remains and other detritus found in cesspits, dung heaps, open sewers, and on the streets were therefore believed to be a cause of disease, as were the foul odours omnipresent in swamps, marshes, low-lying valleys, and enclosed storage spaces.⁵¹ Stench corrupted the air in both substance and quality and people were, in turn, infected by the corrupted air: "by the forme of thayer aboue – the bodyes benethe lightly be infecte. For thynpressyons aboue corrupteth the ayer and so the spirites of a man ben corrupt."⁵² Moulton suggested that the air itself was not corrupt, but was rather affected by vapours emitted from deep in the earth. Phayer claimed that stench was the third root cause of the plague. In discussing the sweating sickness, le Forestier stated that Londoners' poor sanitary habits –throwing carrion into the streets, leaving their privies dirty, and using tainted water – were a source of disease.⁵³ Caius noted that air was corrupted and

⁵⁰ Cited in Campbell, *Men of Learning*, 48.

⁵¹ Andrew Wear, *Knowledge and Practice in English Medicine, 1550-1680*, (Cambridge: Cambridge University Press, 2000), 136-137; Caroline Hannaway, "Environment and Miasmata," in *Companion Encyclopedia of the History of Medicine*, ed. W.F. Bynum and Roy Porter, (London: Routledge, 1993), 1: 292-308.

⁵² *Here Begynneth*, fols.2r-2v.

⁵³ Le Forestier, "Venymys Feuer," fol.71v.

putrefied by evil qualities.⁵⁴

Susceptibility explained why only some people became ill when everyone breathed the same infected air. As *De epidemia* analogized, as fire could burn only combustible materials, so too could pestilential air only cause infection in those who were already susceptible to it. The main cause of susceptibility was humoral imbalance, which was said to be common among those who ate and drank excessively, who bathed too often, who sweated too much, who were lecherous, or who were otherwise sinful – in essence, those who poorly managed the non-naturals. People with corrupted humours were believed to exhale putrid breath that transmitted disease.⁵⁵ Moulton claimed that Avicenna had already resolved that “they þ[at] be replet and ful of corrupte humours...receyue the corrupcion and the venym of the ayre.”⁵⁶ Phayer blamed immoderate living, evidenced by “the noughtynesse of humours, which are apte to receyue the said vapours.”⁵⁷ Caius’s causation discussion focused on the ‘poor English diet’ which decreased disease resistance. He also complained about Englishmen’s lost vitality:

But we are nowe a daies so unwisely fine, and womanly delicate, that...The olde manly hardnes, stoute courage, & peifulnes of Englande is utterly driven awaye, in the stede whereof, men now a daies receiue womanlines & become nice, not able to withstande a blaste of wynde, or resiste a poore fische.⁵⁸

⁵⁴ Caius, *Sweate*, fol.13v.

⁵⁵ Oswei Temkin, “Historical Analysis of the Concept of Infection,” in *Double Face*, 456-471.

⁵⁶ Moulton, *Glasse of Helth*, fol.Biiir.

⁵⁷ Phayer, *Kegiment of Life (sic)*, fol.5r.

⁵⁸ Caius, *Sweate*, fol.22v.

Table 2: Tractate commentary on astrology

Tractate	Astrological Causes
<i>De epidemia (15th)</i>	“hevenly or firmamental bodies bie of the first and prymatief causis” ⁵⁹
<i>Litill Boke (1485)</i>	“The fourth token is whan the sterres semen oftentimes to falle then it is token that the ayre ys infect with moche veneous vapours.” ⁶⁰
<i>Moulton (1531)</i>	“the corrupt ayre & the venme therof the which was caused by a coniunccion of Saturne & Iouis.” ⁶¹
<i>Phayer (1546)</i>	Saturn and Mars have “unholosome influences, [which] are [the] cause of manyfolde infirmityes.” ⁶²
<i>Le Forestier (1485)</i>	“the ferre causes they be the fygures or the planetys...when that the celestial fygures are doying or receyvng the dispositions of the erth then ther is gret moystenys in the ayre and...stynkyng vapors” ⁶³
<i>Caius (1552)</i>	“To this mai be ioyned the euel disposition by constellation, whiche hath a great power & dominion in al erthly thinges.” ⁶⁴

Table 3: Tractate commentary on infected air

Tractate	Infected Air
<i>De epidemia (15th)</i>	“the air, therfor, so chaunged and corrupt bredith or engendrith in dyvers folke dyvers sikenes...” ⁶⁵
<i>Litill Boke (1485)</i>	“the ayre ys infect with moche venemous vapours...it cometh fro the rote bynethe [or] fro[m] the rote aoue” ⁶⁶
<i>Moulton (1531)</i>	“ayre corrupt is cause of the pestylence that nowe is reinyng.” ⁶⁷
<i>Phayer (1546)</i>	“Pestylence is non other thyng but a venemous infectio[n] of þe ayre, enemye to þe vitall spirites, by a certayne maliciouse and eueil propertye.” ⁶⁸
<i>Le Forestier (1485)</i>	“The nygh causes be the stynkyng of the erthes...dede bestes or...stynkyn waters for these be grete causes of putrefacion and these corrupteth the ayre, and so our bodyes are infect...” ⁶⁹
<i>Caius (1552)</i>	The first source was infection “by thaire receiuing euel qualities, diste[m]pring not only þe hete, but the hole substa[n]ce therof, in putrifieng thesame.” ⁷⁰

⁵⁹ Matheson, “John of Burgundy,” 2:580.

⁶⁰ *Here Begynneth*, fol.1v.

⁶¹ Moulton, *Glasse of Helth*, fol.Biv.

⁶² Phayer, *Kegiment of Life (sic)*, fol.7r.

⁶³ Le Forestier, “Venyms Feuer,” fol.70v.

⁶⁴ Caius, *Sweate*, fol.13v.

⁶⁵ Matheson, “John of Burgundy,” 2:578-79.

⁶⁶ *Here Begynneth*, fols.1v-2r.

⁶⁷ Moulton, *Glasse of Helth*, fol.Biir.

⁶⁸ Phayer, *Kegiment of Life (sic)*, fol.4v.

⁶⁹ Le Forestier, “Venyms Feuer,” fol.71r.

⁷⁰ Caius, *Sweate*, fol.13v.

Fabbri notes that, to the earliest plague tractate authors – who wrote in both Latin and the vernacular – the idea of contagion by direct contact or air was neither foreign nor new. Many authors discussed their observations that disease spread from sick to healthy persons. Even the University of Paris’s Faculty of Medicine, which based its tractate on astrological and theoretical conjectures, cautioned that the disease was so contagious that the healthy should avoid the sick.⁷¹ By contrast, in her study of 72 Latin tractates, Carmichael notes that only one-third made specific reference to contagion.⁷²

Although they did not discuss the actual mechanism of contagion in detail, some of the English tractate authors saw the plague as definitely contagious and transmissible from one person to another.⁷³ The infected person was believed to exhale foul contagious air from his body. The author of the *Litill Boke* stated emphatically that the plague was contagious and advised his readers to avoid being around those who were already infected, as their breath might spread disease.⁷⁴ Phayer suggested that human-to-human transmission was one of the main ways that the disease was spread, because “our bodyes be infected by contagyon of men, more then any other beastes.”⁷⁵ Although neither *De epidemia* nor Moulton’s later adaptation of it spoke directly to the issue of contagion, the authors’ acknowledgement that

⁷¹ Stearns contests the historiographical tradition of using Andalusī plague tractates as examples of ‘heretical’ exceptions to Muslim scholarship. Rather, he suggests that Ibn al-Khatīb’s claim that empirical evidence should over-ride prophetic traditions demonstrates that there was a “debate on the issue of contagion, rather than...a confrontation between conservative scripturalism and rational empiricism.” Stearns, *Infectious Ideas*, 69.

⁷² Carmichael admits that she did not consider advice to avoid infected locations or persons as references to ‘contagion.’ “Universal and Particular,” 37.

⁷³ As Paul Slack notes, “It [the idea of contagion] was accepted because it accorded with the evidence of experience, and it was enough to acknowledge its existence in general terms, and to draw practical conclusions.” *Impact of Plague*, 27.

⁷⁴ *Here Begynneth*, fol.5r.

⁷⁵ Phayer, *Kegiment of Life (sic)*, fol.10r.

“wikked aire may entre and envenyme the spirites of a man”⁷⁶ points to their recognition that whatever its cause, plague was disseminated through the air. In discussing the sweating sickness, neither le Forestier nor Caius explicitly commented on whether or how the disease was contagious or transmissible. More than the other authors, however, le Forestier emphasised the venomous and corrupted air which was generated by filth and stink. His ardent criticism of the Londoners’ unsanitary conditions attested to his belief that such conditions created environments in which disease could be engendered.

The English tractates were quite consistent in their prevention and treatment advice, providing a range of remedies designed both to improve an individual’s overall health and to reduce possibility of infected air *qua* disease being transmitted. They differed little from their Continental counterparts in drawing upon traditional medical authorities and continuing the convention of the medieval *regimen sanitatis*, which focused on ensuring the good governance of health through the proper maintenance of the six non-naturals. To avoid the risk of disease, most authors recommended leaving infected areas, or at least avoiding crowds. If unable to leave, people were advised to avoid or remove all causes of putrefaction and stink. Maintaining clean spaces and bodies was deemed crucial for disease prevention.⁷⁷ Le Forestier exhorted Londoners to amend their unsanitary habits. Phayer hailed rulers to decree that dunghills and carrion be banned from the streets.⁷⁸ The authors recommended the use of vinegar, rose water, and sweet-smelling herbs to fumigate the air in homes, and of pomanders to keep ‘venomous air’ from entering bodies. Even those plague tractates which did not directly address contagion included advice to ensure that “infect ayer entre not in” to people’s homes, “for an infect ayer most causeth putrifacao[n] in places & houses wher folk

⁷⁶ Matheson, “John of Burgundy,” 2:588.

⁷⁷ Or at least faces and hands, as excessive bathing was deemed a risk factor for infection.

⁷⁸ Phayer, *Kegiment of Life (sic)*, fol.14v.

slepe therefore lette your hous be clene.”⁷⁹ Patients were entreated to change their bed linens daily and keep their windows open to the north and east. Physicians were advised to stand “ferre fro the pacie[n]t, holdy[n]g their face toward the dore or wyndowe.”⁸⁰ Healthy people were advised to stay indoors away from southerly winds.

Caius, however, clearly did not perceive the disease to be transmissible by contact. His remedies for the sweating sickness focused on aiding or inducing sweating to “let out the venime.”⁸¹ In his discussion of how one might aid persons too ill to induce their own sweating, Caius clearly did not perceive the disease to be transmissible by contact. The ill were advised to “surrendre and geue ouer to the disease without resistence.”⁸² Caregivers were not advised to flee, but rather to stay nearby for twenty-four hours to ensure that the sick person remained covered in bed. In cases where the ill were unable to sweat naturally by rubbing themselves or by ingesting warm drinks, caregivers were advised to keep patients awake and to “call them by their names, and beate them with a rosemary braunche, or some other swete like thyng...[or else pull] them by the eares, nose, or here.”⁸³ This required not only that the caregivers remained, but that they maintained close physical contact with the ill.

One could surmise from their writings that the plague-specific tractate authors perceived the disease to be contagious, meaning transmissible. The infected and corrupted air, the venomous breath of the affected, and even the gaze of the sick could transmit the plague. All the plague-specific tractates were direct translations of or adaptations from Continental treatises; where and how those tractates spoke of contagion, so too did the

⁷⁹ *Here Begynneth*, fol.4r.

⁸⁰ *Here Begynneth*, fol.3r.

⁸¹ Caius, *Sweate*, fol.31v.

⁸² *Ibid.*, fol.32r. Le Forestier includes some similar advice about inducing sweating, but does not go as far as Caius in detail or recommendation.

⁸³ *Ibid.*, fols.36r-36v.

English versions. The sweating sickness treatises, on the other hand, were more original writings. While they maintained the tractate structure and kept much of the content related to disease causation, prevention, and treatment and applied it to the sweating sickness, le Forestier and Caius moved beyond the confines of the translated/adapted plague tractate and incorporated personal witness. Both authors spoke of infected air as a *source* of disease, as did the plague tractate authors, but neither commented directly on the *spread* of disease through the air or on human-to-human transmissibility, such as through venomous breath.⁸⁴ Le Forestier's discussions of Londoner's poor sanitary habits contained much greater detail than did the general discussions of 'wikked ayre' of the plague-specific writings, as his intention was to recommend specific ways in which disease-engendering environments might be improved.

Caius's discussion provides a very different perspective. Although he conceded the need to remove "[t]he causes of infectio[n]...[such as] damning diches, auoidynge cario[n]s..."⁸⁵ and to improve infected air with sweet smells and fumigation, his advice to caregivers to directly and physically assist patients to sweat runs counter to the advice of plague-specific tractates to avoid infected places and people. To Caius, if the disease was engendered in, or even transmitted through, corrupted air, it was definitely not spread from human to human. Table 4 provides examples of the authors' commentaries on contagion and transmissibility.

The question arises, of course, whether some of the tractates that were ostensibly about the plague might have also referred to another contemporary epidemic disease. If so, similar theories of causation and contagion could be applied to a range of unnamed diseases, and any

⁸⁴ Fabri states that le Forestier commented on the transmission of contagion but provides no specific reference. In any event, she used only the 1909 edition of le Forestier's revised Latin tractate, which also discussed the plague. "Continuity and Change," 162.

⁸⁵ Caius, *Sweate*, fol.23r.

distinctions suggested here made irrelevant. This would accord with Slack’s contention that English contagious disease tractates demonstrated no distinction by disease. Of the plague-specific tractates considered in this study, only Phayer’s treatise was written when sweating sickness also existed.⁸⁶ Although he repeatedly refers to ‘pestilence’ in his preface, Phayer makes a clear distinction between “this only plage and scourge of god co[m]monly called þe Pestile[n]ce” and other “co[m]mon and familier infirmities” including “lepryes, agues, cankers, pockes, goutes, palsyes, dropsyes, reumes, phtysis, and other oute of nu[m]bre.”⁸⁷ It is thus likely that Phayer’s tractate was about the plague rather than any other ‘pestilential’ disease. Le Forestier and Caius wrote specifically about the sweating sickness, clearly distinguishing it from the plague. Other tractates addressing the ‘French Pox’ or ‘*dissenteria*’ did so in an obvious manner, with the diseases being clearly distinguished from others.

Table 4: Tractate commentary on contagiousness and transmissibility

Tractate	Contagiousness/ Transmissibility
<i>De epidemia</i> (15th)	“wikked aire may entre and envenyme the spirites of a man” ⁸⁸ “whan the pooris or issues bien open, the venemous aire entrith, thrillyng the body and defoulyng the spirites.” ⁸⁹
<i>Litill Boke</i> (1485)	“I say that pestilence sores be [con]tagious because of enfect humours...& the reke or smoke of suche sores is venemous & corrupteth the ayer.” ⁹⁰ “flee fro[m] suche p[er]sons as be i[n]fect. In pestile[n]ce time no body sholde stande i[n] grete prece of peple for som...of the[m] may be infect” ⁹¹
<i>Moulton</i> (1531)	“through the workyng of that venemous pestylence ayre or dyuers syckenes and perelous gendred in man, woman and chyld.” ⁹² “is howe thou shalt gouerne and preserue thy selfe from the malice of the

⁸⁶ Although printed during a sweating sickness outbreak, the *Litill Boke* was a plague tractate.

⁸⁷ Phayer, *Kegiment of Life (sic)*, fol.2r.

⁸⁸ Matheson, “John of Burgundy,” 2:588.

⁸⁹ *Ibid.*, 582.

⁹⁰ *Here Begynneth*, fol.3r.

⁹¹ *Ibid.*, fols.3r-3v.

⁹² Moulton, *Glasse of Helth*, fol.Biiiv.

Tractate	Contagiousness/ Transmissibility
	pestylence ayre, and from the venym and corrupcion that is gendred therby.” ⁹³
<i>Phayer</i> (1546)	“venymous ayer it self, is not halfe so vehement to enfect as is the co[n]versation or breath of [the] enfected...” ⁹⁴ “flye the corrupte ayre, accordyng to the prouerbe, Longe, cito tarde. Flye be tymes, flye farre, and come slowelye agayne.” ⁹⁵
<i>Le Forestier</i> (1485)	“so our bodyes ar infect of that corrupt ayre...” ⁹⁶ “...of the whiche thinge [stinking water and fouled streets] let any man that loveth god and his neyghbour amend.” ⁹⁷
<i>Caius</i> (1552)	“when the aire infectiue cometh co[n]sonant... the disease engendred” ⁹⁸ “takyng a way þe causes of enfecto[n]...[by] landyng muddy and rotte[n] groundes, burieng dede bodyes...” ⁹⁹

Conclusion

Modern scholars’ reliance on medical treatises to assess late medieval and early modern understanding of contagion is predicated on a contradiction. On the one hand, historians tend to separate medical treatises that address the plague from those that address other epidemic diseases based on perceived differences in disease nomenclature or textual structure.¹⁰⁰ The *Early Modern English Medical Texts (EMEMT) Corpus*, for example, categorises plague-specific treatises separately from those that address ‘other specific diseases’ based on format,

⁹³ Ibid., Bv.

⁹⁴ Phayer, *Kegiment of Life (sic)*, fol.10r.

⁹⁵ Ibid., fols.11r-11v.

⁹⁶ Le Forestier, “Venyms Feuer,” fol.71r.

⁹⁷ Ibid., fol.71v.

⁹⁸ Caius, *Sweate*, fol.16r.

⁹⁹ Ibid., fol.23r.

¹⁰⁰ See, for example, Slack, “Mirrors of Health;” George R Keiser, *Works of Science and Information*, vol. 10 of *A Manual of the Writings in Middle English, 1050-1500*, (New Haven: Connecticut Academy of the Arts and Sciences, 1998); Irma Taavitsainen and Päivi Pahta, ed., *Early Modern English Medical Texts: Corpus Description and Studies*, (Amsterdam: John Benjamins, 2010); Irma Taavitsainen, et al, “Medical Texts in 1500-1700 and the Corpus of Early Modern English Medical Texts,” in *Medical Writing in Early Modern English*, ed. Irma Taavitsainen and Päivi Pahta, (Cambridge: Cambridge University Press, 2011), 9-29.

authorship, target audience, and “continuity from medieval traditions versus new trends.”¹⁰¹ In making such structural distinctions, however, historians have largely neglected the non-plague tractates in their studies of contagion and have tended instead to retrospectively apply the contemporary medical *theories* found in the plague-specific tractates to the broad spectrum of late medieval and early modern epidemic diseases. This may be due to their tendency to consider that people’s experiences with the plague overshadowed and informed all of their other disease experiences. Paul Slack suggests, for example, that plague treatises provide “evidence of the conventional view of epidemics held by Englishmen.”¹⁰² A comparison of the contents of the plague and sweating sickness tractates demonstrates, however, that the two diseases were viewed differently by those who wrote about them. The tractate authors described the plague as being contagious both by contact with infected people and through the air, while the sweating sickness was viewed as engendered in fouled air but only potentially transmissible through the air. Of course, as Jon Arrizabalaga notes, these two modes of disease transmission – by person and by air – are not mutually exclusive, but are rather stages of transmission along a broad spectrum.¹⁰³ However, while some plague-specific tractates did not directly discuss the question of contagion, the widespread emphasis on the *transmission* of the plague was not repeated in the extant tractates that addressed the sweating sickness. Therefore, it is reasonable to suggest that not all epidemic diseases discussed in the tractates were viewed in the same way, as has been commonly assumed. Rather, the plague and sweating sickness were seen as distinct illnesses, each viewed through its own epidemiological profile, as it was understood at the time.

¹⁰¹ Päivi Pahta and Maura Ratia, “Treatises on Specific Topics,” in Taavitsainen and Pahta, *Corpus Description and Studies*, 79.

¹⁰² Slack, *Impact of Plague*, 24.

¹⁰³ See Chapter 1 and Arrizabalaga, “Perceptions and Reactions,” 259-260.

Historical explorations of late medieval and early modern epidemic disease experiences and beliefs are incomplete and will remain so until more work has been done to comprehensively compare and contrast plague-specific works with those that address other epidemic diseases. This thesis demonstrates that recategorising ‘plague tractates’ as ‘contagious disease tractates’ allows us to take the corpus as a whole and identify and compare the texts’ theoretical contents without being sidetracked by any structural differences between them.¹⁰⁴ Doing so here has highlighted some of the key perceptual differences of disease transmission that existed in the tractates written about the plague and the sweating sickness. This indicates that it is methodologically inaccurate to suggest that ‘one set of contagion beliefs fits all diseases.’ More comparative work should be done to identify if the transmission modes of other epidemic diseases were also viewed differently. Doing so would contribute significantly to studies of late medieval and early modern understanding of and reactions to contagion. Certainly in different time periods and locations, dissimilarities have been noted. Slack notes, for example, that in “the more sophisticated intellectual environment of Venice in the 1570s, the advocates of the one [miasma or contagion] denied the existence of the other, but this did not happen in England before the end of the seventeenth century.”¹⁰⁵ Comparing plague and sweating sickness tractates demonstrates that the English intellectual environment may not have been quite as unsophisticated as Slack suggests.

