IRRATIONAL ACTORS:
LITERATURE AND LOGIC IN EARLY MODERN ENGLAND

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A DISSERTATION
PRESENTED TO THE FACULTY
OF PRINCETON UNIVERSITY
IN CANDIDACY FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

RECOMMENDED FOR ACCEPTANCE
BY THE DEPARTMENT OF ENGLISH

Advisers: Nigel Smith, D. Vance Smith, Jeff Dolven

June 2014
ABSTRACT

In *Irrational Actors: Literature, Logic, and Religious Experience* I provide a new history of early modern logic, as seen through the work of authors—including Christopher Marlowe, William Shakespeare, Thomas Middleton, and John Milton—who are not known for being logicians, and in many cases might have denied the appellation. I demonstrate, nevertheless, that only by examining logic through the lens of literature is it possible to explain the stakes of early modern innovations in logical method for phenomenal experience, for interpersonal communication and, ultimately, for salvation.

The reception of logic by poets and playwrights is complex: they do not merely read logic texts in a vacuum, but interpret it within a climate of controversial opinion. In the early modern period, logic became a subject of unprecedented notoriety, due in large part to the controversial life and career of the logician Petrus Ramus, whose death in the purge of Protestants in Paris during the Saint Bartholomew's Day Massacre helped to link logical method with religious and political conviction. Observing the violent debates of their age, early modern authors could not help but realize that though logic had pretensions to rigorous objectivity, its conclusions tended to vary with its context. It is, I argue, this paradox that fascinated authors like Marlowe, Shakespeare, Middleton, and Milton. In works like *Doctor Faustus, Hamlet, The Changeling*, and *Paradise Lost*, these authors make constant use of logical forms, but they do so in order to arrive at a wide variety of results. In their hands, logic proves to be a surprisingly versatile, and aesthetically rich, instrument.
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ACKNOWLEDGMENTS

I am pleased to acknowledge the mentors, friends, and colleagues who helped me to complete the writing of this dissertation.

My first obligation is to my supervisory committee: Nigel Smith, Jeff Dolven, and D. Vance Smith. I will never forget their patience and generosity as advisors, and the examples they set with their own work as scholars and teachers.

In the course of pursuing my graduate studies, many individuals have aided me with their expertise and conversation. I am especially grateful to Lee Johnson, Andrew Cutrofello, Leonard Barkan, Russ Leo, and Sean Keilen, who provided insightful and encouraging feedback on my written work. Thanks are also due to my friends and colleagues within the English Department at Princeton, including Matthew Harrison, Ross Lerner, Kenneth Chong, Amelia Worsley, Ariana Reilly, Matthew Stedding, Dan Walker, Giulio Pertile, Will Evans, Liz Melly, Emily Vasiliauskas, and Grant Wythoff. These and others made the atmosphere at Princeton collegial, intellectually stimulating, supportive, and pleasurable.

Many friends and family members have been supportive of my work as well as generous readers: I would like to thank in particular Derek Shimozawa, Nigel Ward, and Dylan Rush. My parents, as always, have been unfailing in their love and interest. My deepest thanks are owed to my wife, Julianne Werlin.
INTRODUCTION

We now speak of "the logic of gender," "the logic of violence," or even "the cultural logic of late capitalism." The assumption behind such statements is that there is not a single trans-historical discourse called "logic" to which any argument should adhere but rather a variety of distinct logics. Though this idea might seem typical of postmodernism, but it has, I will show, a long and influential history. As Søren Kierkegaard observes, "Dialectics is commonly considered fairly abstract; one thinks usually of logical steps. However, one soon learns from life that there are many kinds of dialectic, that nearly every passion has its own." Yet at the same time the source of logic's prestige resides precisely in its rigor and objectivity. In Irrational Actors I argue that this tension between logic as both an over-arching and individuated principle began in the early modern period as a result of being worked in the forge of religious controversy and subjected to the cool analysis of literary authors.

It can seem counter-intuitive to suggest that logic could be a resource within literary fictions. At least since the time of Giambattista Vico, indeed, it has been common to assume "that poetry was born sublime precisely because it lacked rationality." In the

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3 Giambattista Vico, The New Science (New York: Penguin, 1999): 149. Throughout Vico's great work, there is ample criticism of logic, and elevation of poetry that makes
early modern period, attacks on logic by humanists like Lorenzo Valla, Juan Luis Vives, and Desiderius Erasmus were largely predicated on the emptiness of their abstractions and the inelegance—indeed, the "barbarousness"—of their style. Poets' and dramatists' most memorable depictions of logic, moreover, are often satirical: it is usually the clowns, fools, and madmen that most often and conspicuously speak in syllogisms and employ technical logical vocabulary in early modern literature. Like Aristophanes in *The Clouds*, literary authors were all too willing to highlight the ridiculousness of formal logic when used in inappropriate contexts. Nevertheless, in his *Essay of Dramatic Poesy*, John Dryden suggests that he is "of opinion that they cannot be good poets, who are not accustomed to argue well." In offering this opinion, Dryden is suggesting that logic forms the deep structure of drama, and that discerning audiences are attuned to its presence. Indeed, he goes on to say that "false reasonings and colours of speech are the certain marks of one who does not understand the stage; for moral truth is the mistress of the poet, as much as of the philosopher." In *Irrational Actors*, it will be my general purpose to suggest that logic, even when it seems to be ridiculed within a given poem or play, is integral to its themes and structures. Within their fictions, early modern authors

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5 In the remarkable *History of Philosophy in Eight Parts* (London: Humphrey Moseley and Thomas Dring, 1656), Thomas Stanley includes a full translation of *The Clouds*, which implicitly calls into question the ethical aims of philosophical instruction, though he slyly suggests that the play is added "not as a comicall divertisement for the Reader, who can expect little in that kind from a subject so ancient, and particular, but as a necessary supplement to the life of Socrates" (67).


7 Ibid. 12.
could show what one learns about logic "from life," as Kierkegaard put it. They explore not only the nature of logic, but also the appropriateness of using it in given social situations, its ability to further one's ends, and whether it can ensure that those ends are good.

In *Irrational Actors*, I argue that the nature and purposes of literary representations of logic were profoundly affected by the life and work of Peter Ramus, a much-maligned figure in intellectual history. Though Ramus was a celebrity in the Renaissance, modern scholars have accorded him a much lower status: in studies of the discipline, such as William and Martha Kneale's seminal *The Development of Logic*, Ramus only gets a passing mention. Indeed, it is a deep irony that Walter Ong's *Ramus, Method, and the Decay of Dialogue*, the most influential study of Ramus in the English-speaking world, devotes very little attention to Ramus's writings. Focusing instead on broad intellectual trends, Ong's study is dismissive of the mechanics of the Ramist system. One reason, I will suggest, that Ramus's works are so important for literary authors is that his logic books are themselves more literary than they have been taken to be. According to William Hazlitt, "strict logicians are licensed visionaries," and even the most unpropitious technical demonstrations sometimes contain unexpected wordplay, metaphor, and (a very important neglected dimension of Ramist writing) irony. Ramus's claims for the revolutionary character of his own method may have been overstated, but

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the language in which he made those claims proved surprisingly powerful. Ramus's life, writing, and the controversies surrounding them left an indelible mark on the literature and culture of the early modern period, and the legacy of his influence continues to be felt today.

**Ramist Logic and Literature**

Ramus's legend tended to diverge from the strict facts of his life, as Marlowe humorously suggests in his depiction of the logician in *The Massacre at Paris*, which recounts his demise during one of the most notorious religious massacres of the 16th century. Marlowe's Ramus is a poor scholar, whereas the historical Ramus was rich enough to endow college fellowships; the historical Ramus was famous for being a martyr killed during a religious massacre, but in Marlowe's play he dies arguing about the niceties of formal logic with an obscure opponent named Scheckius (Jacob Schegk); Omer Talon is not Ramus's internationally famous popularizer and author of many books, but his "bedfellow." Marlowe summons up ideas of adolescence, bookishness, and poverty, and yet simultaneously describes Ramus as a famous intellectual speaking to large audiences throughout Germany, whose books are quoted from memory by even his greatest foes. The satire is appropriate, for it shows the absurdity of Ramus being held up as a modest, bookish, and religious saint by the puritans who promoted his cause in England. In *The Massacre*, the Duke of Guise refers to Ramus as a "flat decotamist" (29), but the impression Marlowe gives us of him is twofold.\(^\text{11}\)

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\(^{11}\) For more on Marlowe's strange representation of Ramus, see Sarah Knight, "Flat Dichotomists and Learned Men: Ramism in Elizabethan Drama and Satire," in Steven J. Reid and Emma Annette Wilson (eds.), *Ramus, Pedagogy, and the Liberal Arts: Ramism*
Crude satires of Ramus in the early modern period are common. In a series of important essays, Mordechai Feingold has documented the hostility of early modern Englishmen toward Ramus, particularly among educated authors, by comparison with the esteem Ramist ideas enjoyed on the Continent. The authors of a play produced at Cambridge University refer to a budding Ramist logician as "Stupido," for example. Marlowe's critique is, of course, subtler—but also more historically grounded. Ong's criticism that Ramus was "superficially revolutionary but at root highly derivative" is not only a judgment of Ramus's career but also a plausible summary statement about his reputation in the sixteenth and seventeenth centuries. In order to understand Marlowe's satire, it is necessary to understand Ramus's grandiose and in some cases patently indefensible pretentions, and also the undeniably great influence his "derivative" methods had on the habits of writers within a range of political and discursive contexts. Ramus's public persona was that of a virtuoso and a radical, but even in his own writings and in those of his acolytes one may detect a complex and even respectful orientation towards the tradition of logic as it was then understood. Ramus was a revolutionary in the


13 Stupido is the name given to the vain, slow-walking, and foolish logician in The Pilgrimage to Parnassus, which appeared in 1598.