¹⁰⁴ I have shown that the sweating sickness tractates largely followed the traditional plague tractate formula; indeed, there are more similarities than differences in their literary and linguistic formats. Distinction based on structural considerations alone is thus unconvincing.

¹⁰⁵ Slack, *Impact of Plague*, 28.

CHAPTER 3

REVISITING THE AUTHORITY OF MEDICAL TREATISES

Introduction

“Therefore seke you out a good Phisicien...knowen to haue skille...and flie the vnlearned as a pestilence.”¹ Recommendations to use only professional medical care when faced with epidemic disease, such as John Caius’s above-noted counsel in 1552, were common in late medieval and early modern medical treatises. Professional medical care would, it was suggested, provide the best means of prophylaxis and treatment because it was predicated on traditional and authoritative medical theory, training, and practice. Christiane Nockels Fabbri’s detailed analysis of the evolution of plague-related medical thought in Western Europe demonstrates that indeed there was a marked continuity in plague medicine between 1348 and 1599.² For those who had no access to a professional physician – the vast majority of the population – the contagious disease tractates contained a large number of remedies that could be prepared and used at home.

While the tractates’ disease prevention and treatment regimens changed little over time or from region to region, discourses on disease aetiology evolved to reflect culturally-specific concerns. The ongoing popularity of the tractates rested, in fact, to a large extent on the degree to which they responded to local socio-cultural and religious change. As Fabbri notes, “the plague treatises trace at once continuity and change, and substantiate both the

¹ John Caius, *A Boke, or Counseill Against the Disease Commonly Called the Sweate*, (London: Richard Grafton, 1552), STC 2nd ed. 4343 fols, 27v-28r.

² Christiane Nockels Fabbri, “Continuity and Change in Late Medieval Plague Medicine: A Survey of 152 Plague Tracts from 1348 to 1599,” (PhD diss., Yale University, 2006), ProQuest (3214261).

cultural construction and the social significance of epidemics;” for the historian, she adds, the value of the tractates lies “as much in the record of medical tradition and conservatism, as in the serendipitous documentation of deep cultural and religious transformation.”³

As historians have chiefly read and analysed contagious disease tractates only as medical texts, there has not yet been sufficient examination of the tractates’ socio-political-professional contents and contexts. These non-medical contents and contexts, while not necessarily conflicting with the tractates’ medical aspects, certainly influenced the writing, content, and dissemination of the tractates. Their absence from scholarly considerations of late medieval and early modern concepts of contagion, particularly those based on contagious disease tractates and other medical treatises, therefore represents a research gap. In this chapter, I explore whether and how issues such as professional competition, religious transformation, and socio-political conflict are reflected in the English-language tractates, as well as what such reflections suggest about the ancillary purposes of the tractates. In doing so, I reflect again on how a more nuanced reading of the tractates raises concerns about historians’ reliance on such treatises as reliable and authoritative witnesses of medical beliefs and practices in the late medieval and early modern era.

‘Social logic of the text’

The study of medieval historiography has demonstrated that chronicles and other texts were important not for presenting the ‘truth’ of what happened, but rather for their “ability to address contemporary political life via a displacement to the past” and thereby to present reality as it *needed* to be presented to both account for and maintain the legitimacy of current

³ Fabbri, “Continuity and Change,” iv, 202.

rulers.⁴ Written reality, or the presentation of it, was therefore a function of claims to legitimacy, which in turn were subject to change and interpretation. Modern scholars who base their reconstruction of past events and actions – and of past beliefs and concepts – on historical texts must therefore be cognizant of the philosophical, intellectual, and socio-political contexts within which those texts were written. More than an epistemological exercise, a linguistic and contextual analysis of historical texts is necessary to unpack the texts' underlying structure, content, and intent. Written accounts are not simply recorded, but constructed and open to continuous interpretation; “no word is the last word, no account, however thorough, is ever the definitive account.”⁵ Päivi Pahta and Irma Taavitsainen, for example, base their linguist analysis of medical writing in late medieval and early modern England on the theoretical assumption that languages, and hence texts, are

communication that always takes place in a particular context of discourse, characterized by time and place...and for a particular purpose. This communicative situation has an impact on how the speakers or writers formulate their message...[such that] meaning is a process that needs to be viewed in [a] multilayered context...from different perspectives.⁶

Socio-cultural changes affected both the practice and theoretical foundations of medicine, and as such must be considered in any analysis of the contents of medical texts.

This is not to suggest that historians must re-enter or re-ignite the deconstructionist, post-modernist debates of the late twentieth century (linguistic turn, New Historicism, and so on) about the status and use of historical knowledge, the separation of language and text

⁴ Gabrielle M. Spiegel, *The Past as Text: The Theory and Practice of Medieval Historiography*, (Baltimore: Johns Hopkins University Press, 1997), xiii.

⁵ Robert M. Stein, “Literary Criticism and the Evidence for History,” in *Writing Medieval History*, edited by Nancy Partner, (London: Hodder Arnold, 2005), 68.

⁶ Päivi Pahta and Irma Taavitsainen, “An Interdisciplinary Approach to Medical Writing in Early Modern English,” in *Medical Writing in Early Modern English*, ed. Irma Taavitsainen and Päivi Pahta, (Cambridge: Cambridge University Press, 2011), 1.

from authorial intent and reality, or the divide between author and reader.⁷ Rather, what Gabrielle Spiegel calls the ‘social logic of the text’ – a concept that unites the investigation of a text’s contents (both literary and documentary) and the social context in which it was written – highlights the prospect that a text derives its power and meaning “in large part from its social context and its relation to the social and political networks in which it is elaborated.”⁸ An historical text is thus, at once, a product of and an agent for its socio-political environment.

The necessity of undertaking contextual analysis has been discussed at some length in relation to understanding past political or military events, such as rebellions or battles. John H. Arnold, for example, explores how contemporary chronicles and poems that discussed the so-called Peasants’ Revolt of 1381 provided significantly different portrayals of the rebels’ composition and aims, what took place, and the immediate results of the uprising. Each source was sufficiently biased – particularly related to the author’s sympathies but also in terms of the amount and type of information actually available to him and how it was interpreted – to distort any clear appreciation of the event. Without a detailed analysis of additional documents such as trial records, attempting to accurately reconstruct the uprising from the chronicles and poems is virtually impossible.⁹

When reading historical accounts of disease outbreaks, their causes, and how people reacted to them, one must likewise take into consideration a wide range of authorial, literary,

⁷ For a summary of the debates, see the various essays that are collated in Keith Jenkins, ed., *The Postmodern History Reader*, (London: Routledge, 1997). See also Hayden White, *The Content of the Form: Narrative Discourse and Historical Representation*, (Baltimore: Johns Hopkins University Press, 1987).

⁸ Gabrielle Spiegel, “History and Postmodernism,” in Jenkins, *Postmodern History Reader*, 266. See also Gabrielle Spiegel, “History, Historicism and the Social Logic of the Text in the Middle Ages.” *Speculum* 65, no. 1 (1990): 59-86, <http://www.jstor.org/stable/2864472>.

⁹ John H. Arnold, *What is Medieval History?* (Cambridge: Polity Press, 2008), 23-26.

and contextual issues, including the authors' dynastic, political, and religious affiliations, their social status, and their intended audience; the metaphorical language and rhetorical devices used; and the wider socio-political environment in which the text was produced and disseminated.¹⁰ For example, many medical texts "may have been written with a bias or slant in an attempt [to] impress a potential patron or person in power, and this could have affected the content."¹¹ Each of the above-noted factors affects how a particular disease episode was perceived and portrayed, or, in the case of medical treatises specifically, how a disease's aetiology, prophylaxis, and treatment was described.

Just as Spiegel points to the political utility of medieval historiography – in that chronicles, in addition to recording events for posterity, played a critical role in the politics of a society dependent on the past for its legitimacy – the utility of the tractates thus extends far beyond their commentary on epidemic disease.¹² Indeed, further scrutiny of the tractates suggests that underlying the standard medical discourse – particularly in the fifteenth and sixteenth centuries – was much more than a stock medical interpretation of epidemic disease. In addition to including (at-times veiled) commentary on ongoing professional, religious, and socio-political strife, tractate authors used the tractate genre to legitimize both their professions and their political affiliations. In such cases, epidemics may have simply provided a backdrop against which the authors could frame their broader discourses. Intrinsic to any discussion of late medieval and early modern medical literature, then, is the social and cultural context within which the texts were written and, perhaps more importantly, the

¹⁰ The issue of the tractates' intended and actual audiences is addressed in Chapter 4.

¹¹ Piers D. Mitchell, "Retrospective Diagnosis and the Use of Historical Texts for Investigating Disease in the Past," *International Journal of Paleopathology* 1, no. 2 (2011): 82, doi:10.1016/j.ijpp.2011.04.002.

¹² Gabrielle Spiegel, "Political Utility in Medieval Historiography: A Sketch," *History and Theory* 14, no. 3 (October 1975): 314-325, <http://www.jstor.org/stable/2504866>.

influence that the context had on what was written, how it was written and produced, and who read it.¹³ This does not, of course, necessarily mean that the underlying non-medical commentaries are mutually exclusive of or negate the tractates' medical significance: non-medical and medical dialogues might well be complementary or, at the least, run in parallel through the text, particularly where 'medical' concerns had cultural connotations.¹⁴ All the same, to fully comprehend the medical contents and contexts of contagious disease tractates, the non-medical contents and contexts must be unpacked and analysed.

English tractates: intersections of medicine, profession, religion, and politics

In late medieval and early modern England, health and disease were portrayed culturally; that is, they were at once medical issues, religious issues, political issues, and societal issues, and each was intertwined in such a way as to blur modern distinctions between them. A healthy person was one whose humours were balanced and who avoided the conditions that caused illness. He lived moderately and enjoyed mental, physical, and spiritual equilibrium. Contemporary medical theory considered the body and soul as inextricable. The management of Galen's six non-naturals had been Christianised such that immoderate living was deemed by physicians and clergy alike to be sinful. Righteous living, prayer, and repentance would not only benefit the soul but would also offer protection against earthly disease.¹⁵ Illness and

¹³James T. Patterson, "How Do We Write the History of Disease?" *Health and History* 1, no. 1 (1998): 5-29, <http://www.jstor.org/stable/40111315>.

¹⁴Marc Bloch's analysis of the royal touch for scrofula provides a cogent example of the contextual and textual interplay between healing and politics in *Les rois thaumaturges : étude sur le caractère surnaturel attribué à la puissance royale, particulièrement en France et en Angleterre*, (Strasbourg: Librairie Istra, 1924).

¹⁵Carole Rawcliffe, *Medicine and Society in Later Medieval England*, (Stroud: Alan Sutton, 1995), 21.

suffering were widely regarded as punishment for sin.¹⁶ While in Italy most medical teachers and students (and hence university-trained practitioners) were laymen, the teaching of medicine at English universities was subordinated to the teaching of theology.¹⁷ The English medical profession was, until the mid-fifteenth century, dominated by clerics; even into the seventeenth century, a large proportion of professional practitioners were priest-physicians.¹⁸ In hospitals, primacy was given to spiritual health over physical health.¹⁹ Some diseases acquired particularly strong religious and/or moral connotations, while religious and political

¹⁶ Darrel W. Amundsen counters the common claim that since the Church saw disease as a divine punishment and banned some medical practices among clergymen, attempts to cure disease defied God's will. He notes that "no Christian document from the Middle Ages entirely condemns, on theological grounds, the Christian's use of physicians and medicine." *Medicine, Society, and Faith in the Ancient and Medieval Worlds*, (Baltimore: Johns Hopkins University Press, 1996), 7-8.

¹⁷ Nancy Siraisi, "The Faculty of Medicine," in *A History of the University in Europe*, vol. 1, *Universities in the Middle Ages*, ed. Hilde de Ridder-Symoens, (Cambridge: Cambridge University Press, 1992), 369. In England, University of Oxford colleges actually forbade or significantly limited the study of medicine into the fifteenth century.

¹⁸ Rawcliffe, *Medicine and Society*, 108-113; Margaret Pelling and Charles Webster, "Medical Practitioners," in *Health, Medicine and Mortality*, ed. Charles Webster, (Cambridge: Cambridge University Press, 1979), 199; Robert Ralley, "Medical Economies in Fifteenth-Century England," in *Medicine and the Market in England and its Colonies, c.1450 – c.1850*, ed. Mark. S.R. Jenner and Patrick Wallis, (New York: Palgrave Macmillan, 2007), 24-46.

¹⁹ In marked contrast to the larger Continental institutions, English hospitals largely followed or took inspiration from Augustinian monastic houses and followed the pattern of secular collegiate houses. Only about two percent of English hospitals were solely devoted to caring for the sick, but even these regularly prohibited lepers, lunatics, pregnant women, people with infectious illnesses, and others who might interfere with liturgical performances or otherwise contaminate sacred places. Martha Carlin, "Medieval English Hospitals," in *The Hospital in History*, ed. Lindsay Granshaw and Roy Porter, (London: Routledge, 1989), 21-40; Miri Rubin, "Development and Change in English Hospitals, 1100-1500," in Granshaw and Porter, *Hospital in History*, 41-59; Nicholas Orme and Margaret Webster, *The English Hospital 1070-1570*, (New Haven: Yale University Press, 1995); Carole Rawcliffe, "Medicine for the Soul: The Medieval English Hospital and the Quest for Spiritual Health," in *Religion, Health and Suffering*, ed. John R. Hinnells and Roy Porter, (London: Kegan Paul International, 1999), 316-338; and Sheila Sweetinburgh, *The Role of the Hospital in Medieval England: Gift-giving and the Spiritual Economy*, (Dublin: Four Courts Press, 2004).

texts frequently used medical metaphors to strengthen claims that society, or some segments of it, had become corrupt or unjust.²⁰ Epidemic diseases were used as particularly common metaphors for religious or social disorder; thus from the fourteenth century word *pestilence* evolved the fifteenth century word *pestilent*, whose meanings included being “harmful or dangerous to religious, morals, or social order” (“And after alle Affrike infecte, the pestilente errour of the Saracenys infecte a grete parte of Speyne”²¹), and the sixteenth century word *pestilential*, whose meanings included “morally or socially harmful” (“Corrupted with pestilenciall auarice or ambicion”²²). The word *contagious* also quickly evolved from its original meanings related to contamination or disease transmission to describe something that was “morally or socially injurious, noxious, or dangerous” (“þanne we schulen myche esilier forbere þe contagiose lustis and likingis”²³).

Health and disease were likewise intimately tied to the social, economic, and political relations between members of different social strata and political affiliations. Dorothy Porter notes, for example, that while the historiography of public health (itself developed in large part to address the threat of epidemic disease) cannot ignore the role played by conceptual and theoretical developments in medicine, it also

²⁰ See Susan Sontag, *Illness as Metaphor and AIDS and Its Metaphors*, (New York: Farrar, Straus and Giroux, 1977; Picador, 1988). Leprosy provides a cogent example of the impossibility of separating the medical, religious, political, and social aspects of disease and how it was experienced in the medieval period. See Carole Rawcliffe, *Leprosy in Medieval England*, (Woodbridge: Boydell Press, 2006) and Luke Demaitre, *Leprosy in Pre-Modern Medicine: A Malady of the Whole Body*, (Baltimore: Johns Hopkins University Press, 2007).

²¹ Anonymous fifteenth-century translation of Higden's *Polychronicon*, taken from British Library *Harley Manuscript 2261* and cited in University of Michigan, *Middle English Dictionary*, <http://quod.lib.umich.edu/m/med/>.

²² Thomas Elyot, *The Boke Named the Gouernour*, (London: 1531), iii. vi. sig. aiiijv, cited in the *Oxford English Dictionary Online*, www.oed.com.

²³ Reginald Peacock, *The Reuele of Crysten Religioun*, edited by W.C. Greet, (1927) cited in *Middle English Dictionary*.

involves an analysis of the structural operation of power, which makes the political implications of population health in different periods and in different societies a central issue of historical research into the subject. In late medieval and early modern societies this means paying attention to a wide variety of different theatres of power including city states, fiefdoms and dukedoms, monarchical realms and large institutional organisations of power such as the Church...Population health has [thus] not only been intimately linked to access to medical care, it has always depended upon collective provision of social welfare and needs to be discussed, therefore, within the broader history of welfare provision.”²⁴

In ancient and early medieval societies, ruling classes implemented public hygiene measures to improve their own spiritual and material environments. As cities grew, the focus of public health measures shifted from the comfort of the elite to preventing the spread of disease from poorer populations. The ‘diseased poor’ became more than an ideological threat to the elite, and “health care acquired a new political status with the rise of urbanization. [The poor] had already become objects of Christian welfare provision; now their behaviour in relation to the spread of disease became subject to [municipal and state] regulation.”²⁵ Public health care, particularly those measures designed to halt or slow the transmission of disease through quarantine and isolation, became matters of state or municipal regulation implemented, in large part, to maintain civil order. Particularly in Continental Europe but also later in England, recurring epidemics stimulated the creation of public health committees dedicated to maintaining social stability and public order. In effect, epidemic disease posed a threat to social order and was met by extensive political.

Although English contagious disease tractates were not written as histories, they

²⁴ Dorothy Porter, “The History of Public Health: Current Themes and Approaches,” *Hygiea Internationalis* 1, no. 1 (1999): 15-16.

²⁵ Dorothy Porter, *Health, Civilization, and the State: A History of Public Health from Ancient to Modern Times*, (London: Routledge, 1999), 24. See also Richard Palmer, “The Church, Leprosy and Plague in Late Medieval and Early Modern Europe,” in *The Church and Healing: Papers Read at the Twentieth Summer Meeting and the Twenty-First Winter Meeting of the Ecclesiastical History Society*, ed. W.J. Sheils, (Oxford: Basil Blackwell, 1982), 79-100.

contain significant historiographical value. They provide some insight into late medieval and early modern conceptual thinking about disease and contagion; they also, even if less overtly, provide a window into contemporary responses and reactions to religious, cultural, social, and political change. Underlying the explicit medical content, in fact, one finds a wealth of implicit commentary that says much about professional strife, religious transformation, and socio-political conflict.

At first glance, the tractates appear to present a relatively unified position on epidemic disease and the pre-eminent role of the professional physician in diagnosing and treating it. It was common practice in medical literature – indeed in virtually all contemporary scientific literature – to make reference to ancient authorities to boost the legitimacy of both text and author, and such deference can largely be “taken for granted, since it is frequent, uncritical, and for the most part reverentially stereotyped.”²⁶ The English tractate authors professed to be experts in or, at the least, relaying what authorities such as Avicenna, Galen, and Hippocrates had already “most exactly wryten of the sayd disease.”²⁷

Underlying the medical discussions in the English tractates, however, was considerable professional tension, as is shown in Table 5. Thomas le Forestier and John Caius, for example, included long criticisms of ‘unlearned practitioners’ in their treatises. Le Forestier found it disgraceful that the ‘noble’ medical profession was defamed by ignoble practitioners who profited from people’s fear and gullibility and led citizens from good medical care “as

²⁶ R.W. McConchie, *Lexicography and Physicke: The Record of Sixteenth Century English Medical Terminology*, (Oxford: Clarendon Press, 1997), 63.

²⁷ Thomas Phayer, *The Kegiment of Life (sic)*...,(London: Edward Whitchurche, 1546), STC 2nd ed. 11969, fol.4r. The ancient medical authorities were actually silent about great epidemics and late medieval and early modern writers faced the daunting challenge of reconciling ancient theories of disease aetiology, prophylaxis, and treatment with the more severe epidemics that they faced.

the blynde ledys the blynde.”²⁸ He devoted a considerable portion of his tractate to instructing his readers how to identify and select a reputable physician. Caius castigated

simple women, carpenters, pewterers, brasiers, sopeballe-sellers, pulsters, hostellers, painters, apotecaries (otherwise then for their drogges,)... promising helpe of al diseases, yea vncurable, with one or two drinckes...of great and hygh prices, as though thei were made of the sune, moone, or sterres, by blessynges and Blowynges, Hipocriticalle prayenges, and foolysh smokynges of shirtes Smockes and kerchieffes, wyth suche others theire phantasies, and mockeryes, meaninge nothinge els but to abuse your light belieue, and scorne you behind your backes with their medicines (so filthie, that I am ashamed to name them) for your single wit and simple belief...²⁹

Table 5: Tractate commentary related to professional strife

Tractate	Professional Strife
<i>De epidemia</i> (mid-late 15 th c.)	“many maisters ther hav bien, grete and fer lierned in theoric or in speculacioun and groundly in sight of medicyne, but thei bien but litel proeved in practic.” ³⁰
<i>Litill Boke</i> (1485)	“physicians seyng the uryng of their pacientes they speke sup[er]ficially & be deceyued.” ³¹
<i>Moulton</i> (1531)	“And so euery man woman, and chylde, to be theyr owne phisycion in tyme of nede, against the vengeaunce and corrupcion of the pestylence...” ³²
<i>Phayer</i> (1546)	“no phisition will vouche-safe to visite any suche infected of the co[m]mon sorte...” ³³
<i>Le Forestier</i> (1485)	“so for sha[m]ful to se so nobel p[er]sons to p[e]yrsh and to dye for the errose of som false lechys” ³⁴
<i>Caius</i> (1552)	“Therefore seke you out a good Phisicien...knownen to haue skille...and flie the vnlearned as a pestilence.” ³⁵

De epidemia, written more than 100 years earlier, had also lamented ignorant practitioners

²⁸ Thomas le Forestier, “Treatise on the Venyms Feuer of Pestilens,” *Additional MS 27582*, *British Library*, fol.70r.