14 Ong, xvii.
Renaissance sense of the term: he simultaneously sought to introduce a new system and to complete an old one.

Among self-described Ramists, Ramist method was seen first and foremost as the consummation and perfection of a long tradition of thinking about logic, including the naive production of arguments by the unlearned and major theorists. For Marlowe's acquaintance, the Ramist logician Abraham Fraunce, logic emerges gradually in the course of the use and improvement of natural language, "so that, Art, which first was but the scholler of nature, is now become the maystres of nature, and as it were a Glasse wherein shee seeing and viewing herselfe, may washe out those spottes and blemishes of naturall imperfection."  

Peter Ramus himself, for all his radicalism, variously explained his lineage as deriving from the work of Plato and Aristotle, and the preface to a ubiquitous English translation of his "Two Books of Dialectic" boasts that the "perfecte methode" of Plato and Aristotle has been "raysed as it were from deathe, by the most learned and Martyr to God, Petrus Ramus, who hathe not only proued with stronge argumentes, but in very deede set before our eyes that this perfecte methode maye be accommodate to all artes & sciences."  

In the light of such statements, one would be hard pressed to understand the reason for Ramus's incendiary rhetoric against Aristotle, who he has merely excavated from the ruins of centuries of misleading scholastic commentary on logic.

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15 Abraham Fraunce, *The Lawyer's Logic* (1588): 1-2. The spelling has been lightly modernized.
In a sense, the Ramist program was not a development of theory at all, but rather a revolution in practice. It facilitated the teaching of logic in classrooms by simplifying challenging subjects like syllogistic: Walter Ong memorably called it a "pedagogical juggernaut." Ramist logic, according to Ramist logicians, constituted a breakthrough in efficiency, allowing students to move more rapidly through a diverse humanist curriculum, and aiding statesmen and pastors to cut a figure in public life. The Ramist clarion call was "to put the logical arts to use." Ramus himself applied his method to poetry, mathematics, physics, and other disciplines; a Cambridge contemporary of Marlowe's broke down the syllogistic structure of the biblical Psalms; Melanchthon and his followers transformed much of the Bible into a tissue of syllogisms. Indeed, it was common for professors, such as Niels Hemmingsen (a student of Melanchthon's), to so thoroughly inculcate students in the rules of syllogistic that they would "come into theyr mindes, euen as it were vppon a sodaine" any time they read the Bible or composed a sermon. The Ramist concern with brevity and efficiency also resulted in the

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17 Qtd. in Walter Ong, 41. For a very useful, extended discussion of Ramus's declarations of the use-value of his system, see 41-45. Other logicians made similar points. An early Ramist logician, Roland Maclmaine, asserts that there "is nothing appartayning to dialectike eyther in Aristotles xvii booke[s] of logike, in his eight booke of Phisike, or in his xiii bookes of Philosophie, in Cicero his bookes of Oratorie, or in Quintilian, in the which there is almost nothing that dothe not eyther appartayne to the invention of argumentes [or] a disposition of the same, but thou shalt fynde it shortlie and after a perfecte methode in this booke declared," in The logike of the moste excellent philosopher P. Ramus martyr, newly translated, and in diuers places corrected, after the mynde of the author (London, 1574): 7-8. Thomas Blundeville declared that logic is "very necessary for all students in any profession" in the subtitle of The arte of logick Plainely taught in the English tongue, according to the best approved authors (London, 1599).
18 For example, William Temple, a student at Cambridge while Marlowe was there, composed A logicall analysis of twentie select Psalmes (London 1605), in which he breaks down 20 psalms into over 100 pages of closely reasoned argument.
19 Niels Hemmingsen, The preacher, or Methode of preachinge, wrytten in Latine (1574).
composition of countless textbooks and preaching manuals organized in accordance with Ramist principles, which helped to manage information in a time when there was "too much to know."\(^{20}\) As Walter Ong observes, Ramist method "assimilated to itself all discourse" so that any "curriculum subject, an oration (or a poem), stripped down to its essentials, is a string of definitions and divisions somehow or other operating through syllogisms."\(^{21}\) It is, he writes further, "close to the view of a madman."