²⁹ Caius, *Sweate*, fols.28r-28v.

³⁰ Lister M. Matheson, “John of Burgundy: Treatises on Plague,” in *Sex, Aging, and Death in a Medieval Medical Compendium. Trinity College Cambridge MS R.14.52, Its Texts, Language, and Scribe*, ed. M. Teresa Tavormina, (Tempe: Arizona Center for Medieval and Renaissance Studies, 2006), 2:579-580.

³¹ *Here Begynneth a Litill Boke Necessarye & Behouefull Aȝenst the Pestilence*, (London: William de Machlinia, ca. 1485), STC 2nd ed. 4590, fol.2v.

³² Thomas Moulton, *This is the Myrour or Glasse of Helth*, (London: Robert Wyre, 1531), STC 2nd ed. 18214a, fol.Aiiiiiv.

³³ Phayer, *Kegiment of Life (sic)*, fol.3v.

³⁴ Le Forestier, “Venyms Feuer,” fol.70r.

³⁵ Caius, *Sweate*, fols.27v.-28r.

who, because they did not understand the cause and quality of disease, prescribed useless remedies that killed their patients. These tractate authors made a distinction between themselves, as university-trained medical doctors, and other medical practitioners by pointing to the latter's ignorance of astronomy, "the whiche is in phisik wonder nedeful."³⁶ Not understanding astronomy, and therefore the primary causes of disease, meant that medical practitioners could also not understand the secondary or immediate causes of disease.³⁷ In contrast, the *Litill Book* translator disparaged physicians who based their diagnoses on urine alone and in doing so "speke sup[er]ficially & be deceyed."³⁸

The English population's medical needs were met by a diverse range of practitioners, many of whom were engaged in multiple occupations.³⁹ Itinerant physicians – both Latinate and those less formally trained – were not uncommon.⁴⁰ Dissension often existed between

³⁶ Matheson, "John of Burgundy," 2:579-580.

³⁷ Physicians who did not use astrology were regarded by many of their peers as incompetent or negligent. Roger Bacon noted in his *On the Errors of Physicians* that "a physician who knows not how to take into account the positions and aspects of the planets can effect nothing in the healing arts except by chance and good fortune." Quoted in Amundsen, *Medicine, Society, and Faith*, 207. See also Allan Chapman, "Astrological Medicine," in Webster, *Health, Medicine and Mortality*, 275-300.

³⁸ *Here Begynneth*, fol.2v.

³⁹ In the mid-1980s, a number of historians recognised that there existed a variety of medical practitioner options within various overlapping social and economic networks. Contrasting the reality of this multi-provider environment with the traditional tripartite division of physician-surgeon-apothecary, these scholars labelled the provision of health care in the late medieval and early modern period the 'medical marketplace.' Mark S.R. Jenner and Patrick Wallis suggest that this "new way of describing early modern medicine" was "at the forefront of a revolution in the history of medicine." "The Medical Marketplace," in Jenner and Wallis, *Medicine and the Market*, 2. While this term has been criticised by some scholars for both its ideological and economic biases and determinism and its non-recognition of the cultural, social, and religious aspects of medical provision, it is nevertheless still widely used.

⁴⁰ Linda Ehram Voigts notes that there is no evidence of the negative association of itinerant physicians with mountebanks in England (as there was in Italy) until the end of the sixteenth century; instead, extant manuscripts suggest that itinerant doctors diagnosed and treated a wide range of ailments for patients from all social classes. Linda Ehram Voigts, "Fifteenth-

various practitioners, both within and across practitioner types.⁴¹ Senior members of the Cambridge and Oxford medical faculties attempted to regulate and restrict medical practice in 1421 by petitioning King Henry V; the petitioners complained of “many unconnyng and unapproved in the forsayd science [who] practiseth...so that in this roialme is every man, be he never so lewed, takyng upon hym practyse, y-suffred to use hit, to grete harm and slaughtre of many men.”⁴² By the sixteenth century “humanistic physicians [were] in open competition with an array of representatives of a vigorous and evolving system of traditional medicine.”⁴³ University-trained physicians regularly denigrated their competitors as ‘quacks’ or ‘empirics,’ while they, in turn, were criticised for their perceived greed and pretentiousness. The College of Physicians of London was instituted in 1518 in an attempt to regulate the licensing of physicians and the provision of medical services, particularly in London.⁴⁴ Although it did help to revitalize teaching in the medical faculties at Cambridge

Century English Banns Advertising the Services of an Itinerant Doctor,” in *Between Text and Patient: The Medical Enterprise in Medieval & Early Modern Europe*, ed. Florence Eliza Glaze and Brian K. Nance, (Firenze: SIMSEL, 2011), 245.

⁴¹ For an overview of cross-practitioner disputes, see Andrew Wear, *Knowledge and Practice in English Medicine, 1550-1680*, (Cambridge: Cambridge University Press, 2000) and Margaret Pelling, *Medical Conflicts in Early Modern London: Patronage, Physicians, and Irregular Practitioners, 1550-1640*, (Oxford: Clarendon Press, 2003).

⁴² *Rotuli Parliamentorum*, quoted in Claire Jones, “Discourse Communities and Medical Texts,” in *Medical and Scientific Writing in Late Medieval English*, ed. Irma Taavitsainen and Päivi Pahta (Cambridge: Cambridge University Press, 2004), 29.

⁴³ Pelling and Webster, “Medical Practitioners,” 165. Humanist medicine refers to the movement which sought to remove Arabic and medieval influences on and interpretations of classical Hippocratic and Galenic theories by returning to the original documents and adhering to their original meanings. Paul Oskar Kristeller, “Humanism,” *Minerva* 16, no. 4: (1978) 586-595, doi: 10.1007/bf01100334; Jerome J. Bylebyl, “The School of Padua: Humanistic Medicine in the Sixteenth Century,” in Webster, *Health, Medicine and Mortality*, 335-370; Vivian Nutton, “John Caius and the Linacre Tradition,” *Medical History* 23, no. 4 (1979): 373-391, PMID: PMC1082578.

⁴⁴ In 1512, Parliament passed *An Act concerning Physicians and Surgeons*, which stated that no one could practice medicine until he was licensed by the bishop of his diocese (except Oxford or Cambridge graduates). The College of Physicians was established shortly

and Oxford, by the end of the sixteenth century the College remained small, both administratively and in influence.⁴⁵ Its jurisdiction was limited to an 11.27 kilometre (seven-mile) radius in London, and even there it enjoyed little success in its ongoing attempts to control the licensing and practice of medicine.⁴⁶ In London, unlicensed practitioners continued to flourish, and throughout the countryside they dominated the provision of care.⁴⁷

It was against this state of affairs that the licensed physician-authors railed. Their tractates, and indeed many of the translated tractates written by Continental physician authors, reinforced the traditional view that *physick* was a complex art whose accurate performance was based on many years of theoretical learning (meaning formal university education) and judgement.⁴⁸ Caius was one of the most vocal critics of unlicensed medical practitioners. He was also a leading figure in the College of Physicians, being its president for a number of years. He had received his medical training in Padua and was a renowned Galenist, humanist, and royal physician whose staunch adherence to classical humoralism

thereafter and given the authority to license physicians throughout the country (again except Oxford or Cambridge graduates). Pelling and Webster, "Medical Practitioners," 168-173.

⁴⁵ For changes made in sixteenth century medical education, see Peter Murray Jones, "Reading Medicine in Tudor Cambridge," in *The History of Medical Education in Britain*, ed. Vivian Nutton and Ray Porter, (Amsterdam: Editions Rodopi B.V., 1995), 153-183. See also Faye Marie Getz, "The Faculty of Medicine before 1500," in *The History of the University of Oxford*, vol. 2, *Late Medieval Oxford*, ed. J. I. Catto and Ralph Evans, (Oxford: Clarendon Press, 1992), 373-405.

⁴⁶ George Clark, "History of the Royal College of Physicians of London," *British Medical Journal* 1, no. 5427 (1965): 79-82.

⁴⁷ See R.S. Roberts, "The Personnel and Practice of Medicine in Tudor and Stuart England. Part I: The Provinces," *Medical History* 6, no. 4 (1962): 363-382, PMID: PMC1034759 and "The Personnel and Practice of Medicine in Tudor and Stuart England. Part II: London," *Medical History* 8, no. 3 (1964): 217-234, PMID: PMC1033388. See also James K. Mustain, "A Rural Medical Practitioner in Fifteenth Century England," *Bulletin of the History of Medicine* 46, no. 5 (1972): 469-476 and Michael T. Walton, "Thomas Forestier and the 'False Lechys' of London." *Journal of the History of Medicine and Allied Sciences* 37, no. 1 (1982): 72, doi: 10.1093/jhmas/XXXVII.1.71.

⁴⁸ Paul Slack, "Mirrors of Health and Treasure of Poor Men: The Uses of the Vernacular Medical Literature of Tudor England," in Webster, *Health, Medicine and Mortality*, 257.

coloured his perceptions of both disease aetiology and his fellow practitioners.⁴⁹ Le Forestier, a Norman doctor, is known to have travelled in modern-day Italy and was possibly trained there.⁵⁰ Le Forestier's tractate called for medical practitioners to "be ryghtfully examyned and that wyse men and worthy men [university-trained physicians] may be takyn for wyse men and that they that use falseness may be punished..."⁵¹ One wonders if le Forestier's commentary on the 'false lechys' was actually meant to be a more general commentary on the state of English medicine at the time, which lagged behind that of Italy and France in terms of education, organisation, status, and general medical culture until at least the mid-sixteenth century.⁵² John of Burgundy was also likely university-trained, given his derision of medical practitioners who had not studied astronomy but who instead devised remedies based on a misunderstanding of disease. These authors claimed to have written their treatises, in part, to counter the dangers posed by unauthorized practitioners.

Thomas Phayer wrote against this scholastic tradition. Although he had begun his pediatric medical practice around 1540, he received a medical doctorate from Oxford only in 1559. He was not a member of the College of Physicians; he was neither trained abroad nor exposed to academic humanists until later in his career.⁵³ Phayer rejected the classical academic stance of men like Caius and wrote instead in a style that demonstrated his close relationships with his patients and his respect for non-professional practitioners. Like many

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⁵⁰ Guy Panel also notes "Des allusions imprécises que l'on trouvera disséminées dans le *Tractatus* tendraient à faire croire qu'il a soigné des rois et des reines et de puissants seigneurs." Thomas le Forestier, *Traite de la Peste*, (Rouen, 1496; facs. with intro. by Gustave Panel, Rouen: Imprimerie Leon Guy, 1909), xvij.

⁵¹ Le Forestier, "Venym's Feuer," fol.70r.

⁵² Pelling and Webster, "Medical Practitioners," 165.

⁵³ The English humanist movement was led by men who had studied in Italy. Nutton, "Linacre Tradition," 377.

tractate authors, Phayer included herbal remedies for self-prophylaxis or treatment, but he also claimed that he wrote his tractate because professional physicians refused to see the ill.⁵⁴

A further source of professional strife was the language in which the tractates were produced. Before the mid-sixteenth century, a genre of broad medical works specifically intended for the non-medical reading public was already being produced (for the most part) by non-medical men who translated or adapted Continental works. At the same time, few English medical practitioners in the fourteenth to sixteenth centuries – professional or otherwise – had the technical Latin expertise of university-trained physicians. Seeking access to both authoritative (classical) and new medical and surgical writings, but reliant on translations and adaptations, these practitioners created a specific and growing demand for medical texts that were printed in English. Thus, le Forestier wrote his treatise in English to make it accessible to English practitioners and readers. There is little evidence that physicians as a whole disapproved of the production and dissemination of these works.⁵⁵ However, even in the early fifteenth century some physicians and guild-trained medical practitioners sought to preserve their exclusive professional role by limiting medical training to universities and controlling (indeed restricting) the dissemination of medical knowledge beyond the universities or guilds.⁵⁶ These practitioners criticised the publication of medical works in English, “charging that dissemination of medical information among the

⁵⁴ Amundsen contends in his study of medical ethics that the extent to which physicians fled from plague cannot be determined with certainty, as there is no reference to it in the tractates. He does not address how many physicians might have refused to care for the ill, as Phayer claims, but suggests that “physicians necessarily came into frequent contact with patients suffering from pestilence. Various prophylactic techniques were developed and adopted by physicians to protect themselves from contagion.” *Medicine, Society, and Faith*, 298.

⁵⁵ Slack, “Mirrors of Health,” 257.

⁵⁶ Jones, “Discourse Communities,” 29.

unqualified resulted in malpractice and quackery.”⁵⁷ In reality, the apparent dichotomy between ‘learned’ Latin works and ‘unlearned’ English works was false, as the English works were mostly translations and therefore not ‘folk practices’ as professional physicians often claimed.⁵⁸ Nevertheless, Caius disdained the use of English in medical treatises, believing it would lower academic standards. He claimed that he felt bound to use English, however: “Therfor compelled I am to vse this our Englishe tongue... it also better to write this in Englishe after mine own meanyng, then to haue it translated out of my Latine by other after their misunderstandyng.”⁵⁹ Phayer, on the other hand, challenged the pre-eminent position of the Latinist university-trained physicians by producing medical works solely in English – in his words, questioning “Why grutche they phisik [humanist physicians] to come forth in Englysshe? wolde they have no man to knowe but onely they?”⁶⁰ A contemporary medical writer, Sir Thomas Elyot, wrote a scathing rebuttal in his work *The Castel of Helth* against those physicians who challenged the use of English in medical works by writing

If physitions be angry that I have wrytten physyke in englyshe, let them remembre that the grekes wrote in greke, the Romayns in latyne, Avicenna and the other in Arabike, which were their owne propre and maternal tongues. And yf they had bene as moche attached with envy and covetyse as some nowe seem to be they wolde have devysed somme partycular language with a straunge cypher of fourme of letters wherein they wolde have written their scyence, whyche language or letters noo man shoulde have

⁵⁷ Ted Brown, “Word Wars: The Debate over the Use of the Vernacular in Medical Writings of the English Renaissance,” *Texas Studies in Literature and Language* 37, no. 1 (1995): 99, <http://www.jstor.org/stable/40755062>. In a review of the debates about the production of vernacular versus Latin medical works, Brown notes the irony that the dispute was carried out primarily in English publications.

⁵⁸ Faye Marie Getz, “Charity, Translation, and the Language of Medical Learning in Medieval England,” *Bulletin of the History of Medicine* 64, no.1 (1990): 5. See also Faye Getz, *Medicine in the English Middle Ages*, (Princeton: Princeton University Press, 1998). One major activity undertaken by the College of Physicians in the sixteenth century was prosecuting non-licensed medical practitioners who claimed to have gained their knowledge of medical matters from vernacular print sources. Pelling, *Medical Conflicts*, 155-164.

⁵⁹ Caius, *Sweate*, fol.7v.

⁶⁰ Phayer, *Kegiment of Life (sic)*, fol.2r.

known that hadde not professed and practysed physyke.⁶¹

Textual witnesses of professional strife were not uncommon. Amundsen notes that “[v]ehement condemnations of fellow physicians occur frequently in the medical literature of the Middle Ages, untempered by humility. The authors of pest tractates frequently condemned the theories and techniques of their colleagues.”⁶² By the late fifteenth century, the condemnation targeted not only fellow physicians but also, and rather more strongly, other medical practitioners. In addition to informing and educating their audiences about epidemic disease, then, the tractates offered their authors an opportunity to dispute their competitors’ knowledge and practices. To some extent the denigration of competitors found in the tractates need not be taken at face value, given how common it was and being in part what Paul Slack calls “calculated appeal for readers.”⁶³ It does highlight, though, the reality that a battle for credibility between physicians – and between unauthorised practitioners and the more formally trained doctors – extended across centuries.⁶⁴

Besides reflecting tensions between medical practitioners, the tractates began to adopt a moralistic tone by the late fifteenth century. While the number and severity of plague epidemics had begun to subside by then, the number of tractates printed and in circulation increased.⁶⁵ Concomitant with this increase – and tied explicitly to extensive religious

⁶¹ Sir Thomas Elyot, *The Castel of Helth Corrected and in Some Places Augmented...*, (London: Thomas Berthelet, 1541), STC 2nd ed., 7644, fol.Aivr.

⁶² Amundsen, *Medicine, Society, and Faith*, 294.

⁶³ Slack, “Mirrors of Health,” 257.

⁶⁴ Walton, “‘False Lechys’,” 72. Walton points out that le Forestier’s tractate is among the ‘sparse materials’ that discuss the role of and attitudes towards unauthorised practitioners in London before the sixteenth century.

⁶⁵ In England, plague outbreaks were recorded in thirty-four years during the fifteenth century; in the sixteenth century, this declined to nineteen years. R. S. Gottfried, *Epidemic Disease in Fifteenth Century England*, (New Brunswick, NJ: Rutgers University Press, 1978).

change – was a paradigmatic shift in how epidemic disease was presented and explained (see Table 6). Disease prevention recommendations were no longer strictly physical, but instead stressed social order and morality. Contagion and disease transmission were reframed as divine retribution for human sin, sent through celestial influences on the quality of earthly air, which in turn became corrupted and caused disease. ‘Venomous air’ was not entirely rejected as a cause of disease, but was portrayed as the result of divine wrath rather than of astrological or environmental events: “And the malyce of the coniunccio[n] & of other syn, this is left in the ayre and beneth, the which malyce & venym hath his respect and his influe[n]ce more in the complexio[n] of man tha[n] of beast...”⁶⁶

Table 6: Tractate commentary related to divine will

Tractate	Divine Will
<i>De epidemia</i> (mid-late 15 th c.)	None
<i>Litill Boke</i> (1485)	“whan these tokenes appe[r] it is to drede grete pestilence but god of his mercy wille remoue it” ⁶⁷
<i>Moulton</i> (1475/1531)	“synne that reygne[n]t amo[n]g head me[n]. And the gouerners of the church and of the lawe, is cause of the pestilence.” ⁶⁸
<i>Phayer</i> (1546)	“what payne or punyshme[n]t can ther be ymaged to put vs in remembraunce of oure owne wyckednesse more then this only plage & scourge of god.” ⁶⁹
<i>Le Forestier</i> (1485)	None
<i>Caius</i> (1552)	“If other causes ther be supernatural, them I leue to the diuines...and the diseases thereof to cure, as a matter with out the compasse of my facultie.” ⁷⁰

The integration of divine causation into medical treatises coincided with increasing religious dissent which ultimately led to the Reformation. The tractates’ religious tone was not limited to Catholic or Reformer writers, but was used by writers of both persuasions as

⁶⁶ Moulton, *Glasse of Helth*, fol.Biv.

⁶⁷ *Here Begynneth*, fol.1v.

⁶⁸ Moulton, *Glasse of Helth*, fol.Avv.

⁶⁹ Phayer, *Kegiment of Life* (*sic*), fol.2r.

⁷⁰ Caius, *Sweat*, fol.39r.

each side of the religious divide attempted to explain epidemic disease in terms of the moral failings of the other or of society in general. In England, religious dissension was exacerbated by the political crisis of Henry VIII's years-long attempt to annul his marriage to Catherine of Aragon. The turmoil caused by Henry's subsequent separation of the English church from the Roman Church in 1534 through the Act of Supremacy, his dissolution of monasteries and other religious houses over the following decade, and the swings in official religion during the reigns of Edward VI, Mary I, and Elizabeth I was reflected in a noticeable shift from astrological and medical to religious aetiology and treatment arguments.⁷¹

The *Litill Boke* suggested that penance was the best remedy for plague, and indeed portrayed God as a merciful being who would protect man from the coming of the plague. However, Thomas Moulton's c.1475 tractate was actually the first English-language tractate to make the religious shift which turned the medical treatise into a moral one, shortly predating the reconstruction of plague in religious terms in the tractates of Continental Lutherans and Calvinists in the early sixteenth century. Moulton's vocation as a Dominican friar and his pre-occupation with morality coloured his adaptation of *De epidemia*. Much of the astrological and medical discussion in the original tractate was reframed in moralistic terms or subsumed within a broader religious re-contextualization of the disease. In fact, Moulton claimed, the impact of the 1345 conjunction of Saturn and Jupiter was still felt in the late fifteenth century because it had been "wrought more principally in the synne of man

⁷¹ The Reformation affected life in England broadly. See, for example, A.G. Dickens, *The English Reformation*, 2nd ed., (London: B.T. Batsford, 1965; University Park: Pennsylvania State University Press, 1989); Keith Thomas, *Religion and the Decline of Magic: Studies in Popular Beliefs in Sixteenth and Seventeenth-Century England*, (Harmondsworth: Penguin Books: 1978); Eamon Duffy, *The Stripping of the Altars: Traditional Religion in England 1400-1580*, (New Haven: Yale University Press, 1992).

kynde more than of any other.”⁷² Those most susceptible to disease were those who lived immorally (no longer just immoderately). Prayer and repentance were the most important curative rituals. Although Moulton repeated much of the medical advice originally proffered by John of Burgundy, his tractate was first and foremost a moral treatise, not a medical one. This is evidenced by Moulton’s addition of a long opening moral statement about the plague being divine retribution for sin and his reconfiguration of John of Burgundy’s opening astrological material to a commentary on divine will.⁷³

Thomas Phayer situated his discussion of the plague directly in the tide of religious upheaval of mid-sixteenth century England. His treatise began with a long preface that asserted that all diseases and infirmities were the will of God sent as a punishment to mankind for its many sins and for its disobedience of the commandments.⁷⁴ He then reflected on what he perceived to be the religious and moral failings of his fellow man:

What disease is there in the worlde, so venemous in infectyng, so full of paine in suffryng, so hastye in deuouryng, and so difcile in curyng, as the plage is? And yet are we now adayes, so stubburne and so frowarde, or els so drowned in the myre of fylthy and carnall appetytes, that we nothyng do regarde these open and manifest toke[n]s of our condemnation in the sight of God, but apply our hole studies to perseuer in our sinnes euer worse & worse, wherfore it is no maruayle though the sayde disease encrease, but rather to be feared, that almyghtye God wyll poure hys indignation vpon us...⁷⁵

For Phayer, the most important prophylaxis was penance to address the diseases of the soul.