Logic was inevitably affected by the disciplines it came into contact with. In particular, the use of Ramist logic by puritan theologians, in addition to the accident of Ramus's death during the Bartholomew's Day Massacre, strengthened associations between an ostensibly universalizing logical discourse and a radical religious community. As a result of the fact that Ramus converted from Catholicism to Protestantism, for example, the basic logical operation of "conversion," which denoted the transformation of propositions into syllogisms, took on religious connotations that literary authors explore in their fictions. In interpreting the influence of logic on literature (and the literary qualities of logic books), it is essential not only to consider the formal characteristics of logical method, but also the ways in which it was used and discussed in a wide variety of sociopolitical contexts.

There have been recent attempts to rehabilitate Ramus in the wake of the scathing criticisms of scholars such as Ashworth, Ong, and Feingold. Recent scholarship, influenced by the pioneering work of Howard Hotson, has indeed done much to suggest

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\(^{20}\) For comprehensive overviews of the nature and purposes of Ramist textbooks, see Howard Hotson, *Commonplace Learning: Ramism and its German manifestations* (New York: Oxford University Press, 2007); and Ann Blair, *Too Much to Know: Managing scholarly information before the modern age* (New Haven: Yale University Press, 2010).

\(^{21}\) Walter Ong, 192.
that Ramus and his acolytes were more complex than one would tend to infer from their controversial writings. In focusing on the literary reception of logic, however, I argue that the influence of Ramist logic sometimes consisted precisely in the implausibility of logicians' claims for it. By triangulating literary texts, logic manuals, and popular discussions of logic, I provide a new, revisionist account of the conceptual stakes and historical development of early modern logic. It is perhaps true that Ramus was a better conventional logician than has been granted by his harshest modern critics, but in *Irrational Actors* I will suggest that the aspects of his work that created the most controversy—that is, their style and their pretentions to utility—that proved most influential for literature.

**Summary of Chapters**

Throughout *Irrational Actors*, I show how theoretical concern about Ramist logic affected the plot and ideas of works by Christopher Marlowe, William Shakespeare, Thomas Middleton, and John Milton. The selection of authors is dependent in part on the sophistication of the questions they ask about logic, but I have also chosen them for their influence. Marlowe's depictions of logicians—Doctor Faustus, and Ramus himself in *The Massacre at Paris*—virtually set the terms for subsequent treatments of logic in works by Thomas Greene, George Chapman, and indeed Shakespeare's *Love's Labors Lost*, in which officials involved in the Massacre at Paris trade discourses about love and learning. Hamlet's language is developed in the discourse of Giovanni in *'Tis a Pity She's*

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22 For an overview of the controversy and an attempt to treat the life and writing of Ramus with more seriousness, see Reid and Wilson, *Ramus, Pedagogy, and the Liberal Arts*. 
a Whore, which is similarly concerned to illustrate a peculiar logic to incestuous relationships. Middleton's university men have analogues in other Jacobean plays by Jonson, Beaumont and Fletcher, and Webster. The polemical writings and poems of John Milton represent something of a summation: as a university student and adherent to Ramism, Milton makes ample use of logic in his writings; but he also shows awareness of the criticisms of logic in his dramatic predecessors, and even—I argue—allows discomfort with logic to weaken his justification of God's ways to men in Paradise Lost.

In the end, I have tried simultaneously to explain a series of important philosophical puzzles that emerge from literary employments of logic, and to tell a narrative of the development of logic in literature of the early modern period.

Chapter 1: "Marlowe and the Limits of Logic"

In chapter 1 of Irrational Actors, "Marlowe and the Limits of Logic," I assess Marlowe's powerful interrogations of logic, including his deft reflections on the implications of Ramus's life and career for understanding the discipline. Marlowe's equivocal representation of Peter Ramus in The Massacre at Paris shows that he was sensitive not only to the intricacies of his logical methods, which were much discussed during his time at Cambridge, but also the controversy surrounding his life and martyrdom within the context of English religious polemic. In his masterpiece, Doctor Faustus, Marlowe provides an even subtler and more provocative examination of the implications of Ramus's thought for the understanding of logic. At the very outset of Doctor Faustus, the protagonist, like the historical Ramus, dismisses the "sweet analytics" of Aristotle, on the way to rejecting all of the major disciplines of the early
modern university. It is with the putative rejection of logic that Marlowe begins his exploration of what logic is.

The question of what Faustus has rejected is complicated by his subsequent behavior, for almost immediately he continues to make use of logical definitions and syllogisms that he has ostensibly rejected. He proves that religion is a sham using a syllogism, and chops logic with a devil. I discuss this strange tendency to make use of the logic he has rejected—what I call the "fetishistic disavowal" of logic—against a background of religious controversy in which polemicists rejected or extolled logic in keeping with their sense of what was expedient. The tragedy of Faustus lies in his unconscious use of the ideas and methods he claims to have abandoned, and I show that this as a basic conceptual problem for the age. Ultimately, I argue that Doctor Faustus is not the celebration of skepticism that critics have taken it to be, but rather a skeptical treatment of skepticism itself, predicated on a sophisticated understanding of the philosophical implications of contemporary logical theory and its applications.

Chapter 2: "Shakespeare and the Logic of Social Life"

In chapter 2, I investigate Shakespeare's representation of logic use in Hamlet. The play consists almost entirely of current and former university students, and there is conspicuous logic use, though often of a flagrantly fallacious sort. At one point, Hamlet uses a syllogism to "prove" that Claudius is his mother, and he cannot but marvel at the "absolute" logical reasoning of the gravediggers. Such scenes, I suggest, are in keeping with Shakespeare's general understanding of the omnipresence of logic at universities, and within the "cases of conscience" promulgated by contemporary theologians. In
Shakespeare's time, one asserted one's mastery at school through well-honed logical arguments. One achieved salvation through the careful logical analysis of one's actions using logical arguments. If one is a villain, one makes expeditious use of logic to determine the easiest means to one's ends. Logic, in short, is a tool for facilitating desired outcomes in both the short and the long term. Everywhere in the play, characters seem bent on following the Ramist injunction to put the logical arts to use.

Yet *Hamlet* also shows how the neat rules of logic can crumble under the pressure of time. For how is it possible to apply consistent rules of logic to inconsistent characters and shifting circumstances? As conditions change, propositions that are predicated on particular individuals doing things in given circumstances that once seemed certain lose their validity. Recent criticism has reflected declining interest in the venerable issue of "character" in Shakespeare's plays, abjuring such an interest in favor of more topical concerns; but I argue that Shakespeare provides a searching and historically informed analysis of identity from the ground up, as it were, starting with basic logical problems in contemporary textbooks. In a play almost obsessively concerned with the nature of reason and madness, Shakespeare provides a compelling account of the limits of rationality, and indeed the extent to which rationality conforms to the strictures of logic.

Chapter 3: "Middleton and the Psychology of Logic Use"

Speaking of his father, Tristram Shandy observes that "he was born an orator ... Persuasion hung upon his lips, and the elements of Logic and Rhetoric were so blended up in him—and, withal, he had so shrewd a guess at the weaknesses and passions of his
respondent—that NATURE might have stood up and said—'this man is eloquent.'" In a novel in which every character has his "hobby horse," logic may be said to be Walter Shandy's: he has a gift for argument, but it is clear that he loves it. Indeed, it is his love of arguing that effectively distinguishes him from the other obsessives that populate Sterne's fiction. In chapter 3, "Middleton and the Psychology of Logic Use," I argue that Middleton had a similar conception of how logic—whether learned or arrived at naturally—might be a way of individuating oneself from others, a psychological benefit regardless of whether it results in material benefit for oneself in the competitive socioeconomic environments that Middleton creates in his plays. Middleton develops a conception of logic as a kind of psychological resource, even a therapeutic tool.

In addition to considering some early poetry and prose fiction, this chapter centers on the tragedy, *The Changeling*, and the comedy, *The Chaste Maid of Cheapside*. In both plays, Middleton presents logic as primarily a tool by which individuals assert themselves, or arrive at self-knowledge. As with Walter Shandy (or Peter Ramus), it is unclear whether logical expertise is the result of natural ability or education: in *The Chaste Maid*, the student Tim is a witty logician but his Tutor is a fool, and several of his friends and relations display a ready command of logical argument—whether they realize it or not. In this play, regardless of one's ability, one's joy in ratiocination may be an end in itself, distracting one from the inequities and miseries of life that one cannot materially change. In *The Changeling*, the scene is darker, but logic is equally important to the people who make use of it: in particular, the humorous but, for Middleton, salutary use of

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logic by Alibius and Lollio in the madhouse serves as a stark contrast to the flagrantly illogical speeches of Ansemero, Joanna-Beatrice, and De Flores, who eagerly court ruin by determinedly rejecting the authority of reason. For Middleton, in the end, logic is not simply a neutral instrument but an expression of one's nature.

Chapters 4 and 5: Milton's Logic and the Form of Life

In my final two chapters, "Milton and the Life of the Logician" and "Milton and the Logic of Accommodation," I examine John Milton's use of logic in his prose works and his epic poem, *Paradise Lost*. Milton was the author of a logic textbook, *The Art of Logic, arranged after the method of Peter Ramus*, which he published in 1672. Whereas the difficulty in the previous chapters is to show that an ostensibly trivial topic is of fundamental importance, in my chapters on Milton I demonstrate that the obvious connections between Milton's logic and his artistic texts masks discomfort with his own logical method. I show how Milton makes use of the axioms, syllogisms, methods, and subjects that make up the Ramist system of logic, but I also show how questions about such methods are themselves to be considered part of Milton's forms. Milton's use of logic in his polemical and fictional works does not forestall but rather invites criticism. The use of logic invites questions not only about the ostensible subject—divorce, church governance, or regicide, for example—but also the grounds of argument itself.