Neither of the tractates on the sweating sickness belaboured the point of divine will or

⁷² Moulton, *Glasse of Helth*, fol.Biir.

⁷³ Differences between the original 1475 manuscript and 1531 print versions of the tractate are discussed below.

⁷⁴ Little is known about Phayer’s public religious life. His will directed his wife to spend £5 for an otherwise ambiguous undertaking “where she doth knowe, by an appointement betwene her and me.” Peter Cunningham, “The Will of Thomas Phaer,” in *The Shakespeare Society’s Papers*, (London: F. Shoberl, 1849): 4:4. Some historians have suggested that the money was to be spent on auxiliary burial rites in the Catholic Church.

⁷⁵ Phayer, *Kegiment of Life (sic)*, fol.2v.

punishment for sin, even though both were written during the same period of religious transformation as were Moulton's and Phayer's tractates. Thomas le Forestier does make a comment about original sin being the ultimate cause of all of man's troubles, but he does not further discuss the point of divine will. John Caius explicitly chose not to discuss divine will. Such deliberate avoidance of the issue may have reflected his staunch Galenism, which left little room for speculation of divine causation. It may also have been a calculated move, given his known religious conservatism and the difficulties he faced as a result of his Catholicism.⁷⁶ From a medical standpoint, though, the sweating sickness was not portrayed through the same religious prism as was the plague.

In his study of early modern medical literature, Slack contends that medical authors always saw God as the first cause of human illnesses. Even though his "role was [sometimes] implicit and not always mentioned...above all, plague elicited from all authors an acknowledgement of God's handiwork."⁷⁷ Certainly by the early sixteenth century divine intervention was a common literary theme in explanations of epidemic disease. On the other hand, not all plague-related publications emphasized religious or moral arguments, and by the 1560s pamphlets were in circulation that focused instead on preventing the spread of infection. Indeed, a sharp divide between the moral and medical views of the plague was evident in the tractates by 1603.⁷⁸ Given that the religious portrayal of the plague was not

⁷⁶ W. Munk notes that Caius was physician to Edward VI, Mary I, and Elizabeth I, but was removed from the latter's service because of his Catholicism. "John Caius," *The Roll of the Royal College of Physicians of London*, vol. 1, 1518-1700, (London: Longman, Green, Longman, and Roberts, 1861). Vivian Nutton, however, notes that "his name does not appear in the royal household accounts, and the story of his dismissal from court in 1568 for popery is far from proven." "Caius, John (1510–1573)," *Oxford Dictionary of National Biography Online*, ed. P Carter, (Oxford: Oxford University Press, 2004), doi:10.1093/ref:odnb/4351.

⁷⁷ Slack, "Mirrors of Health," 269.

⁷⁸ George R. Keiser, "Two Medieval Plague Treatises and their Afterlife in Early Modern

included in tractate discussions of the sweating sickness – at least in the two extant treatises consulted for this thesis – the extent to which the forceful religious re-conceptualizations of disease aetiology and prevention suggested by Moulton and Phayer, among others, actually replaced previous beliefs is unclear and should not necessarily be read as representative.

The tractate authors furthermore served as witnesses to contemporary socio-political issues. As is shown in Table 7, authors' experiences or biases often affect how disease events are portrayed. At least fourteen national plague epidemics, and innumerable local or regional outbreaks, occurred during the fifteenth century when England was embroiled in a series of dynastic battles – colloquially named the 'Wars of the Roses' – between the Yorkist and Lancastrian factions. Writers of contemporary historical accounts of the era inevitably favoured one side or the other and this bias comes through in their writing when they discussed where a disease outbreak first erupted, what was happening in the country or city at the time, who was affected, or how the outbreak was handled. While no original plague tractates were written in England during the 'Black Death', an original English tractate on the first outbreak of the sweating sickness in 1485 does survive, and like the contemporary plague-specific tractates, reflects socio-political unrest.

Table 7: Tractate commentary related to socio-political relations

Tractate	Socio-Political Relations
<i>De epidemia</i> (mid-late 15 th c.)	None directly; some pre-1400 versions are dedicated to Richard II
<i>Litill Boke</i> (1485)	Publication and dissemination coincided with the first outbreak of the sweating sickness and questions about Henry VII's legitimacy
<i>Moulton</i> (1475/1531)	"this treatyse is very nedefull and necessary...for a comonwelth and health of the kynges lyege people." ⁷⁹
<i>Phayer</i> (1546)	None directly
<i>Le Forestier</i> (1485)	"...thy hyghnes and thy grete power is vexed & trobled w[ith] dyu[er]s sykenysse ..." ⁸⁰
<i>Caius</i> (1552)	Dedication and repetition of link between first outbreak of sweating sickness & Henry VII's claims to the English throne

Numerous versions of *De epidemia* were produced during the Wars of the Roses era. Although the translation consulted for this thesis sticks closely to the original fourteenth-century Latin version and does not address England's dynastic factionalism, some translation versions produced before 1400 contain dedications to Richard II. Without definitive dating of these fourteenth-century tractates, it is difficult to say with certainty if they provided early commentary on the long-standing disputes between Richard and his uncle John of Gaunt and cousin Henry Bolingbroke, the latter eventually deposing Richard in 1399 and becoming Henry IV, the first 'Lancastrian' king of England. It appears that the post-1400 versions of the tractate did not include dedications to Henry IV. Of the tractates considered here, only Thomas Moulton's c.1475 adaptation of *De epidemia* might have been produced prior to the late fifteenth century. Its strong religious and moral tone was likely, in part, a reaction against the martial and dynastic uncertainty of the times and the ongoing threats to personal and communal stability. While little is known about Moulton's life or personal sympathies, he writes in the tractate's opening lines that its production was necessary for the protection of

⁷⁹ Moulton, *Glasse of Helth*, fol.Aiiiiir.

⁸⁰ Le Forestier, "Venym's Feuer," fol.70r.

the health of the king's supporters.⁸¹ This suggests that Moulton at least accepted the current king (Edward IV) as legitimate. Later in the tractate, Moulton discusses the link between the planetary conjunction of 1345, corrupt air, and

other wonderfull alteracions betwxit kynge and kynge, lorde and lorde, man and man woma[n] and woman, father and son, brother and brother, and many other...⁸²

His disdain for the ongoing dynastic rivalry and the turmoil it caused is evident. The moral themes found in the later printed versions of the tractate used even stronger language than the original manuscript. For example, in his discussion of plague as divine retribution, Moulton originally states that where the four pillars of the Church (Saints Jerome, Augustine, Gregory, and Ambrose) “speken of this mater, they seyen holi that syn that regneth amonge comones.”⁸³ In the printed version of the tractate, this was changed to “Where they speke of this mater, they saye that synne that reyneth among the people, *And namely that synne that reyneth amonge hed men & the gouernours of the Churche*”⁸⁴ (italics added). Such statements might be considered as indirect political and religious commentary on the country's secular and religious rulers, including Henry VIII's attempts, with the direct support of church high officials, to obtain an annulment.

Supporters of Richard III used the first outbreak of the sweating sickness to question the legitimacy of Henry VII's claims to the English crown in late 1485. In their reassessment of the sweating sickness, John Wylie and Leslie Collier demonstrate that Lord Stanley's Yorkist entourage had already encountered the disease during the summer of 1485 and may

⁸¹ Moulton, *Glasse of Helth*, fol.Aiiiiir.

⁸² Ibid., fol.Biiiv. Moulton also discusses the defeat of emperors, the perils of the sea, and other natural and human disasters. In doing so, he may have been downplaying what might have otherwise been dangerous commentary.

⁸³ Keiser, “Plague Treatises,” 301.

⁸⁴ Moulton, *Glasse of Helth*, fol.Avv.

have brought it with them to London after switching their allegiance from Richard to Henry Tudor. They also point to clerical records that demonstrate disease outbreaks elsewhere in the country prior to its eruption in London.⁸⁵ None of this, however, is reflected in contemporary accounts of either the York-Tudor battle or the disease outbreak. For example, the *London and Croyland Chronicles* and Thomas le Forestier's tractate tie the onset of the sweating sickness with Henry's arrival from France. Although the *Chronicles* authors had Yorkist sympathies, and le Forestier had ties to Richard III, such references lent weight to questions about the Henry VII's legitimacy, particularly in London.⁸⁶ Robert S. Gottfried claims that le Forestier travelled in Henry's 'triumphal entourage,' though it is more likely that le Forestier dedicated the tractate to the new English king after Henry's victory, since Henry also gained the title of Duke of Normandy and thus became le Forestier's overlord.⁸⁷

Le Forestier's manuscript may have been written to protect his position, if not his life:

O noble and meke p[ri]nce I beseche the of thy noble mageste to spare me though I have be so bold to wryte to thy highnes of this lytell governyng...I be seche the to take me and favour me...⁸⁸

⁸⁵ John A.H. Wylie and Leslie H. Collier, "The English Sweating Sickness (*Sudor Anglicus*): A Reappraisal," *Journal of the History of Medicine and Allied Sciences* 36, no. 4 (1981): 428, doi: 10.1093/jhmas/XXXVI.4.425.

⁸⁶ For the dynastic sympathies of chronicle writers, see Edward Donald Kennedy, *Chronicles and Other Historical Writing*, vol. 8 of *A Manual of the Writings in Middle English, 1050-1500*, (New Haven.: Connecticut Academy of the Arts and Sciences, 1989), 2049. Richard III granted le Forestier a lifetime annuity in January 1485. Rosemary Horrox and P.W. Hammond, ed., *British Library Harleian Manuscript 433*, vol. 1, *Register of Grants for the Reigns of Edward V and Richard III*, (Gloucester: Alan Sutton, 1979), 256.

⁸⁷ R.S. Gottfried, "Population, Plague, and the Sweating Sickness: Demographic Movements in Late Fifteenth-Century England," *The Journal of British Studies* 17, No. 1 (1977): 18, <http://www.jstor.org/stable/175690>. Charles Creighton notes that "[whatever] his relation with the Tudor court may have been [Forestier's] name does not occur in the patents as one of the king's physicians." *History of Epidemics*, vol. 1, *From A.D. 664 to the Extinction of Plague*, (Cambridge: Cambridge University Press, 1891), 237.

⁸⁸ Le Forestier, "Venymys Feuer," fol.77r. In 1488, Henry VII granted le Forestier a general pardon; although the record does not specify his crime, it is not unreasonable that le Forestier

Although Thomas Phayer's tractate was written and published at a time of "rigorous social consolidation of the realm under Henry VIII as a religious and cultural entity detached from continental Europe,"⁸⁹ it contained no explicit commentary on contemporary socio-political events. John Caius's tractate, on the other hand, contains two suggestive notations. The first is his dedication of the tractate to Sir William Herbert, 1st Earl of Pembroke and Baron Herbert of Cardiff. Herbert married Anne Parr, sister of Catherine Parr, but his familial, political, and religious allegiances shifted as necessary to maintain his status and position during the tumultuous years of Edward VI's and Mary I's reigns.⁹⁰ Caius was a royal physician and moved in some of the same aristocratic and political circles as did Herbert; his dedication may reflect his own careful political manoeuvring. The second is his reiteration of contemporary claims that the sweating sickness arrived from France with Henry VII, thereby reflecting questions about the legitimacy of the Tudor monarchy.⁹¹

Arnold suggests that the greatest help in knowing what a medieval document says is to know what it is likely to say; but taking this approach might lead one to miss the nuances

was pardoned for supporting Richard. Great Britain, Public Records Office, *Calendar of Patent Rolls Preserved in the Public Record Office, Henry VII volume 1 (1485-94)*, (Burlington: TannerRitchie Publishing in collaboration with the Library and Information Services of the University of St Andrews, 2004-2008), 202, Membrane 16.

⁸⁹Rick Bowers, *Thomas Phaer and The Boke of Chyldren*, (Tempe: Arizona Center for Medieval and Renaissance Studies, Arizona State University, 1999), 2. More details about Phayer's life are found in Bower's introduction to *The Boke of Chyldren*.

⁹⁰ Before 1551, Herbert was given the guardianship of King Edward VI, was made a Knight of the Garter, and was granted his earldom and barony. Narasingha P. Sil, "Herbert, William, First Earl of Pembroke (1506/7–1570), Soldier and Magnate," *Oxford Dictionary of National Biography Online*, edited by P Carter, (Oxford: Oxford University Press, 2004), doi:10.1093/ref:odnb/13055.

⁹¹ The re-iteration of these claims is curious, as they would not have been popular with any of the Tudor monarchs. It is possible that the references were meant to place blame on the French mercenaries, rather than on Henry VII himself. Threats to the Tudor's ongoing legitimacy are reviewed in Desmond Seward, *The Last White Rose: Dynasty, Rebellion and Treason*, (London: Constable, 2010).

that run through many tractates.⁹² Each tractate, particularly those that were original writings or, at the least, adaptations rather than direct translations of older treatises, contain within them reflections of the turmoil of England's fifteenth and sixteenth centuries. Some of them might have been produced for both political and medical reasons, with the recurrent epidemics providing an opportunity for commentary that could otherwise be dangerous.

Examining how each of the three issues discussed here – professional strife, religious transformation, and socio-political crises – was reflected in the contagious disease tractates demonstrates that the medical texts were about much more than the epidemic diseases they purported to be addressing. To make sense of how disease and disease transmission was understood, an analysis of the portrayal of disease in contemporary documents cannot be conducted separately from an analysis of the political and social context in which those documents were written. The inclusion of socio-political commentary in the tractates is not unexpected, given that each author wrote within and was part of a particular historical context. However, since context affects the perception and portrayal of medical issues, the texts must be read as more than medical literature. Reading contagious disease tractates as social commentaries then, instead of solely as medical texts, sheds a different light on their authority as sources of medical knowledge and beliefs.

The contagious disease tractate as more (or less) than a medical treatise

Concepts of health and disease were intertwined with medical, religious, political, and social issues in late medieval and early modern England; so too were the English tractates comprised of more than medical concepts of and approaches to epidemic disease. The

⁹² Arnold, *Medieval History*, 33.

majority of the tractates' medical contents were copied, often verbatim, from older tractates and other medical texts. Even by the later sixteenth century, when the tractate authors began to introduce new discussions about the nature of contagion and the virtues and efficacy of various remedies, the tractates continued to be based on the traditional Galenic methodology that had characterised the entire genre from its inception.⁹³ At the same time, these authors often discussed how plague-causing miasmatic conditions were presaged by the vast number of animals such as snakes, rats, and moles that came to the surface to escape the bad subterranean air; such commentaries were often repetitions of Avicenna's writings from the tenth century and should not be taken as evidence that such events were witnessed. The professional, religious, and socio-political commentaries in the tractates, on the other hand, while also being somewhat repetitive at times, more clearly illustrate the contemporary anxieties and preoccupations that extended beyond the medical concerns related to epidemic disease. In this light, the English contagious disease tractate must be viewed as more, or perhaps less, than a medical treatise.

H.S. Bennett's 1969 study of books and readers neatly sorts the types of books available to the English public between 1475 and 1557 into ten discrete categories, one of which is medicine.⁹⁴ However, although the modern classification of medical texts – meaning those that deal with human diagnosis, prognosis, and therapy – is useful, it is not entirely straightforward because it excludes some texts that contemporaries would have considered to be medical-related, while including other texts that perhaps had other

⁹³ Slack, "Mirrors of Health," 249.

⁹⁴ Other categories include: religion and devotion; law; education; information; arithmetic, astronomy, and popular science; geography; history; news; and literature. H.S. Bennett, *English Books & Readers* (Cambridge: Cambridge University Press, 1969), 1:65-151.

purposes.⁹⁵ Paul Slack's study of medical-related texts printed between 1486 and 1604, for example, demonstrates that the term 'medical literature' is actually difficult to apply to the late medieval and early modern periods. As the authors of these texts had diverse accomplishments and interests, their works necessarily crossed and blurred the boundaries of medicine and other subjects.⁹⁶ The role played by clergymen in translating and producing texts with medical content, for example, was particularly important by the fifteenth century and ensured that there was a considerable overlap between texts that today would be classified as either medical or religious. While the authors of the more religious texts normally concentrated on spiritual causes and remedies for disease, in the tractates in particular they incorporated and blended both medical and theological arguments, making it difficult for modern historians to distinguish between the two types of publications as they currently define them.

In their studies of contagious disease tractates, a few historians have acknowledged the impact that religious transformation in particular had on the treatises' contents and ongoing relevance. In his comparative study of two English tractates, George R. Keiser suggests that those tractates that emphasized the role of divine retribution in plague aetiology ultimately had longer lives in print during the religious turmoil of the sixteenth century than did less moralistic tractates.⁹⁷ Fabbri suggests, however, that the tractates' religious tone perhaps reflected less the authors' beliefs than profit-inspired responses to angst.⁹⁸ This evolution in the tractate also reflected, in addition to actual religious transformation, the reality that

⁹⁵ Linda Ehsam Voigts, "Scientific and Medical Books," in *Book Production and Publishing in Britain 1375-1475*, ed. Jeremy Griffiths and Derek Pearsall, (Cambridge: Cambridge University Press, 1989), 345, 387 fn 4.

⁹⁶ Slack, "Mirrors of Health," 255.

⁹⁷ Keiser, "Plague Treatises," 292-324.

⁹⁸ Fabbri, "Continuity and Change," 193.

medical professionals played an increasingly minor role in the production of English medical literature: by the sixteenth century, the majority of printed medical texts in England were produced by men who did not earn their living by practicing medicine, with the clergy's contribution to the literature being particularly significant.⁹⁹ This diminishes neither the reality of the religious changes of the sixteenth century nor the desolation caused by recurring epidemics. It does point to the evolution of the contagious disease tractate – or at least the plague-specific tractates – into what Fabbri calls “hybrid works” with shared vocabulary.¹⁰⁰ In opposition to the tractates that focused on medicine, a number of these ‘hybrid’ tractates imitated the medical works but focused on spiritual plague remedies while at the same time dismissing the more medical prophylactic and remedial recommendations. As these tractates moved away from their traditional focus on the medical aspects of the plague (aetiology, prophylaxis, and treatment), they not only reinforced social and religious norms but also re-interpreted epidemic disease – and fear of it – as a means of social control.¹⁰¹ The tractates’ religious contents therefore must not be taken as concrete evidence of changing medical beliefs, but rather as indicators of shifts and tensions in broader societal mores and values as religious traditions were questioned, attacked, and transformed.

The role that the inclusion of commentary related to professional strife and socio-political crises had on the identity of the contagious disease tractate as a medical treatise has received much less attention. It is, nevertheless, a critical aspect of both the evolution of the tractate and its role as an authoritative source of medical knowledge, practices, and beliefs.

⁹⁹ Non-medical writers included lawyers, civil servants, clergymen, and professional writers. Thomas Moulton, Andrew Boorde, and Thomas Paynel, members of the Dominican, Carthusian, and Augustinian orders, respectively, were among the best known authors of ‘medical’ works in the fifteenth and sixteenth centuries. Slack, “Mirrors of Health,” 252-255.

¹⁰⁰ Fabbri, “Continuity and Change,” 40.

¹⁰¹ Slack, “Mirrors of Health,” 271.

Le Forestier, for example, wrote his sweating sickness tractate in 1485 in large part as a reaction against what he perceived to be the harmful activities and defective knowledge of the ‘false lechys.’ He sought to define the nature of and treatment for the disease, as he understood it, to protect Londoners from being deluded by practitioners whose remedies were based on theories that differed from his own. More than medical treatises, the tractates can be read as contemporary socio-professional commentaries on the variety and range of medical care available in late medieval and early modern England. Care must be taken in relying on the commentaries for historical accuracy, though, as the insight that they provide is based largely on how professional physicians viewed – or, more precisely, depicted (accurately or otherwise) – the practices of direct competitors and unauthorised practitioners.