In my final chapters, I see Milton as an endpoint in the skeptical interrogation of logical method inaugurated by dramatists and religious polemicists. I investigate Milton's exploration of Calvinist predestination alongside logical arguments about freedom and causation; I show how Shakespeare's analysis of an antic "disposition" (temperament) is
related to characters' different approaches to logical "disposition" (organization) in *Paradise Lost*; and I show how Milton, like Middleton, explores the psychic effects of intensive logic use. In his prose works, Milton communicates complex perspectives on logic on the basis of his belief in his own virtue and the insidiousness of his opponents' arguments, and particularly in *The Reason of Church Government*, develops a sense of logic as a *form* in contrast to the merely tactical arguments of the church prelates. In *Paradise Lost*, I argue, the lines are less clearly drawn: no one, not even God or the Son, provides a sure model for logic. As Stanley Fish long ago suggested, the appearance of an indubitable argument may well be a lure for the over-confident reader.

In the end, I argue that Milton's exploration of logical controversies in his works results in his notoriously complex—if not confused—metaphysical system. Disputes about whether logical propositions refer as words or things influence Milton's depictions of *creatio ex nihilo* and *creatio ex deo*; disputes about how the conclusion of a syllogism is "necessary" influence is presentation of free-will problems; and the idea of logic as the abstract form of an argument or poem has a profound shaping effect on Milton's poetics. It is my purpose, finally, to suggest that critical debate about Milton's "monism" reflects Milton's own thinking (and doubts) about logic, rather than—as is the case with other metaphysical monists—an attempt to arrive at an original metaphysics. Milton tried to compose a "great argument," and in the process questioned the limits of argument itself. The doubts that manifest themselves even at key moments in his poetry reflect not only his courage as a theological thinker, but also the subtlety of the Ramist system of logic that he mastered and used over the course of his life.
It is generally accepted today that we need reasons to believe that something is true. It is perhaps less commonly remembered that we also need reasons to doubt. As Thomas Nagel observes: "Every hypothesis is a hypothesis about how things are and comes with logic built into it. The same is true of every doubt or counterproposal. To dislodge a belief requires argument, and the argument has to show that some incompatible alternative is at least probable." It is, indeed, impossible to disbelieve in some things, Nagel suggests. The idea that $1 + 2 = 3$, for example, is indubitable: any argument to the contrary is more complex, would require us to accept more premises than are entailed by belief in this simple mathematical proposition. In Nagel's view, therefore, "there just isn't room for skepticism about basic logic, because there is no place to stand where we can formulate or think it without immediately contradicting ourselves by relying on it." There just isn't room for total skepticism, because any defense of skepticism is predicated on the kind of logic that is supposed to be refuted by skepticism. Skepticism, in Nagel's view, is self-refuting.

There is a scene early on in Christopher Marlowe's *Doctor Faustus* where the protagonist, for no apparent reason, disbelieves in something he has every reason to take for granted. In this scene, Faustus asks Mephastophilis for information about "the place

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25 Ibid. 62
26 This is only obviously true, of course, if one mounts a logical defense of skepticism, which a total skeptic would presumably not wish to do. In this essay, I will consider ancient and modern skeptical rejoinders to Nagel's position.
that men call hell," which the affable demon is all too happy to give. In response to Mephestophilis' account of the nature of hell, however, Faustus simply and probably sincerely answers: "I think hell's a fable." In a play filled with magic, this laconic answer still manages to startle critics. Stephen Greenblatt is representative when he states that it is "extraordinary, and in the circumstances, ludicrous." Indeed, it seems as strange to tell a devil that there is no hell as it would be to tell a Martian that there is no planet Mars. It is important to remember that, in a play where Faustus can temporarily believe that a ghoul in a wig could be his lover, it is a scene depicting Faustus's incredulity that seems most incredible.

Numerous critics have attempted to draw Marlowe from Shakespeare's shadow by shining a light on the heretical notions to be found in plays like Tamburlaine parts 1 and 2, The Jew of Malta, and Doctor Faustus. For example, in his seminal study The Overreacher, Harry Levin decries the critical neglect of Marlowe on the basis of an "unholy trinity" of atheism, Machiavellianism, and Epicureanism, none of which (Levin suggests) should trouble us any longer. Later critics, including Jonathan Dollimore and John Parker, have similarly celebrated Marlowe for his radical skepticism, which was paradoxically nursed in an "inner dialectic" of Christian thought that tried to negate it.

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27 This and subsequent quotations are from Roma Gill's edition, based on the A Text of the play (Oxford: Clarendon Press, 1990): 5.130. Citations from this text are put in parentheses in the text hereafter.
30 See Jonathan Dollimore, Radical Tragedy: religion, ideology and power in the drama of Shakespeare and his contemporaries (New York: Palgrave Macmillan, 2010), and John Parker, The aesthetics of Antichrist: From Christian drama to Christopher Marlowe (Ithaca: Cornell University Press, 2007). The books complement each other, since
When Faustus calls hell a fable, however, I suggest that we come up against a kind of limit: Faustus has transgressed the limit of what may be doubted. What remains uncertain is what the consequences of this skepticism are—and whether, indeed, there is a form of credulity that is even preferable. In this essay, I examine these issues through an analysis of Marlowe's representation of logic. Early modern logic is notorious for its "rhetorical" character by comparison with ancient and medieval logical systems, but in order to understand the force of Marlowe's satire of his hero it is necessary to recover an idea of logic as abstract, universal, and indeed necessary. Within Marlowe's play—and in his time—logic has a twofold and contradictory reputation as an objective formal system and a mere tool for sophistry. In the first lines of the play, the protagonist rejects logic just as many scholars have rejected the logic of Marlowe's time. However, Marlowe himself is dialectical about dialectic: his question, in the end, is whether logic—and ultimately whatever ideas might be seen to be dependent on it—should be rejected, or even can be rejected.

1. Rejecting Logic

The rejection of basic logic seems to involve one in paradoxes pertaining to total skepticism. It is therefore significant that Marlowe himself represents rejections of logic twice in his work: in Doctor Faustus, the protagonist bids adieu to the "sweet Analytics" of Aristotle during his retrospective survey of his academic career, and in The Massacre at Paris the Duke of Guise has Petrus Ramus, the most famous logician of the age, cut down with a knife. The general question I want to ask is what precisely is the logic that is

Dollimore contextualizes Marlowe in early modern thought, whereas Parker produces a more general survey of Christian writing since antiquity.
being rejected in these scenes? In the early modern period "logic" was a contested term. Humanists attacked and reviled the medieval "Schoolmen"; humanist logicians fought among themselves; theologians debated the extent to which religion was logical—often without having read primary texts about logic. In the course of such debates, however ill informed they may appear to us in hindsight, people asked sophisticated questions about the nature and purposes of the discipline, and molded logical instruments for use in diverse social circumstances. Marlowe learned from these debates, as is evident in his conspicuous employment of facets of logical methods for obtaining definitions and organizing syllogisms, in both his poetry and plays. In The Massacre he shows that he is comfortable enough with Ramus's views about the evidentiary value of testimony and the number of epistemological categories to present them in detail. In order to grasp his intentions in these plays, it is important to determine whether and how Marlowe thinks an individual can dispense with logic. In what follows, I will analyze Faustus's initial rejection of logic as an equivocal and paradoxical one, which opens up a series of puzzles

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32 Marlowe's education has been well handled by his biographers. For extended treatment of his knowledge of logic in particular, see David Riggs, *The World of Christopher Marlowe* (New York: Henry Holt, 1994), especially chapters 4 and 5.
in the course of the play. According to David Bevington, Faustus's "fascination with logic...shows what is simultaneously exalted and debased in Faustus's view of human aspiration through language." It is, however, an anxious fascination, for Faustus's vicissitudes are bred of the uncomfortable idea that logic may be both necessary and inadequate for living in the world.

At the outset of *Doctor Faustus*, the protagonist soliloquizes about his experience with humanistic arts subjects, from logic to law to natural philosophy to theology:

Settle thy studies, Faustus, and begin
To sound the depth of that thou wilt profess:
Having commenc'ed, be a divine in show,
Yet level at the end of every art,
And live and die in Aristotle's works.
Sweet Analytics, 'tis thou hast ravish'd me!
Bene disserere est finis logices.
Is, to dispute well, logic's chiepest end?
Affords this art no greater miracle?
Then read no more; thou hast attain'd that end...

Faustus here claims that he will settle his studies. By this we might think he means to settle them in order, or put them on a kind of foundation. He will "level at the end of every art, / And live and die in Aristotle's works." He is, he tells us, ravished by

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syllogistic. Then, after quoting a single-sentence definition of logic (which, despite what he professes, is not from Aristotle), he dismisses the discipline. But it is not clear what we are to make of this informal adieu to logic. Is it simply his intention to cease investigating the topic in the future, or does he also intend to reject what he has already learned? What in particular are we to make of Faustus's love-hate relationship to Aristotle's *Organon*?