The socio-political crises hinted at in the tractates also suggest that the contagious disease tractates served a greater purpose than simply imparting medical information and advice. For example, Keiser suggests that “the three Machlinia editions [of *Litill Boke*] were encouraged or, more likely, patronized by Henry [VII] to counteract ominous political gossip and to provide an authorized, if still unofficial response to the [sweating sickness] epidemic” of 1485.¹⁰² Keiser also suggests that le Forestier’s tractate might have sought to bolster Henry’s legitimacy: although le Forestier does not comment explicitly on political gossip, he does begin his tractate with a condemnation of “vnexpart men and men quelliers that . . . wrete and put lettres vpon gatys and churche dores as foles promysyng to help the peple of ther sykenesse withoutte connyng.”¹⁰³ While this phrase is most often understood as a remark about unauthorised medical practitioners who publicly posted their unproven remedies, it might also refer to the posting of political gossip countering Henry’s claim and right to the

¹⁰²Keiser, “Plague Treatises,” 319.

¹⁰³ Le Forestier, “Venymys Feuer,” fol.70r.

English crown.¹⁰⁴ That such legitimacy questions continued to be hinted at in Caius's 1552 tractate point to the role that the tractate had in commenting on and reflecting both medical concerns (explicitly) and contemporary socio-political concerns (implicitly).

Each of these initial analyses demonstrate that classifying, and reading, the contagious disease tractates simply as medical treatises misses, or worse ignores, the broader commentary that underlies the discussions of plague and sweating sickness. The tractate is, indeed, more than a medical treatise. It might also, however, be considered to be less than a medical treatise, when one reflects on the lack of originality and the non-medical authorship of the majority of the tractates. Defining what a medical treatise is exactly, however, is not the subject of this thesis. Rather, it is to recognise that the contagious disease tractate, by reflecting an intertwinement of medical, religious, political, and social content, is not exactly what historians have purported it to be.

Conclusion

In her study of early medieval annals, Sally Lamb demonstrates that by reading and analysing only what is written, scholars miss the oftentimes more valuable information that absences or omissions suggest about an author's interests, knowledge, and purpose.¹⁰⁵ A superficial interpretation of annals thus overlooks what is in reality a complex, if opaque, narrative structure full of "rich layers of allegory and typology...[and] highly interpretive patterns of thought" that would have been recognisable to and understood by contemporary

¹⁰⁴ Keiser, "Plague Treatises," 319. While plausible, this suggestion is also curious, since le Forestier associates the outbreak with Henry's arrival from France and, in doing so, repeats the questions about Henry's legitimacy rather than rebutting them.

¹⁰⁵ Sally Lamb, "Evidence from Absence: Omission and Inclusion in Early Medieval Annals," in *Medieval Chronicle VII*, ed. Juliana Dresvina and Nicholas Sparks, (New York: Editions Rodopi, 2011), 45-62.

readers.¹⁰⁶ In a similar vein, by reading and analysing English-language tractates solely as medical texts, one misses the at-times couched references to a number of other issues, including professional strife, religious upheaval, royal legitimacy, and dynastic and social conflict. Indeed, none of the six tractates discussed in this thesis have previously been examined in detail for their underlying non-religious socio-political-professional content.

In 2003, George R. Keiser undertook a rather extensive analysis of two plague tractates – Thomas Moulton’s adaptation of *De epidemia* and Thomas Paynell’s 1534 adaptation of *Littil Boke*. In doing so, he sought to “consider how their respective treatment of the origins of plague situate them in relation to religious and medical interpretations of the plague; how each, in different ways, contributed to the cultural construction of epidemic disease.”¹⁰⁷ Keiser’s study elucidates in detail the style, content, and evolution of the two adaptations, noting, for example, that Moulton’s tractate it was assembled with other medical and miscellaneous works for a provincial gentry family. He points in particular to the stark religious under- and overtones in Moulton’s tractate that ultimately gave it a longer life in print than other works because it responded to contemporary religious anxieties. In highlighting the significant influence that sixteenth century religious transformation had on some aspects of popular understanding of the plague – particularly the ways in which outbreaks came to be widely viewed as acts of divine retribution for human sinfulness – Keiser points to the important role that context plays in the tractates’ contents. However, although Moulton specifically criticises “[the] deposyng of lordes out of lordeshyppes and inhaunsynge and inhyghyng of knaues,¹⁰⁸ Kaiser does not situate Moulton’s original

¹⁰⁶ Lamb, “Evidence from Absence,” 48.

¹⁰⁷ Keiser, “Plague Treatises,” 294.

¹⁰⁸ *Ibid.*, fol.Biiiv. Moulton also discusses the defeat of emperors, the perils of the sea, and

adaptation of *De epidemia* within the internecine conflict that was the ‘Wars of the Roses’ or comment on how factionalism might have influenced its tone, style, or content.¹⁰⁹ He also does not sufficiently analyse the further adaptations made in the tractate’s printed version, or how those adaptations responded to and reflected both religious forces and the turbulent socio-political environment of the Tudor reign. Thus, although Keiser recognises that the *Litill Boke* was printed and circulated during the 1485 sweating sickness outbreak largely as a political imperative to “contest the notion that the Sweating Sickness was a divine rebuke to the new king,”¹¹⁰ he fails to consider that Moulton’s tractate might also have been written or printed for political reasons. As such, while he ties the writing of the tractate and its comment that the plague had spread “generalli in this realme” to a period of multiple national epidemics (1463-64, 1467, 1471, 1473, and 1479-80), Keiser does not contemplate that Moulton might also have been referring, however subtly, to dynastic battles, particularly between 1461 and 1471 when the crown shifted twice between Henry VI and Edward IV. That such references might have been recycled in print during the 1530s to refer to the discord of Henry VIII’s reign suggest that Moulton’s “vengeaunce and corrupcion of the pestilence” might have been less medical and more political than has been recognised, particularly in an era when the word *pestilence* was assuming political undertones.¹¹¹

Contagious disease tractates were not written and circulated in a vacuum. Tractate authors responded to, and reflected on, the complex societies in which they lived, worked, faced, and tried to understand epidemic disease. This must be considered when reflecting on

other natural and human disasters. In doing so, he may have been downplaying what might have otherwise been dangerous commentary.

¹⁰⁹ Ibid., 298.

¹¹⁰ Ibid., 324.

¹¹¹ Moulton, *Glasse of Helth*, fol.Aiiiv.

the tractates' authoritativeness. In an era when the number of actively practicing university-trained physicians was relatively small and the majority of English tractates were produced by non-medical authors, the degree of professional strife that continued to be repeated in the tractates is considerable. Basing modern assumptions about concepts of contagious epidemic disease on what is written in the tractates must be tempered with a recognition that strife and tractate authors' training and standing influenced not only how they portrayed epidemic disease, but also how they presented (or misrepresented) the beliefs and practices of their competitors. Likewise, the ambiguity of whether those treatises ostensibly about the plague were indeed contagious disease tractates or were rather devotional works "masquerading as plague tracts"¹¹² raises questions about how they should be used when discussing contemporary beliefs about disease. The socio-political commentary found in some tractates may not have directly affected discussions of disease causation and transmission, but they do suggest that some of the texts might have been written and circulated for political reasons rather than to impart medical information.

¹¹² Fabbri, "Continuity and Change," 40.

CHAPTER 4

REACHING THE POOR?

Introduction

Thomas Moulton wrote his tractate in 1475, he claimed, for the “compassion that I haue of the poore people, that was & is destrayed euery day therby for defaute of helpe.”¹ Authors of vernacular contagious disease tractates often asserted that they sought to reach, educate, and assist the general public, particularly the ‘common man, woman, and child’. Most studies of late medieval and early modern English medical texts refute such claims, however, noting that it is unlikely that the poor had access to the tractates; Paul Slack suggests, in fact, that in spite of their dedications to the poor, such works probably did not even reach ‘the middle sort’ as late as the end of the sixteenth century.²

The extent to which the tractates’ prefatory dedications can be divorced from their actual audiences, however, is less clear cut than it appears. While scholars have conducted significant and informative studies on general readership in the late medieval and early modern period, historians of social responses to disease often base their research on medical texts without adequately taking into consideration who might have read or used them.³ Furthermore, no studies have yet examined the audience – intended or actual – of English-

¹ Thomas Moulton, *This is the Myroure or Glasse of Helth*, (London: Robert Wyre, 1531), STC 2nd ed. 18214a, fol.Aiiiiir.

² Paul Slack, “Mirrors of Health and Treasure of Poor Men: The Uses of the Vernacular Medical Literature of Tudor England,” in *Health, Medicine and Mortality*, ed. Charles Webster, (Cambridge: Cambridge University Press, 1979), 258.

³ Jennifer Andersen and Elizabeth Sauer provide a succinct overview of the evolution of reading history in “Current Trends in the History of Reading,” in *Books and Readers in Early Modern England: Material Studies*, ed. Jennifer Andersen and Elizabeth Sauer, (Philadelphia: University of Philadelphia Press, 2002), 9-11.

language contagious disease tractates as a specific type of medical text to inform discussions on the impact of texts on contemporary attitudes towards epidemic disease. Evidence of readership is critical, however, to demonstrate not only that transmitted medical knowledge was received, but also how it was received and the role that readers played in creating “textual meaning” out of what they had read.⁴ In other words, without actually knowing who read the tractates and how received information reflected, was appropriated into, or reformed readers’ understanding of and beliefs about contagious disease, modern historians are left to make assumptions about the impact that these tractates might have had on contemporary medical ideas. In this chapter, I explore the tractates’ intended and actual audiences through a multi-faceted study of prefatory and inter-textual dedications, basic codicology, and print history. In doing so, I reflect on how intended and actual readership, in addition to content, must be considered in any investigation of the potential impact of contagious disease tractates on contemporary medical ideas about contagious and epidemic disease.

Medical knowledge transmission in late medieval and early modern England

Around 1655, French polymath Blaise Pascal wrote a mathematical treatise entitled *De l’esprit géométrique*, in which he discussed the transmission of mathematical knowledge. The treatise reflected Pascal’s perception that the transmission of knowledge encompassed four essential and fundamentally inter-related components: context (why the knowledge is being transmitted), content (what kind of knowledge is being transmitted), medium (how it is transmitted), and receiver (to whom it is transmitted).⁵ Pascal’s perceptions have since been

⁴ Andersen and Sauer, “History of Reading,” 9.

⁵ Richard Scholar, “Introduction,” in *Transmitting Knowledge: Words, Images, and Instruments in Early Modern Europe*, ed. Sachiko Kusukawa and Ian Maclean, (Oxford:

elaborated to address the transmission of other bodies of knowledge during the late medieval and early modern periods.⁶ Pascal's quadripartite approach is relevant, for example, for exploring and understanding the transmission of medical knowledge.

Previous studies of the practices of writing, copying, translating, and adapting medical-related texts in late medieval and early modern England point to the existence of both parallel trends in the transmission of medical knowledge.⁷ Anne Van Arsdall notes, for example, that regardless of the language in which they were written, early "medieval medical texts assume tacit skill as well as fundamental mastery of the concepts and vocabulary [included within them] to be able to follow the instructions."⁸ Such texts were not necessarily complex, but neither were they sufficiently complete and detailed to be usable without some level of prior knowledge. As such, the people for whom they were produced already had a desire to learn as well as "the context, tacit knowledge, and communal

Oxford University Press, 2006), 1-5.

⁶ Scholar uses the term 'bodies of knowledge' "to reflect the shifting boundaries and identities of disciplines in the late medieval and early modern period." Scholar, "Introduction," 6.

⁷ See, for example, Andrew Wear, *Knowledge and Practice in English Medicine, 1550-1680*, (Cambridge: Cambridge University Press, 2000) and the various chapters in Irma Taavitsainen and Päivi Pahta, ed., *Medical and Scientific Writing in Late Medieval English*, (Cambridge: Cambridge University Press, 2004), Irma Taavitsainen and Päivi Pahta ed., *Early Modern English Medical Texts: Corpus Description and Studies*, (Amsterdam: John Benjamins, 2010), and Irma Taavitsainen and Päivi Pahta ed., *Medical Writing in Early Modern English*, (Cambridge: Cambridge University Press, 2011). General book production studies usually include short discussions of medical-related works, but make too fine a distinction between medical and other works. See, for example, H.S. Bennett, *English Books & Readers*, vol. 1, *1475 to 1557: Being a Study in the History of the Book Trade from Caxton to the Incorporation of the Stationers' Company*, (Cambridge: Cambridge University Press, 1969) and vol. 2, *1558-1603: Being a Study of the Book Trade in the Reign of Elizabeth I*, (Cambridge: Cambridge University Press, 1965). General studies about book readers typically do not discuss medical books.

⁸ Anne Van Arsdall, "The Transmission of Knowledge in Early Medieval Medical Texts: An Exploration," in *Between Text and Patient: The Medical Enterprise in Medieval & Early Modern Europe*, ed. Florence Eliza Glaze and Brian K. Nance, (Firenze: SIMSEL, 2011), 207.

understanding needed to understand [the texts].”⁹ In other words, the texts were written for, and used by, people who were trained or being trained in medical practice. At the same time, traditional medical knowledge in England continued to be transmitted orally and/or through simple vernacular herbals, remedy books, guidebooks, and receipts.¹⁰ By the thirteenth century, however, universities had become the primary environment within and through which the *authoritative* medical texts, concepts, and procedures that formed the foundation of learned medical practice were discussed and transmitted in Latin. A century later, scholastic knowledge was being disseminated beyond the learned university environment and Latin medical works were collected by the upper classes and highly educated townspeople, many of whom were bi- or trilingual.¹¹ By the fifteenth century, English-language texts presenting technical medical information were increasingly available to non-university-trained medical practitioners and other literate readers. The production of such vernacular works was undertaken primarily by professional medical men who knew what was available, had access to the works in Latin, and recognised a demand for their translation into English.¹² When translated, they were close in style and tone to the original Latin texts, included detailed commentaries on the topics being addressed, and made reference to the

⁹ Van Arsdall, “Transmission of Knowledge,” 209.

¹⁰ Remedies, herbals, and medical guidebooks written in Anglo-Saxon, as well as learned treatises and medical receipts written in a mixture of Latin, English, and Anglo-Norman, attest to the production and dissemination of insular vernacular medical texts by at least the tenth century. This predates the vernacularisation of medical works on the Continent by several centuries. Linda E. Voigts, “Anglo-Saxon Plant Remedies and the Anglo-Saxons,” *Isis* 70, no. 2 (1979): 250-268, <http://www.jstor.org/stable/230791>; Tony Hunt, *Popular Medicine in Thirteenth Century England: Introduction and Texts*, (Cambridge: D.S. Brewer, 1990).

¹¹ Linda Ehrsam Voigts, “What’s the Word? Bilingualism in Late-Medieval England,” *Speculum* 71, no. 4 (1996): 814, <http://www.jstor.org/stable/286572>.

¹² As is discussed in Chapter 3, the vernacularisation of medical texts generated considerable strife among medical practitioners, some of whom adapted or translated Latin works into English for the purpose of reaching a broader audience.

authorities on whom such topics were based. Vernacular texts intended for a wider audience, on the other hand, used simpler terminology and general statements that were more easily understood by less-learned readers.¹³ The production of these less technical texts was undertaken largely by non-medical men who translated and adapted Continental works for English readers.¹⁴

The practical relevance of medicine, with medical providers crossing a wide spectrum from university-trained physicians to women supplying home-based care, added a further incentive for the ongoing vernacularisation and dissemination of medical knowledge to a wide audience.¹⁵ A broad variety of medical information was disseminated through vernacular texts, from simple single ingredient herbal remedies to complex theoretical discourses. Linda Ehksam Voigts suggests that there is a tripartite classification of medical texts, consisting of academic treatises, surgical texts, and remedy books, each targeting a specific type of readership.¹⁶ While this type of classification has been substantiated by

¹³ Allan Bell, "Language Style as Audience Design," *Language in Society* 13, no. 2 (1984): 145-204, doi: <http://dx.doi.org/10.1017/S004740450001037X>; Irma Taavitsainen and Päivi Pahta, "Vernacularisation of Medical Writing in English: A Corpus-Based Study of Scholasticism," *Early Science and Medicine*, 3, no. 2 (1998): 160, <http://www.jstor.org/stable/4130415>; Irma Taavitsainen, "Dissemination and Appropriation of Medical Knowledge: Humoral Theory in Early Modern English Medical Writing and Lay Texts," in Taavitsainen and Pahta, *Medical Writing*, 95.

¹⁴ Most Middle English medical texts were translations or adaptations of Latin or French works, rather than being derived from Anglo-Saxon or Anglo-Norman texts.

¹⁵ Päivi Pahta and Irma Taavitsainen, "Vernacularisation of Scientific and Medical Writing in its Sociohistorical Context," in Taavitsainen and Pahta, *Medical and Scientific Writing*, 2, 11. Claire Jones suggests that the term 'discourse community' is more relevant to the role and use of texts in medieval and early modern societies than the terms 'audience' and 'readership,' which she claims are too passive and anachronistic, respectively. A discourse community, on the other hand, includes all those who have texts or practices in common, including those who write, read, or listen to readings of a text. "Discourse Communities and Medical Texts," in Taavitsainen and Pahta, *Medical and Scientific Writing*, 23-26. For the most part, however, I use the term audience.

¹⁶ Linda Ehksam Voigts, "Editing Middle English Texts: Needs and Issues," in *Editing Texts*

research that demonstrates clear linguistic and philological differences between the three genres of text, the categories themselves have subsequently been elaborated to more clearly identify the specific types of works that are included in each grouping, rather than delineating them by their academic/learned versus lay origins and/or target communities.¹⁷ ‘Academic treatises’ have been relabeled as ‘specialised treatises’ to include learned (not necessarily academic) texts that address specific diseases, branches of medicine, and procedures. Contagious disease tractates are included here, regardless of their authorship, origin, or audience. Surgical ‘texts’ are now called surgical ‘treatises’ to include manuals and detailed anatomical descriptions. The third group includes remedy books (recipes, charms, prognostications, almanacs, regimens, etc.) and *materia medica* (herbals and lapidaries).¹⁸

Rossell Hope Robbins suggests that language, which underlined social stratification, was the primary demarcation between who read which medical texts,¹⁹ while Slack claims that even vernacular medical texts likely circulated within a limited circle of readers, primarily medical practitioners.²⁰ More recent scholarship, however, cautions against using simple dichotomies of language, literacy, textual authority, or social status when discussing the role and readership of vernacular texts in late medieval and early modern England.²¹

in the History of Science and Medicine: Papers Given at the Seventeenth Annual Conference on Editorial Problems, University of Toronto, 6-7 November 1981, ed. Trevor Harvey Levere (New York: Garland, 1982), 39-68. In his study, Slack categorises medical texts by subject matter. “Mirrors of Health,” 243.

¹⁷ For substantiating research see, for example, Irma Taavitsainen, “Changing Conventions of Writing: The Dynamics of Genres, Text Types, and Text Traditions,” *European Journal of English Studies* 5, no. 2 (2001): 139-150, doi:10.1076/ejes.5.2.139.7309.

¹⁸ Pahta and Taavitsainen, “Vernacularisation,” 15.

¹⁹ Rossell Hope Robbins, “Medical Manuscripts in Middle English,” *Speculum* 45, no. 3 (1970): 394, <http://www.jstor.org/stable/2853500>.

²⁰ Slack, “Mirrors of Health,” 256, 273.

²¹ Jones, “Discourse Communities,” 23. While literacy provided a crucial stimulus for the increased production and dissemination of medical texts in late medieval and early modern

Wear notes that there was little distinction between lay and medical readers “and both groups might read works which were ostensibly for the other.”²² Even the relatively inexpensive medical books not typically associated with the gentry or wealthier townspeople – almanacs and prognostications – were printed with the intention of appealing to a mixed audience.²³

A closer examination of the tractates suggests that their audience was less dependent on text type than on a combination of factors such as authorship, writing style, typography, cost, and printing conventions. At the same time, an analysis of the tractate authors’ stated *intended* audiences reveals that, in dismissing prefatory dedications in their entirety as “pious hopes or calculated advertisements rather than statements of fact,”²⁴ historians have missed an opportunity to explore and better understand the different ways in which such dedications were actually made and used within one specific type of medical text.

Contagious disease tractate audiences: prefatory dedications and codicology

While most types of medical texts rarely addressed their readers directly and were

England, estimates of literacy levels for this time period remain speculative and virtually impossible to measure statistically. Peter Murray Jones, “Medical Literacies and Medical Culture in Early Modern England,” in Taavitsainen and Pahta, *Medical Writing*, 30-32. Indeed, modern definitions of literacy, which is typically based on one’s ability to read *and* write, neglect both the contemporary distinction between the two actions and “the far more significant circumstance of the presumed illiterate’s use of another’s literacy.” Franz H. Bäuml “Varieties and Consequences of Medieval Literacy and Illiteracy,” *Speculum* 55, no. 2 (1980): 237, <http://www.jstor.org/stable/2847287>. See also Heidi Brayman Hackel, “Rhetorics and Practices of Illiteracy or the Marketing of Illiteracy,” in *Reading and Literacy in the Middle Ages and Renaissance*, ed. Ian Frederick Moulton, (Turnhout, Belgium: Brepols, 2004), 169-183 and Keith Thomas, “The Meaning of Literacy in Early Modern England,” in *The Written Word: Literacy in Transition*, ed. Gerd Baumann, (Oxford: Clarendon Press, 1986), 97-131.

²² Wear, *Knowledge and Practice*, 40-41.

²³ Ville Marttila, “New Arguments for New Audiences: A Corpus-Based Analysis of Interpersonal Strategies in Early Modern English Medical Recipes,” in Taavitsainen and Pahta, *Medical Writing*, 135.

²⁴ Slack, “Mirrors of Health,” 237.

meant for physicians, contagious disease tractate authors included prefatory dedications in which they claimed to be writing for the benefit of the general public. Jacme d'Agramont, for example, wrote his tractate in 1348 “for the information and public health of the people of Lérida and not primarily for physicians.”²⁵ Gentile da Foligno wrote a series of tractates, each specifically targeting a different audience. Most English-language tractates continued this tradition, including prefatory or dedicatory statements that spoke of the authors’ charitable motives. Faye Getz suggests that most translators of medical texts “seem to have seen the vernacular medical translation as a kind of medical sermon, with a pastoral, indeed charitable, function in mind.”²⁶ On the other hand, it is also possible that those who translated medical texts were more strongly motivated by their desire to make a profit.²⁷ Indeed, contemporary critics of the dissemination of vernacular medical knowledge claimed that such charitable acts actually threatened the health ‘of the commonwealth’ because most readers were ‘medically illiterate’ and thus easily seduced by fraudulent writers and printers who sought only to profit at their expense.²⁸ Regardless of their motivation, the authors of vernacular tractates regularly used prefatory or inter-textual dedications both to appeal to a broad readership and to justify the production of their works in English.²⁹

Understanding the potential validity of the dedications requires looking more closely at

²⁵ Dominick Palazzotto, “The Black Death and Medicine: A Report and Analysis of the Tractates Written between 1348 and 1350,” (PhD diss., University of Kansas, 1973), ProQuest (7412609), 32.

²⁶ Faye Marie Getz, “Charity, Translation, and the Language of Medical Learning in Medieval England,” *Bulletin of the History of Medicine* 64, no.1 (1990): 9.

²⁷ Jones, “Discourse Communities,” 30; Slack, “Mirrors of Health,” 237. See also Mary E. Fissell, “The Marketplace of Print,” in *Medicine and the Market in England and Its Colonies, c.1450-c.1850*, ed. Mark S.R. Jenner and Patrick Wallis, (New York: Palgrave Macmillan, 2007), 111-114.

²⁸ Jones, “Medical Literacies,” 39. Thomas le Forestier and John Caius make particular statements about this problem in their tractates.

²⁹ *Ibid.*, 41.

the context within which they were written and the textual language surrounding them. While prefatory dedications were largely formulaic, and can be seen to exist across all types of vernacular medical texts, for example, the excerpts shown in Table 8 demonstrate that there were clear differences in the style and target audiences of the tractate dedications written by non-professional medical practitioners and those written by university-trained physicians. These differences can, in part, be tied to the ongoing professional strife that was a hallmark of late medieval and early modern English medical practice.³⁰ Thomas Moulton's and Thomas Phayer's dedications, for example, focus specifically on the poor, who are "destrayed euery day therby for defaute of helpe" because physicians will not treat or care for them.³¹ For Moulton, a Dominican friar, and Phayer, a medical practitioner for many years before he received formal university training, the disdain with which licensed physicians viewed the poor was appalling and contributed to their dreadful health conditions.³² These authors claimed that they wrote their tractates to mitigate human suffering by providing health guidance and remedies that the poor could use for their own "ayde, co[m]fort and vtilitie."³³ Indeed, Phayer's medical writings were all written for the "popularization of vital knowledge."³⁴ The university-trained physicians, on the other hand, did not target the poor in their tractates. Instead, they asserted that they wrote their tractates

³⁰ See Chapter 3 for a discussion of professional strife in the tractates.

³¹ Moulton, *Glasse of Helth*, fol.Aiiiiir.

³² Moulton also cites other reasons for writing the treatise: the prayers of his brethren and of "many worthy gentyles."

³³ Thomas Phayer, *The Kegiment (sic) of Life...*, (London: Edward Whitchurche, 1546), STC 2nd ed. 11969, fol.1r.

³⁴ Philip Schwyzer, "Thomas Phaer (1510?–1560)," *Oxford Dictionary of National Biography Online*, edited by P Carter, (Oxford: Oxford University Press, 2004), doi:10.1093/ref:odnb/22085.

for “the conseruation of the comyn wele of all cristen people”³⁵ and to benefit “any man [who] shal have neede of any phisicien and leche, governour, preserver, and heler.”³⁶ In other words, their dedications were broader, meant likely to appeal to a more learned and literate audience who would seek and appreciate (and, of course, pay for) the care and advice provided by professional physicians and not fall prey to the ‘false lechys’ whom these physician-writers so vehemently criticised.

This observation that each author defined his potential audience differently, even within the same text type (i.e., contagious disease tractate), accords with Katharine Breen’s study of medieval English reading practices in which she indicates that authors “imagined, created, and sought to control the readership of their texts.”³⁷ Dismissing prefatory dedications, then, ignores the fact that the various tractate authors used particular textual strategies to shape how their works would be received and ultimately used. John Caius, for example, was clear that although he preferred to write in Latin, he did so in English not only, as some historians contend, because the sweating sickness primarily affected the English, but also because he feared that a Latin version would be translated in such a way as to “diminishe the grace of thynges learned.”³⁸ Caius’s prefatory dedication to “euerye persone...of al sortes” must be tempered by his subsequent claim that he wrote his tractate at the request of friends and acquaintances who wished to know “howe to gouerne

³⁵ *Here Begynneth a Litill Boke Necessarye & Behouefull Aȝenst the Pestilence*, (London: William de Machlinia, ca. 1485), STC 2nd ed. 4590, fol.1r.

³⁶ Lister M. Matheson, “John of Burgundy: Treatises on Plague,” in *Sex, Aging, and Death in a Medieval Medical Compendium. Trinity College Cambridge MS R.14.52, Its Texts, Language, and Scribe*, ed. M. Teresa Tavormina, (Tempe: Arizona Center for Medieval and Renaissance Studies, 2006), 2:582.

³⁷ Katharine Breen, *Imagining an English Reading Public, 1150-1400*, (Cambridge: Cambridge University Press, 2010), 8.

³⁸ John Caius, *A Boke, or Counseill Against the Disease Commonly Called the Sweate*, (London: Richard Grafton, 1552), STC 2nd ed. 4343, fol.4v.

themselves” during the 1551 sweating sickness outbreak.³⁹ This tractate was clearly not meant for the poor, but rather for an audience that was already sufficiently learned to understand its contents. Caius’s intended audience was thus much different from Phayer’s or Moulton’s, and ignoring the prefatory dedications misses the fact that tractates were not all meant to serve the same audience.

Table 8: Prefatory and other dedications

Tractate	Prefatory and Other Dedications
<i>De epidemia (mid - late 15th c.)</i>	“...in the moreyne of the people havynge pite and compassioun, busily desiryng with hool herte al mennes helth, and thereto with al my busynes to profite bi divyne helpe and counsail...So that vnneth any man shal have neede of any phisicien and leche, governour, preserver, and heler.” ⁴⁰
<i>Litill Boke (1485)</i>	“the conseruation of the comyn wele of all cristen people, as well for them that ben hole as for remedie of them that ben seke.” ⁴¹
<i>Moulton (1531)</i>	“compassion that I haue of the poore people, that was & is destrayed euery day therby for defaute of helpe.” ⁴²
<i>Phayer (1546)</i>	for “the ayde, co[m]fort and vtilitie of the poore.” ⁴³
<i>Le Forestier (1485)</i>	“and by the reason of that yong and olde and of al mane[r] of ages w[ith] dyuers waylynges and soewes they ar strykeyn...” ⁴⁴
<i>Caius (1552)</i>	“Very necessary for euerye personne, and mucche requisite to be had in the handes of al sortes, for their better instruction, preparacion and defence...” ⁴⁵

Further analysis of the tractates’ prefatory statements also reveals that dedication styles differ between those tractates that specifically address the plague and those that address the sweating sickness. As noted above, Caius wrote his sweating sickness tractate at the request of his learned friends and acquaintances and targeted a relatively learned audience. Although

³⁹ Caius, *Sweate*, fol.1r-2r.

⁴⁰ Matheson, “John of Burgundy,” 2:582.

⁴¹ *Here Begynneth*, fol.1r.

⁴² Moulton, *Glasse of Helth*, fol.Aiiiiir.

⁴³ Phayer, *Kegiment (sic) of Life...*, fol.1r.

⁴⁴ Thomas le Forestier, “Treatise on the “Venymys Feuer of Pestilens,” *Additional MS 27582*, British Library, (1485), fol.70r.

⁴⁵ Caius, *Sweate*, fol.1r.

Thomas le Forestier did not include the same type of readership-based prefatory dedication as the other tractate authors, the explicit to his preface suggests that his tractate targeted learned readers and medical practitioners “that hath ryghtfully wel studyed and rede this nobel faculte thei shal not denye our wordes.”⁴⁶ The plague-specific tractate authors, on the other hand, were more likely to use broad-based dedications (including or not including the poor). Whether these differences are indicative of the fact that the two sweating sickness tractates considered here were written by university-trained physicians, and are therefore tied to the author-based dichotomies noted above, or instead reflect the use of specific stylistic approaches that demarcate how the two diseases were discussed in the tractates is difficult to establish with certainty with the small corpus studied here. In their explanation of the various types of texts included in the ‘treatises on specific topics’ category of the *Early Modern English Medical Texts Corpus* (EMEMT), Päivi Pahta and Maura Ratia maintain that those treatises that focus on diseases other than plague were written by trained physicians and typically targeted learned audiences, particularly other physicians. The plague-specific tractates, on the other hand, addressed either the poor specifically or all segments of society (with different remedies proposed for the rich and the poor).⁴⁷ In terms of authorship and stated target audience, these assumptions generally hold true for the six tractates examined here. However, Pahta and Ratia also claim that all the plague tractates written after 1500 “are original vernacular texts and not translations. The texts were written by English authors and they focus solely on the epidemics in England.”⁴⁸ This claim has been refuted in this thesis, with Moulton’s and Phayer’s tractates being but two examples of older Continental works

⁴⁶ Le Forestier, “Venymys Feuer,” fol70v.

⁴⁷ Päivi Pahta and Maura Ratia, “Treatises on Specific Topics,” in Taavitsainen and Pahta, *English Medical Texts*, 74-99.

⁴⁸ Pahta and Ratia, “Treatises on Specific Topics,” 98.

that were translated, adapted, printed, and circulated in early modern England.

To further bolster the perceived legitimacy of their vernacular works, many medical authors also included flattering dedications to patrons or esteemed colleagues. The socio-political context within which the texts were both written and printed heavily influenced the type and target of salutary dedications, and changing contexts and political fortunes often resulted in the dedications being removed or changed in subsequent editions. For example, a number of medical works dedicated to Thomas Cromwell in the 1530s were quickly reprinted in new editions without the dedication as soon as he fell from royal favour by the end of that decade. Of the tractates examined here, three included dedications to powerful actual or potential patrons. Some versions of *de Epidemia* in circulation before 1400 include dedications to Richard II; while such dedications were removed from later copies, no dedication to Henry IV appears to have been added. Thomas le Forestier dedicated his sweating sickness tractate to Henry VII, who had just been crowned King of England. John Caius dedicated his tractate to Sir William Herbert (1st Earl of Pembroke and Baron Herbert of Cardiff), whom he had evidently planned to meet over the New Year's holidays shortly after the treatise was written. The tractates that did not contain patron-based dedications were the same ones that were ostensibly written for the benefit of the poor, which adds some level of credibility to the prefatory dedications that target, at the least, less learned audiences. This confirms that the tractates' intended audiences were not uniform, but were related more to the authors' social and professional statuses than to the genre itself.

Of course, prefatory dedications and instructions to intended readers did not necessarily determine who actually read medical texts because, as Roger Chartier notes, "experience shows that reading is not simply submission to textual machinery. Whatever it may be,

reading is a creative practice, which invents singular meanings and significations that are not reducible to the intentions of authors of texts or producers of books.”⁴⁹ While the question of who might have actually accessed and used the tractates is important to consider, however, it is not easy to determine with certainty. Although a large number of remedy or recipe-type works survive with handwritten notes that may be used to identify owners, vernacular medical texts were, like vernacular works more generally, regularly omitted from library and probate inventories until well into the seventeenth century. This may have been due to the fact that vernacular texts were held in lower esteem by their owners than Latin works; although they were owned, their owners did not consider them to be an important part of their estate.⁵⁰ This leaves little record of who might have owned the tractates. Nevertheless, some clues about the potential readers and users of contagious disease tractates might be found in the tractate’s codicology, including typography and format.

In his recent discussion of early modern medical literacy, Peter Murray Jones differentiates between functional literacy, a basic skill that would enable a person to read texts necessary for day-to-day activities, and cultural literacy, which would enable a person to read books for edification. Jones suggests that although medical texts should logically require only functional literacy, most medical books produced in late medieval and early modern England were not produced for functional purposes but rather to “appeal to those who wished to exercise their judgment and taste in ways appropriate to their station in

⁴⁹ Roger Chartier, “Texts, Printing, Readings,” in *The New Cultural History*, ed. Lynn Hunt (Berkeley: University of California Press, 1989), 156.

⁵⁰ Claire Jones, “An Assortment of Doctors: The Readers of Medical Books in Late Medieval England,” *Journal of the Early Book Society for the Study of Manuscripts and Printing History*, 3 (2000): 137.

life,”⁵¹ which is confirmed by the moral aspects of the later works. To demonstrate this argument, Jones points to the specific features of printed medical texts that indicate the type of literacy needed to read them, and therefore the types of audiences or discourse communities to which they were actually addressed, regardless of the target audience suggested in the prefatory dedications. Many pre-seventeenth century readers, for example, would not have progressed beyond an ability to read black-letter type, the typeface found both in primers used to teach rudimentary reading skills and on publically posted notices such as bills of mortality or plague orders.⁵² Most almanacs, remedy books, and prognostications were printed using this typeface, making them readable by those who had access to them. Other types of medical works, however, such as surgical and theoretical texts, were often printed using a roman type. Similar to modern typefaces, roman type would not have been readable by those who had only rudimentary reading skills.⁵³ Beyond their content, then, vernacular medical texts “were expressed in forms that might correspond to different points on this [literacy] gradient, with those at the ‘higher’ points being more exclusive in their readership than those at the lower points.”⁵⁴ Of the four printed tractates examined here, all were printed using some variant of the black-letter type, as is shown in Table 9.⁵⁵ This suggests that, regardless of the dedications, the tractates were meant to be read by a wide audience of people with least basic reading skills.

⁵¹ Jones, “Medical Literacies,” 32.

⁵² Jones, “Medical Literacies,” 32-33. Brayman Hackel also argues that a rudimentary level of reading (abecedarian literacy) was common by the early modern period. “Rhetorics and Practices,” 169-183. For a good illustrated overview of the development of typographical styles and their use by particular printers in early modern England, see Daniel Berkeley Updike, *Printing Types: Their History, Forms, and Use: A Study in Survivals*, vol. 1, (Cambridge, MA: Harvard University Press, 1922), 113-124.

⁵³ Thomas, “Meaning of Literacy,” 99-100.

⁵⁴ Jones, “Medical Literacies,” 33.

⁵⁵ Sample pages from each text are included in Appendix 1.

The physical dimensions and formats of books also reflected more about the authors' – and printers' – expected audiences than did their prefatory dedications. Larger volumes, such as those printed in folio or quarto, were more often designed for libraries or for personal individual study, while smaller formats such as octavo, duodecimo, and sexto-decimo were easier to use on a day-to-day basis or at the household level. Learned works, such as texts on anatomy and surgery, were rarely printed in less than quarto size, while almanacs and remedy books were regularly of octavo or smaller size. Pamphlets, typically printed and unbound books of quarto or smaller size containing eight to ninety-six pages, were also popular for disseminating medical information after the mid-sixteenth century, particularly because they were small, easy to print, and inexpensive.⁵⁶ While typically used for advertising proprietary medicines or communicating medical controversies, the pamphlets were also a suitable format for tractates.⁵⁷ Slack suggests that unbound tractates were rarely in octavo or smaller format, suggesting that they were *not* meant for the same audience as almanacs, regimens, and remedy collections.⁵⁸ Of the four printed tractates considered here, only the *Littil Boke* was of quarto size, while the others were in octavo or smaller format. Even Caius's tractate, which ostensibly targeted a more learned audience, was printed in octavo format. This contradicts Slack's contentions about 'normal' tractate size and suggests that the printed tractates, at least, were meant for rather broad audiences, regardless of what their prefatory dedications (and modern scholars) claim. It is more difficult to assess readership for the manuscript tractates. Thomas le Forestier's tractate, for example, is extant

⁵⁶ Maura Ratia and Carla Suhr, "Medical Pamphlets: Controversy and Advertising," in Taavitsainen and Pahta, *Medical Writing*, 180.

⁵⁷ Keiser actually calls some of the tractates pamphlets. "Plague Treatises."

⁵⁸ Slack, "Mirrors of Health," 243, 247. Slack's results show that only 7.5% of plague tracts were in octavo or smaller format. He does not include almanacs in his study, but his point remains the same.

in only a single manuscript; it is not known when it was copied, what happened to the original, or who might have had access to it.

Table 9: Tractate physical appearance

Tractate / Version Consulted	Physical Appearance of Consulted Copy
<i>De epidemia</i> / Trinity College Cambridge MS R.14.52 (edited)	tractate has 4 leaves (entire manuscript has 280 leaves); folio; typography: handwritten/secretary hand, one main scribe ⁵⁹
<i>Litill boke...</i> / William de Machlinia, 1485 edition	8 leaves; quarto; no signatures; typography: black-letter variant ⁶⁰
<i>Moulton</i> / Robert Wyer, c.1531 edition	tractate has 20 leaves (entire book <i>Myroure or Glasse of Health</i> has 78 leaves); octavo; signatures: A-K ⁴ ; typography: black-letter variant
<i>Phayer</i> / Edward Whitchurche, 1546 edition	tractate has 49 leaves (entire book <i>Regiment of Life</i> has 198 leaves); sexto-decimo; signatures: a ⁸ ; A-X ⁸ ; 2A-2C ⁸ (with various mis-foliations); typography: black-letter variant
<i>Le Forestier</i> / B.L. Add. MS 27582 (unedited)	tractate has 8 leaves (entire manuscript has c.267 leaves); folio; signatures added after manuscript was bound; typography: handwritten (entire manuscript includes multiple hands and scribes) ⁶¹
<i>Caius</i> / Richard Grafton, 1552 edition	39 leaves; octavo; signatures: A-E ⁸ ; typography: black-letter variant

The manner in which the tractates were bound and circulated is also relevant to discussions of their audience. While the *Litill Boke* and Caius's tractate on the sweating sickness are known to have been printed and circulated as individual texts, the other four tractates were bound in larger compendia. A detailed examination of these volumes and their contents would have been beneficial, but conducting such an undertaking was beyond the scope of this thesis. That said, enough is already known about them to allow some

⁵⁹ Format information collected from Päivi Pahta, "Description of the Manuscript," in Tavormina, *Sex, Aging, and Death*, 1:1-18.

⁶⁰ All format information on printed tractates was collected from the *English Short Title Catalogue*, *Early English Books Online*, and personal analysis.

⁶¹ Format information was collected from the *Catalogue of Additions to the Manuscripts in the British Museum in the Years MDCCCLIV-MDCCCLXXV*, Volume 2, (London: William Clowes and Sons, 1877), 330 and personal analysis.

speculation about their audiences. As was noted in Chapter 2, more than fifty manuscript versions of *De epidemia* survive in English, all of which are bound in larger medical miscellanies or compendia of varying content. The version consulted here formed part of Trinity College Cambridge MS R.14.52. In addition to three plague-specific tractates, all of which are variants of John of Burgundy's original tractate, the manuscript contains more than one hundred learned medical and scientific texts in Middle English translation, fifty-four of which are unique to this manuscript. While its original ownership is a matter of speculation, it appears from marginal notes that the manuscript was produced for a London-based sponsor with a significant interest in learned medical and scientific texts.⁶²

Le Forestier's tractate on the sweating sickness is extant only in British Library Additional MS 27582, a compendium bequeathed in 1523 by Richard Smyzth, a chantry priest at Exeter Cathedral, to Arnulpho ap Rice, sub-prior at Exeter's St. John's Hospital. In addition to the tractate, the manuscript contains ten medical and alchemical treatises, six recipes and herbals, and astronomical and meteorological prognostications in both Latin and English. This suggests that, at the least, the tractate was of interest to and read by two religious figures with an interest in medical and scientific matters.⁶³

The original version of Moulton's tractate is contained in British Library MS Sloane 3489, which was comprised of a broad miscellany of a diverse set of works in English, including medical texts and recipes, prose narratives, a romance, a hunting guide, a treatise for the instruction of parishioners, and the treatise *De regimine principum*. Keiser indicates that the northern dialects of the various texts suggest a provincial origin, but beyond that

⁶² An extensive study of the manuscript is published in Tavormina, *Sex, Aging, and Death*.

⁶³ My own examination of this manuscript will form the basis of a future study.

nothing is known about the manuscript's ownership.⁶⁴ The printed version of the tractate is included in the larger medical miscellany entitled *The Myroure or Glasse of Helthe*, which contains a variety of recipes, charms, and other practical medical treatises. Phayer's tractate was likewise published a large volume of medical works that also contained his translation of Jehan Goeurot's *Sommaire et entretènement de vie* and two of his own original texts, *A Declaration of the Veynes* and *The Boke of Chyldren*.⁶⁵ Both of these books would have been attractive to a broad, general audience that had an interest in medical matters. Binding the tractates in larger multi-text medical works ensured that they reached a larger and broader audience than they might have reached on their own.

Related to their physical structure is the number of such works (both originals and editions) that were being circulated at a given point in time. Certainly by the late fifteenth century, the advent of the printing press had led to a growth in the production and dissemination of medical-related texts. The printing of medical works in England, however, lagged far behind that on the Continent until at least the 1550s, due to the paucity of new medical texts written in England, the small scale of the English printing industry, and the continued primacy of oral exchange.⁶⁶ Printed medical texts in England primarily replicated what had already circulated in manuscript, in Latin or English, with medieval conventions

⁶⁴ Keiser notes that the dialects of the texts suggest that one came from Derbyshire, others from Northamptonshire, and still others from unnamed areas outside London. "Plague Treatises," 296-299.

⁶⁵ Most scholars suggest, erroneously, that Phayer wrote the tractate. *The Book of Chyldren* was the first English book written about pediatrics.

⁶⁶ Irma Taavitsainen et al., "Medical Texts in 1500-1700 and the Corpus of Early Modern English Medical Texts," in Taavitsainen and Pahta, *Medical Writing*, 10-12; Heikki Mikkeli and Ville Martilla, "Change and Continuity in Early Modern Medicine (1500-1700)," in Taavitsainen and Pahta, *English Medical Texts*, 21.

and scientific thinking remaining intact.⁶⁷ While perhaps reflecting the static nature of medical thought in England, it is more likely a testament to the conservatism of English publishers who “preferred to produce lots of editions of established texts which had already enjoyed success in Latin in the fifteenth century rather than [risk profits] with new texts by contemporary authors.”⁶⁸ In other words, stationers and printers perhaps more than authors played a significant role in deciding which English language medical texts were made available – and therefore which ones were read. Printers also encouraged the public to buy new editions of previously issued works by inserting new title-pages and frontispieces which gave the illusion that the work was updated, new, or otherwise more authoritative than the previous edition(s).⁶⁹ Recent Continental works were readily imported from cities with larger printing industries. However, being primarily in Latin and containing Continental advances in medical theory and practice, these works served a more limited audience than those works selected by printers for regular re-printing in English.

Many English-language tractates were printed in numerous editions (see Table 10). The number of both titles and editions increased in the second half of the sixteenth century and again in the first half of the seventeenth century. Some were printed independently, while others were appended into larger regimens or compendia. Of Slack’s 153 titles and 392 editions of medical works printed between 1486 and 1604, twenty-three titles and forty-two editions (15% and 11% of his totals, respectively) were plague tracts.⁷⁰ A reassessment of

⁶⁷ Päivi Pahta and Irma Taavitsainen, “An Interdisciplinary Approach to Medical Writing in Early Modern English,” in Taavitsainen and Pahta, *Medical Writing*, 3-4.

⁶⁸ Taavitsainen et al, “Medical Texts,” 12-13. See also Bennett, *English Books*, 2 vols.

⁶⁹ Bennett, *English Books*, 1:98. For a more recent study of the role of authors, printers, booksellers, and readers in English print culture, see Adrian Johns, *The Nature of the Book: Print and Knowledge in the Making*, (Chicago: University of Chicago Press, 1998).

⁷⁰ Slack’s study concluded that medical texts represented about three percent of all works

Slack's figures paints a different picture, as he did not include the tractates incorporated in larger compendia (such as those written by Moulton and Phayer) in his plague tract calculations. Adding just these two tractates increases the number of print editions to sixty-eight, or 17% of Slack's total numbers. This is perhaps not a significant difference in results; however, when one looks at these numbers more closely, it is evident that thirty-six, or more than half, of the tractate editions were reprints of only three plague-specific tractates (the *Litill Boke* and the tractates by Moulton and Phayer) . While this demonstrates that these three tractates were considered to be sufficiently profitable by the printers to warrant regular re-publication, it does not indicate what the readership might have looked like. Only two tractates on the sweating sickness survive; le Forestier's is found in only a single manuscript and Caius's was printed in only one edition. This may reflect the fact that although it caused significant localised concern during its six outbreaks, the disease was not as widespread as the plague and did not reappear again after 1551.

Table 10: Print information

Tractate	MS and Print Information
<i>De epidemia (mid-late 15th c.)</i>	50+ mss of varying content and translations to 16 th c.
<i>Litill Boke (1485)</i>	At least 7 editions: William de Machlinia (1485, 1488, 1490); Wynkyn de Worde (1509, c.1511); J. van Doesborch (Antwerp c. 1520); Thomas Gybson (1536) ⁷¹ ; also 4 mss (15 th - early 16 th c.)
<i>Moulton (1475)</i>	Original in B.L. Sloane MS 3489 (c.1475) At least 20 editions: Robert Wyer (c.1531 (multiple), 1536 (multiple), 1540, 1547, 1555); Robert Redman (1540); Elysabeth Pickering (1541); Wyllyam Myddelton (c.1545); Thomas Petyt (1545, 1546), Rychard Kele (1546); N. Hill (1546); Anon (1546 (multiple)); W. Copland (1548, 1560); A Vele (1560); Thomas Colwell (1561, 1566); Hugh Iackson (1580)

published in England between 1486 and 1604; however, his omission of almanacs, which were the most numerous of medical texts, causes his total estimate to be somewhat low.

⁷¹ All print information was collected from the *English Short Title Catalogue*.

Tractate	MS and Print Information
<i>Phayer (1546)</i>	At least 9 editions: Edward Whitchurche (1543, 1544, 1546, 1550, 1560); Ihon Kyngston and Henry Sutton (1553); Thomas Este and Henry My (1567); William How (1578); Edward Allde (1596)
<i>Le Forestier (1485)</i>	Original in British Library Add. MS 27582; printed in Rouen in 1490 in Latin and French; no English print version
<i>Caius (1552)</i>	Richard Grafton (1552)

Little information is available about the prices of medical texts until the later sixteenth century, limiting our knowledge of these texts' potential readership. Prices did vary depending on size, format, and binding. On average, remedy collections and regimens were the least expensive, while surgical treatises were among the most expensive. Of the tractates considered here, sale prices are known only for Moulton's *Myroure or Glasse of Helth*; this work sold for about 2-3d, "as cheap as any publication on the market."⁷² One could extrapolate and surmise that Phayer's regimen was similarly priced. The two other printed works, the *Litill Boke* and Caius's sweating sickness treatise, were relatively sort (8 and 39 leaves, respectively) and small (quarto and octavo, respectively), suggesting that they too would not have commanded exorbitant prices.

Taken together, the tractates' prefatory dedications and basic codicological features suggest that they were meant for, and accessible to, a wide audience. While historians typically dismiss prefatory dedications as literary convention, literary theory demonstrates that textual prologues do play a role in creating audiences: "'Audiences' are born (and reborn) somewhere between authorial desire, the desires of actual historical audiences, and the cultural and linguistic possibilities that shape the act of reading."⁷³ Scrutinising the

⁷² Slack, "Mirrors of Health," 247.

⁷³ Jocelyn Wogan-Browne et al., *The Idea of the Vernacular: An Anthology of Middle English Literary Theory, 1280-1520*, (University Park: Pennsylvania State University Press, 1999), 111.

tractates' prefatory dedications reveals that the tractate authors did not uniformly claim a desire to enlighten the poor. Rather, dedications varied by authors' background and social status. At the same time, the tractates' codicology suggests that the printers, if not the authors themselves, sought to make the texts accessible to as wide an audience as possible. Henry VIII's 1543 ban on "women, artificers, apprentices, journeymen, serving-men of the rank of yeomen and under, husbandmen and labourers" reading the English Bible, suggests that a broad range of social classes could have been able to read by the sixteenth century.⁷⁴ When we add to this the low price that was likely charged for the tractates and the existence of secondhand circulation, it is not unreasonable that all but the poorest had some access to the tractates and the medical information they contained.⁷⁵ To paraphrase Breen, by the late fourteenth century, English medical authors were aware that "their texts were potentially available to anyone who could read...including 'the poor, the stupid, the old, and those without leisure'."⁷⁶

The assumption of many vernacular works was that the intended reader could not readily obtain or afford professional medical care and that Latin medical texts were inaccessible. The vernacular versions were thereby presented as comprehensible works that would be useful either to non-Latinate practitioners or the 'good reader' – in other words, one who "read medical texts in order to better fulfill [his or her] duties as householders, good neighbours and dispensers of charity" and who could be "trusted to employ their medical literacy for the good of the commonwealth."⁷⁷ This latter point is particularly relevant when analysing the tractates that were dedicated to the poor. While advising their readers to seek

⁷⁴ Bennett, *English Books*, 1:27.

⁷⁵ Mary E. Fissell discusses secondhand book markets in "Marketplace of Print," 112-13.

⁷⁶ Breen, *English Reading Public*, 10.

⁷⁷ Jones, "Medical Literacies," 41-42.

professional medical advice when possible, the tractate authors typically provided herbal remedies for those who could not do so, which suggests that the intended readership included persons with sufficient basic medical knowledge to understand and perhaps even use the proffered remedies. While this, at first glance, appears to eliminate the poor illiterate as potential readers or consumers of the information provided in the tractates, making such an assumption ignores the largely oral culture that still existed at this time. As Brian Stock has demonstrated for the eleventh and twelfth centuries, knowledge transmission was only partially dependent on written texts, and the *illiterati* participated in literate culture by listening rather than by reading.⁷⁸ Even into the late medieval and early modern period, most people encountered texts by hearing them read aloud, rather than by reading them as individuals, which lessens the importance of either socio-economic status or literacy as key factors in ‘readership’ or audience.⁷⁹

Some types of medical-related texts, particularly those that addressed epidemic disease, were in fact written to be read aloud. This is particularly true of administrative proclamations such as ‘plague orders’ and medicinal advertisements, both of which would have been read aloud publicly in market squares or on the streets.⁸⁰ While the tractates may not have been read aloud publicly in this fashion, there is little reason to reject the possibility that they might have been read aloud in other settings, such as in homes or among friends, or that people might have otherwise shared their knowledge orally. In this sense, one reader was sufficient to reach a much wider audience, including the poor or illiterate. Assuming that such texts could and did not reach the poor puts too much emphasis on the physical act of

⁷⁸ Brian Stock, *The Implications of Literacy: Written Language and Models of Interpretation in the Eleventh and Twelfth Centuries*, (Princeton: Princeton University Press, 1983), 12-87.

⁷⁹ Wogan-Browne et al., *Idea of the Vernacular*, 107-124.

⁸⁰ Jones, “Medical Literacies,” 34.

reading, without giving due consideration to other modes of knowledge transmission.

Conclusion

The extent to which contagious disease tractates reflected popular understanding of and beliefs about contagious disease is ultimately linked to their audiences. Slack's study of vernacular medical literature concludes that the tractates, like other medical texts, were of no more than "ancillary help to a relatively small elite of practitioners and laymen."⁸¹ He nevertheless claims that "it is in their *reflection of common assumptions and attitudes* that the main value of the [texts] considered here lies" (italics added).⁸² While they may not have played a major role in the provision of medical knowledge and treatment, he states, medical texts act as a mirror that reflected popular attitudes towards sickness and care. Taavitsainen et al. assert, on the other hand, that "the impact of print on the circulation of medical ideas and information was profound."⁸³ The suggestion that the medical texts in circulation were reflective of contemporary beliefs and attitudes – particularly if they were not, as Slack claims, also reflective of actual medical practice and their audience was limited to elite practitioners and laymen – becomes more problematic when one considers that the contents of English-language medical texts, as opposed to those on the Continent, remained largely static until at least the second half of the sixteenth century. This was the case even as advances in medical knowledge and practice were being made. This thesis has already demonstrated that of the tractates in circulation between 1486 and 1604, more than half of the printed editions represented only three works. When we add to this the more than fifty

⁸¹ Slack, "Mirrors of Health," 273.

⁸² Slack, "Mirrors of Health," 273.

⁸³ Taavitsainen, et al, "Medical Texts," 10.

(variant) manuscript copies of *De epidemia* in circulation until at least the first quarter of the sixteenth century and John Caius's 1552 treatise on the sweating sickness, it becomes evident that if English attitudes about epidemic sickness were reflected or 'mirrored' in contagious disease tractates, this was done through very few tractates indeed until at least the late sixteenth or early seventeenth century.⁸⁴ Until then, most of the tractates were of Continental origin and were translations or adaptations of works that were as much as 150 years old.⁸⁵ While English medical practices did lag somewhat behind advances being made on the Continent, concluding that beliefs and practices about epidemic disease did not progress at all outside of the textual medical tradition, that they failed to evolve in response to recurrent experiences with the plague and sweating sickness, seems spurious, particularly when the matter of the tractates' audience has not yet been sufficiently linked to studies of popular practices.⁸⁶ To paraphrase one medieval medical historian, given the static yet protean character of the tractates, how can a historian declare that contemporary practitioners or people believed this or that or did this or that?⁸⁷

⁸⁴ Rebecca Totaro suggests that Moulton's tractate likely circulated autonomously "for well over 100 years...perhaps printed on its own but more certainly rebound by owners with various complementary materials." Although an intriguing idea, there is no evidence that this was the case. Rebecca Totaro, trans. and ed., *The Plague in Print: Essential Elizabethan Sources, 1558-1603*, (Pittsburgh: Duquesne University Press, 2010), 2.

⁸⁵ I have not included Thomas le Forestier's tractate in this discussion, as only one extant copy survives and nothing is about its circulation in England.

⁸⁶ Christiana Nockels Fabbri's analysis of 152 plague tractates clearly demonstrates that there was a marked continuity in plague *medicine* between 1348 and 1599. Fabbri does not, however, explore how such written texts reflected practical responses to epidemic disease. "Continuity and Change in Late Medieval Plague Medicine: A Survey of 152 Plague Tracts from 1348 to 1599," (PhD diss., Yale University, 2006), ProQuest (3214261). Art historians have shown that the medical knowledge depicted in disease-related art works exceeds that of contemporary medical treatises. Christine M. Boeckl, *Images of Plague and Pestilence: Iconography and Iconology*, (Kirksville, MO: Truman State University Press, 2000).

⁸⁷ Faith Wallis, "The Experience of the Book: Manuscripts, Texts, and the Role of Epistemology in Early Medieval Medicine," in *Knowledge and the Scholarly Medical*

The popularity of the tractates, as measured simply by the number of print editions, does not necessarily reflect people's beliefs. Indeed, like some other medical and scientific works, the tractates may have been written for entertainment purposes rather than for edification.⁸⁸ Or, as Rebecca Totaro declares, they might have been "intended to alter the thoughts and actions of readers" rather than to reflect them.⁸⁹ In whichever light one examines them, the contagious disease tractates, on their own, do not provide a reliable witness to attitudes about and understanding of epidemic disease in late medieval and early modern England. Instead, adequately addressing such understanding and beliefs necessitates the study of audiences as a starting point. As has been shown here, previous scholarly assumptions about who might have read the tractates do not stand up to a closer examination of six specific texts that are representative of those that were in circulation during the fifteenth and sixteenth centuries.

Can we trust Moulton's assertion that he wrote for the poor? Yes – because Moulton and his contemporaries meant that they were writing for a wide audience that encompassed the poor. All classes of readers ultimately relied on the same medical foundations:

...the professional medical manuscripts (some with English texts) contain the same type of information given in the nonprofessional [vernacular] collections, and whether the sick man were treated by a graduate doctor or by a practical leech, the procedures would be similar – prognosis by the planets, diagnosis by urinology, and medication by herbs, bloodletting, and empirical remedies.⁹⁰

Traditions, ed. Don Bates, (Cambridge: Cambridge University Press, 2005), 104.

⁸⁸ Keiser suggests, for example, that while medical and scientific writings sponsored by aristocratic patrons were often practical, they also "clearly address a wider range of interests, including a desire for entertainment." *Works of Science and Information*, vol. 10 of *A Manual of the Writings in Middle English, 1050-1500*, (New Haven: Connecticut Academy of the Arts and Sciences, 1998), 3595.

⁸⁹ Totaro, *Plague in Print*, xi.

⁹⁰ Robbins, "Medical Manuscripts," 395. Jones notes "that the boundaries of the medical discourse community which many professionals perceived and attempted to reinforce, were more apparent than real, were certainly permeable, and...the discourse did extend to all areas of the literate community, and beyond." "Discourse Communities," 30.

Whether the poor could actually *read* the tractates is thus less the point than the reality that, by putting the tractate out into the market, tractate authors and their printers were making available the medical knowledge that they wished to transmit. Whether and how that transmitted knowledge was received and used is, of course, an entirely different question.

CONCLUSION

This thesis aimed to connect the medical and non-medical historiographies by contributing to a discussion about the place of, and authority assigned to, medical treatises in assessing what people understood about contagious epidemic disease in fourteenth through sixteenth century England. It focused on one particular type of medical treatise – the English contagious disease tractate – to understand how the concept of contagion was presented in relation to two separate contemporary epidemic diseases, the plague and the English Sweating Sickness, and how this concept was communicated to medical and non-medical audiences. By examining the tractates' contents and contexts as a whole, it was also possible to identify the ways in which the tractate's structure and inherent medical purpose were used to camouflage socio-political-professional commentary that both underlay and co-opted discussions of contagion.

The contagious disease tractate emerged as a specific genre of medical text in the mid-fourteenth century through which contemporary physicians recorded and disseminated their ideas about the nature, prevention, and cure of the plague. In response to recurrent plague epidemics over subsequent centuries, tractates were written, copied, translated, adapted, and disseminated by the hundreds in a variety of languages. Rather than producing original works, English writers translated and adapted a small number of Continental tractates, some more than 100 years old, well into the sixteenth century. English writers also used the tractate structure to address other epidemic diseases, such as the sweating sickness; in doing so, however, they incorporated eyewitness experiences and observation-based commentary that modified the ways in which contagion and epidemic disease were discussed.

The repeated recycling of a limited set of original tractates – whether in translation or in modified form – meant that the English plague-specific tractates’ prophylactic and therapeutic content primarily repeated what the source material had said. Scholastic humoralism remained prominent in prevention and treatment advice, and medical concepts of miasma and contagion also remained largely static, with infected foul air proclaimed to be the primary means through which epidemic disease was transmitted. Just as with the plague, the source of the sweating sickness was said to be infected, venomous air. To the plague tractate authors, however, an individual’s susceptibility to the disease, which was linked to his humoral constitution, also made him contagious through the exhalation of putrid, infected breath that carried disease. The sweating sickness, on the other hand, was not perceived to be transmissible from person to person and prophylactic measures focused much more on removing sources of stench and putrefaction than on staying away from the sick. John Caius’s treatment remedies for the sweating sickness – which were predicated on a need to expel ‘venime’ from the ill person’s body – actually necessitated close, physical contact between the ill and their caregivers. The contagiousness of the plague and the sweating sickness were thus viewed and understood differently. Plague-specific tractate contents should therefore not be retrospectively applied to other contemporary epidemic diseases. This is particularly relevant because the plague-specific and non-plague tractates were virtually identical in style and format; a comparative study reveals that the late medieval and early modern concept of contagion was multi-faceted and disease-specific.

In addition to their medical content, a closer scrutiny of the English contagious disease tractates reveals that authors adapted the tractate structure to respond to, and comment on, local religious, socio-political, and professional concerns. By looking at the tractates not just

as what historians have purported them to be – medical advice for the public and fellow medical practitioners – but rather as multi-layered texts situated with particular socio-political contexts, this thesis demonstrates that they tell us as much about the construction of contagion and disease for political and other non-medical purposes as about contemporary theoretical concepts of disease. Many of the tractates include either direct political commentary couched as medical ‘fact’ – such as the arrival of the sweating sickness with Henry VII – or indirect references to dynastic strife – such as Moulton’s association of the plague with family-based feuding and the ascension of ‘knaves.’ Some tractates, such as the *Litill Boke*, were translated and circulated for almost purely political reasons. The tractates also demonstrate a striking degree of professional conflict; while not an unusual feature of medical treatises more broadly, such strife coloured the way that tractate authors presented their own ideas and, more importantly, criticised the beliefs and practices of their competitors. With each author denigrating and castigating the others, determining clearly who might have actually believed what becomes less straightforward than it might appear. It is thus crucial to place the tractates within their appropriate socio-cultural contexts before taking their contagion-related contents at face value. The inclusion of largely formulaic, static theoretical medical content allowed the authors to creatively frame and discuss non-medical issues. Indeed, by the sixteenth century, the English contagious disease tractate encompassed such a wide spectrum of forms, ranging from religious sermons to medical books to a wide variety in between, that it is sometimes challenging to determine which tractates were actually meant to be medical treatises and which simply used the tractate structure (along with a suitably pestilence-related title) as window-dressing for what were essentially non-medical texts. In this light, historians need to look more carefully at the non-

medical contents and contexts of tractates before assigning an authority to them that may not be warranted.

Tractate authors addressed their tractates to a wide audience. While historians have dismissed prefatory and other textual dedications as little more than sales tactics, examining the dedications in light of the tractates' codicological features reveals that the texts were, for the most part, actually meant to be accessible to an audience that encompassed not only the elite *literati*, but also the poorer classes. Indeed, like other vernacular medical works, the tractates targeted different audiences, depending on their contents, contexts, formats, and levels of technical and theoretical detail.¹ The potential and actual audiences for these works was broad, and included not only all those who could read (across different social statuses, education levels, and professions) but also those who had access to someone who could read to them. This contradicts some of the existing scholarship on tractate audiences, which suggests that in spite of their claims to have been written for the 'common man, woman, and child,' the circulation of such texts was more likely limited to a small group that was comprised primarily of medical practitioners and educated laymen.² Vernacular medical texts filled a need or desire for information that existed in an intermediate space between formalized and scholastic learning (*ars*) and the popular and colloquial mentality (*vulgus*).³

¹ Päivi Pahta and Irma Taavitsainen, "Vernacularisation of Scientific and Medical Writing in its Sociohistorical Context," in *Medical and Scientific Writing in Late Medieval English*, ed. Päivi Pahta and Irma Taavitsainen, (Cambridge: Cambridge University Press, 2004), 16-17. See also Irma Taavitsainen and Päivi Pahta, "Vernacularisation of Medical Writing in English: A Corpus-Based Study of Scholasticism," *Early Science and Medicine*, 3, no. 2 (1998): 160, <http://www.jstor.org/stable/4130415>.

² See, for example, Paul Slack, "Mirrors of Health and Treasure of Poor Men: The Uses of the Vernacular Medical Literature of Tudor England," in *Health, Medicine and Mortality in the Sixteenth Century*, ed. Charles Webster, (Cambridge: Cambridge University Press, 1979).

³ Luke Demaitre, "Medical Writing in Transition: Between *Ars* and *Vulgus*," *Early Science and Medicine* 3, no. 2 (1998): 88, <http://www.jstor.org/stable/4130412>.

In other words, much of the vernacular medical literature was both “written and read on a level below the classroom but above the street.”⁴ Acknowledging that the tractates were accessible to a wide audience that included the poor is still insufficient, however, to demonstrate how and if transmitted medical information was received and used, or how formulaic theories of contagion reflected popular practices against it.

Contagious disease tractates typically appeared during or shortly after major disease outbreaks and were often reprinted in new editions, with little change, during subsequent outbreaks.⁵ While tractates responded to the public’s fears and anxieties about contagious disease, any exploration of popular understanding of and beliefs about contagious disease in the late medieval and early modern periods that is based on contagious disease tractates alone addresses only a small part of the story. Just as the fields of microbiology and paleopathology are now adding significant insights into the clinical identity of past diseases, laying to rest some of the debates that have consumed historians over the past few decades, so too would a pluri-disciplinary investigation of contemporary materials help to show the extent to which medical knowledge was transmitted and used.

Echoes of people’s experiences with disease outbreaks are found in a wide variety of non-medical works. If contagious disease tractates purported to portray how disease was understood from the learned medical perspective, even when such documents were not written by medical practitioners, many lay documents reflected how people and their

⁴ Pahta and Taavitsainen, “Scientific and Medical Writing,” 10.

⁵ Heikki Mikkeli and Ville Martilla, “Change and Continuity in Early Modern Medicine (1500-1700),” in *Early Modern English Medical Texts: Corpus Description and Studies*, ed. Irma Taavitsainen and Päivi Pahta, (Amsterdam: John Benjamins, 2010), 19; Irma Taavitsainen et al, “Medical Texts in 1500-1700 and the Corpus of Early Modern English Medical Texts,” in *Medical Writing in Early Modern English*, ed. Irma Taavitsainen and Päivi Pahta, (Cambridge: Cambridge University Press, 2011), 13.

communities actually reacted when faced with health threats. Administrative records can provide insight into municipal or state-level actions that were taken against disease, as well as the ways in which medical theories were or were not incorporated into political and administrative decision-making. Paul Slack's study of the English *Books of Orders*, for example, shows that restrictive and controversial attempts to manage plague outbreaks in the late sixteenth and early seventeenth century were incorporated into wider social control policies that were both based at least as much on political imperative as on medical advice and reissued repeatedly without significant alteration.⁶ Literary and art history, on the other hand, provides medical historians with a unique perspective from which to investigate contemporary perceptions and explanations of the plague – as they are revealed through images and stories, rather than through medical texts or administrative records – that may challenge assumptions about how people understood and dealt with the disease.⁷ In a similar manner, family papers and diaries that include commentary on people's personal experiences with, understanding of, and beliefs about epidemic disease could provide further insight into

⁶ Paul Slack, "Books of Orders: The Making of English Social Policy, 1577-1631," *Transactions of the Royal Historical Society* 30 (1980): 1-22, <http://www.jstor.org/stable/3679000>.

⁷ See, for example, Jennifer C. Vaught, ed., *Rhetorics of Bodily Disease and Health in Medieval and Early Modern England*, (London: Ashgate, 2010); Rebecca Totaro and Ernest B. Gilman, ed., *The Plague in Print; Representing Plague in Early Modern England*, (New York: Routledge, 2010); Ernest B. Gilman, *Plague Writing in Early Modern England*, (Chicago: University of Chicago Press, 2009); Rebecca Totaro, *Suffering in Paradise: The Bubonic Plague in English Literature from More to Milton*, (Pittsburgh: Duquesne University Press, 2005); Bryon Lee Grigsby, *Pestilence in Medieval and Early Modern English Literature*, (New York: Routledge, 2004). Medical historians have until relatively recently dismissed the visual arts as a reliable source of information about contemporary medical beliefs. Christine M. Boeckl has demonstrated that the visual depictions of the late medieval and early modern period very closely match both physical plague symptoms and human responses to modern symptoms. Christine M. Boeckl, *Images of Plague and Pestilence: Iconography and Iconology*, (Kirksville, MO: Truman State University Press, 2000).

how personal coping strategies and actions reflected or ran counter to the recommendations that were made in contemporary tractates.⁸ None of these works – whether medical, administrative, literary, theological, or otherwise – can be examined in isolation; each reflected and influenced the other and aids a better understanding of disease experiences. When using non-medical sources, of course, one must be cognizant of the degree to which they are also bound within formulaic conventions and represent contemporary interpretations of behaviours and beliefs, influenced by socio-political realities, rather than being accurate depictions of them. However, when considered as part of a larger, pluri-disciplinary study, such materials can provide scholars with a wider perspective on how contagious disease tractates were accessed, understood, and used.

There are several issues raised by this thesis that remain unanswered. Most noteworthy is the question whether the English disease and tractate experience was truly unique. Disease and socio-political-professional turmoil were not exclusive to England, of course. However, the English experience with the sweating sickness, the slower evolution of medical practice and the less-rigid demarcations between medical practitioners, the printing industry's conservatism, the long-standing custom of translating or adapting Continental medical texts rather than producing local works based on local knowledge and practices, and the distinct ways in which the religious transformation unfolded in England all point to the likelihood

⁸ In his study of the impact of the plague, Slack quotes and/or makes reference to a large number of manuscripts and personal papers, but unfortunately provides little more than bibliographical information about these sources, leaving ambiguous their value to lay-medical comparative study. Paul Slack, *The Impact of Plague in Tudor and Stuart England*, (London: Routledge and Kegan Paul, 1985). Wrighton cautions that such personal letters sometimes reflected the contents of the tractates, not so much because they were believed, but because they constituted a common narrative trope. Keith Wrightson, *Ralph Taylor's Summer: A Scrivener, His City, and the Plague*, (New Haven: Yale University Press, 2011), 7-8.

that the English experience was sufficiently different from that of Continental countries to warrant cross-cultural comparisons. Comparing the contents of English-language texts printed outside of England with those printed in England would shed additional light on the ‘English experience,’ as would a study of the political suppression of printing during times of socio-political uncertainty. Furthermore, adding more cross-disease, cross-time period, and cross-species analyses to a much larger study would also strengthen this thesis’s results.⁹

In his recent micro-historical account of the 1636 plague outbreak in Newcastle-upon-Tyne, Keith Wrightson states that historians have “addressed the vast contemporary printed literature on plague, elucidating how people of the time understood (or rather misunderstood) the nature of the disease, how they justified efforts to combat or contain it, and more broadly how they interpreted its meaning.”¹⁰ This thesis has demonstrated, however, that historians’ reliance on medical texts has misled the historiography of contagious disease. While the tractates do repeat the pre-laboratory medical theories that infected air was the primary source of infection and that disease could be transmitted both through the air and by direct human-to-human contact, they also clearly demonstrate that both the concept of contagion and its application varied by disease. Furthermore, and more importantly, the concept of contagion was an integral component of the wider discourse on the contemporary human condition. Rather than being limited to a medical function, the concept of contagion was used to inform discussions about individual and community morality and the state of society as a whole. It was, then, a holistic concept that served a number of purposes, all of which could be, and were, broached through the tractate structure. By taking at face value the

⁹ By the latter point, I suggest that comparing the contents of the tractates with treatises about animal diseases might add much further depth to the analysis that has been begun here.

¹⁰ Wrightson, *Ralph Taylor’s Summer*, 6.

tractates' commentary on contagion as a medical concept, without considering either its stock and static theoretical nature or its broader, non-medical meanings, historians have missed, or worse ignored, the much more interesting conversation about contagion that was taking place in the tractates. In doing so, they have also assigned more authority to contagious disease tractates as reflections of contemporary medical beliefs than is warranted.

Contagious disease tractates do not tell the whole story of late medieval and early modern understanding of and beliefs about disease. As John Caius notes,

if more ouer we can sette a parte al affections, as fretting cares & thoughtes, dolefull or sorowfull imaginations, vaine feares, folysh loues, gnawing hates, and geue oure selues to lyue quietly, frendlie, & merily one with an outhier, as men were wont to do in the old world, whe[n] this countrie was called merye Englande, and euery man to medle in his own matters, thinking them sufficient, as thei do in Italye, and auoyde malyce and dissencion, the destruction of commune wealthes, and priuate houses: I doubte not but we shall preserue oure selues, bothe from this sweatinge syckenesse, and other diseases also not here purposed to be spoken of.¹¹

While Caius's advice reflects contemporary medical beliefs about balanced humours and lifestyles, it also says much about the turbulent state of mid-sixteenth century English society. Contagious disease tractates are a relevant primary source for investigating the evolution of scholarly theoretical assumptions about contagion. Assuming that their largely formulaic contents actually reflected what people believed about contagious disease, however, does a disservice not only to them, but to us as historians.

¹¹ John Caius, *A Boke, or Counseill Against the Disease Commonly Called the Sweate*, (London: Richard Grafton, 1552), STC 2nd ed. 4343, fols.31r-31v.

APPENDIX 1: CONTAGIOUS DISEASE TRACTATE IMAGES

The images of printed tractates are taken from Early English Books Online. Digital images of Thomas le Forestier's tractate were purchased from the British Library. I used an edited version of *De epidemia*; as no image of that version is available, I have inserted a photograph of another version that I took at the Bodleian Library in October 2012.

Figure 1: *De epidemia*, anonymous, from MS Bodleian Additional B.60, f.4r-4v

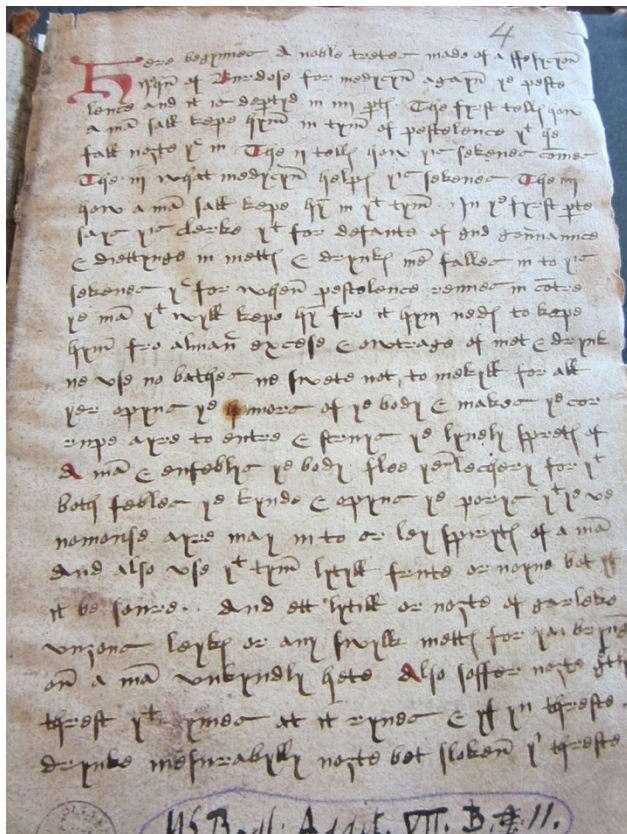


Figure 2: Sweating Sickness Tractate, Thomas le Forestier, from British Library Additional MS 27582, f.70r

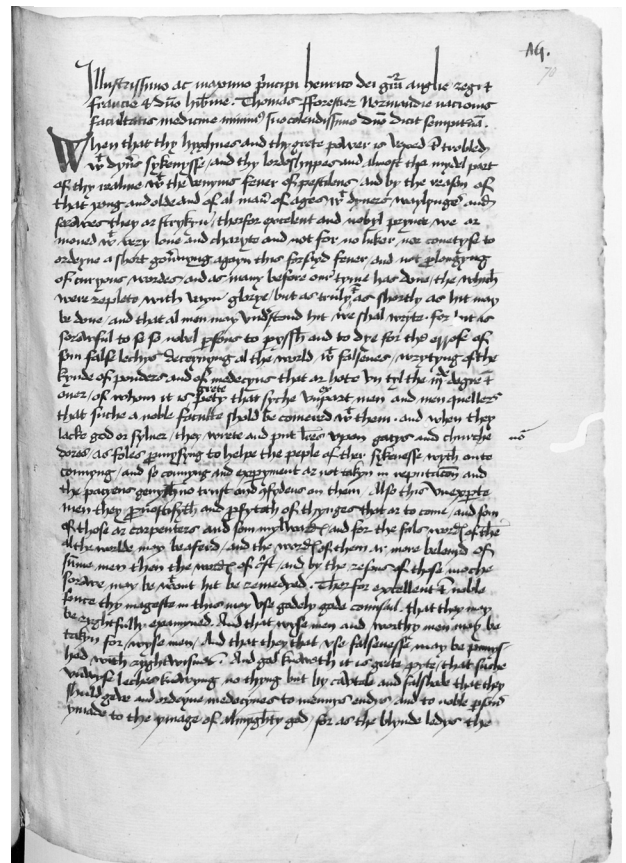


Figure 3: *Litill Boke*, anonymous, printer William de Machlinia, 1485, f.1r

Here begynneth a litill boke necessarpe
a behouefull azenst the Pestilence

To the reuerence & worship of the bles
sed Trinite & of the glorious Virgyn
saynt marpe & the conseruacion of the
comyn Welk of alle cristen people, as well for
them that ben holt as for remedie of them that
ben seke. At the Bisskop of Auisiens in the roy
aunte of Denmarke doctour of Philosophie Wille
Wate by the moost expertee & famous doctours
auctorised in Philosophie somme thinges of the in
firmyte of pestilence which dayly infecteth
sone suffreth vs to departe oute of this lyfe.
First I wil Wate the tokenes of this infirmyte
The secon d the causes wherof it cometh
The thirde remedies for the same
The fourthe comforte for the herte & the pncipal
membres of the body
The .v. When it schal be season to be lett blode
First I sayde the tokenes of this infirmite
.vij. thinges ought to be noted in the same
The first is When in a sommers daye the wedes
often times chaungeth. as i the mornynge the

Figure 4: Plague tractate, Thomas Moulton, printer Robert Wyer, c.1531, f.iiiiir

Here begynneth the fyrst
parte of this booke that sheweth dy
uers causes how the pestilence
may be gendred.

Cap. i.




Onsidering that this treat
tise, is very nedefull and
necessarpy against the spe
kenesse of y Pestilence. And
for a comon welth and health of the
kynge's lyege people: I Thomas
Moulton doctour of diuinitie, of the
order of y frere preachers, the which
for to gather moueth me for dyuers
causes. The one is prayers of myne
owne brythren.

Another is cause of prayers of
many worthy gentyles.
And another is compassion that I
haue of the pooze people, that was
is destrayed euery day therby for de
faute of helpe.

And

Figure 5: Plague Tractate, Thomas Phayer, printer
Edward Whitchurche, 1546, f.4v

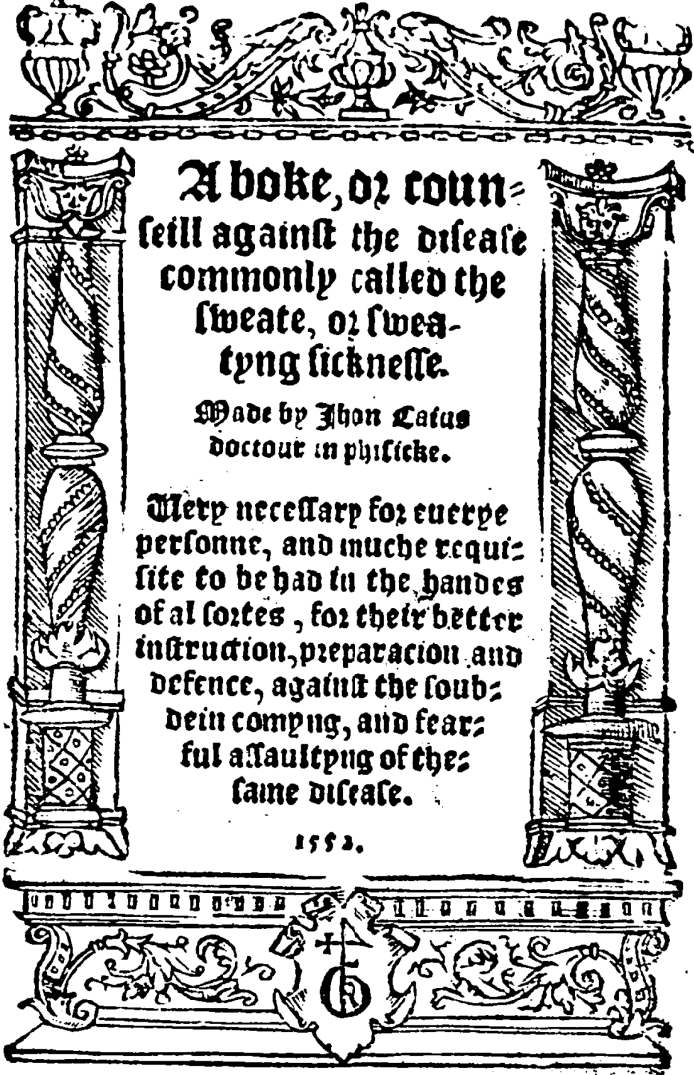
A treatyse of
What is mente or signified by
 this woorde pestilence.



pestilence is none o-
 ther thyng but a ve-
 nemous infectiō of
 þ aper, enemye to þ
 vitall spirites, by a
 certayne maliciouse
 and euell propertye
 (& not of any qualiz
 ey elemental, that is wythin it selfe.

For euen as pure triacle is a cōforter
 of lyfe not bicause of heat, cold, moyst-
 nes or drynes, but for as moch as oute
 of al his cōpositiō there redoūdeth a cer-
 tayne fourme agreynge to the forme of
 the vitall spirites of our body, so is the
 forslaid vapour enemye to our natures
 not for any qualirie as is sayde before,
 but for þ, þ his proportiō is directe cūē
 cōtrepe to our vitall spirites, cōsisting
 in þ harte, which vitall spirites, yf by þ
 wil of God, & ordynary dyet, be strōger
 in the paciēt than þ forslaid vapour is
 they dryue it frō the bodye & wil not be
 infected.

Figure 6: A Boke or Counseil, John Caius, printer
Richard Grafton, 1552, f.1r



A boke, or coun-
 seil against the disease
 commonly called the
 sweate, or swea-
 tyng sicknesse.

Made by Iohn Caius
 doctour in physicke.

Very necessary for euery
 personne, and muche requir-
 site to be had in the handes
 of al sortes, for their better
 instruction, preparacion and
 defence, against the soue-
 dein comyng, and fear-
 ful assaultyng of the
 same disease.

1552.

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