Faustus's definition of logic comes not from Aristotle, but rather from another authority, probably Petrus Ramus. According to some scholars, Ramus was a revolutionary figure in the history of logic and philosophy, sweeping away the achievements of his ancient and scholastic predecessors; and according to others he was a hack and charlatan, pilfering what he needed from Aristotle's remains like a scavenger. In *The Massacre*, Marlowe alludes to these two contradictory interpretations of Ramus's use of Aristotle's body of work. To the Duke of Guise, Ramus is a dangerous radical, guilty of "scoffing" the *Organon* and of turning it into "a heap of vanities." Ramus's "chopped logic" is then used as a basis for chopping Ramus; as Matthew Greenfield puts it, "the murderer applies to Ramus's body a physical analogue of the philosopher's own method of dissecting problems." Ramus himself, however, voices a more humble perspective on his accomplishment: he merely "reduced [the *Organon*] into better form," and states that Aristotle's works provide a necessary foundation in logic: "And this for Aristotle will I

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34 Riggs, among many others, discusses this misquotation, suggesting that it shows "the Doctor never read those books and does not know what he is talking about," in *The World*, pg. 87.
say, / That he that despiseth him, can nere / Be good in Logick or Philosophie."\textsuperscript{37} Which is it? Does Ramus tear down tradition or settle it and build on it? It is a contradictory pair of impulses, reminiscent of Ramus's desire simultaneously to live and die in Aristotle's works, and to give them up for something better. It is puzzling that the attitudes of both Ramus and the Guise are able to coexist in a single individual.\textsuperscript{38}

The difficulties engendered by Faustus's rejection of logic ramify over the course of the speech. The first irony of what follows is that he does more than he seems to. As Genvieve Guenther notes, Faustus characterizes a logic aimed at disputing well as "a rather limited goal," but then in the next line "the significance of what he is abandoning changes": "Faustus is abandoning not just the form of disputation but the opportunity to study being and nonbeing, existence itself."\textsuperscript{39} In giving up the means he gives up the end. Such a development would have been prepared for by the moralistic sermonizing of the myriad defenders of Aristotle from Marlowe's time. Roger Ascham, indeed, goes so far as to suggest that to depart from Aristotle is to cease from being a Christian. In \textit{The Schoolmaster}, Ascham includes Ramus among the worst heretics, not on the basis of a nuanced consideration of his system, but simply for inculcating irreverence for authority. According to Ascham, if one rejects the authority of Aristotle's logic or Quintilian's rhetoric as Ramus did, one will "from these steppes, likelie enough presume, by like pride, to mount hier, to the misliking of greater matters," eventually putting oneself

\textsuperscript{37} \textit{The Massacre}, 7.48-50.
\textsuperscript{38} Nevertheless, Faustus is not alone in this puzzling attitude. Theophilus Gale, for example, was capable both of calling Ramus the greatest philosopher since Plato and a mere corrector of Aristotle, "with designe to render \textit{Aristotle's Logick} more useful." See \textit{The court of the gentiles, or, A discourse touching the original of human literature, both philologie and philosophie, from the Scriptures and Jewish church} (London, 1670): 370.
"against Christ and all true Religion." At the same time one tears down the hierarchy of knowledge one descends a slippery slope. It is inevitable, Ascham suggests, that Faustus will go on to bid divinity a formal farewell, as he eventually does: "Divinity, adieu!" (48). Nevertheless, if it is true that Faustus gives up more than he intends as a result of disclaiming Aristotle, it could also be argued that he gives up less than he intends.

With an Ascham-like sense of disapproval, Robert Ornstein remarks on the equivocal nature of Faustus's abjuring of logic: "Inc capable of selfless dedication to his studies, he can use the very chop logic he scor ns in philosophy to justify his abandoning of theology and his pursuit of black magic." There is a deep irony in the fact that Faustus seems to make use of the very logic he has ostensibly rejected in his later rejection of divinity. When Faustus turns to divinity, we see that his rejection of logic was as superficial as his previous mastery of it, for the first thing he does when confronted with the Bible is engage in syllogistic reasoning. Presumably with his book open in front of him, he "view[s]" the following arguments: *stipendium peccati mors est*, which he correctly translates as "the reward of sin is death," and *si peccasse negamus, fallimur, et nulla est in nobis veritas*, which he again translates (student and scholar that he is) as "if we say we have no sin, / We deceive ourselves, and there's no truth in us" (38-43). Confronted with these premises, Faustus makes the following inferences: "Why then belike we must sinne, / And so consequently die. / I, we must die an everlasting death" (44-46). Finally, in Ramist fashion, he reduces the complex, syllogistic argument he has created into a simple axiom: "What doctrine call you this, Che sera, sera, / What

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wil be, shall be?" (47-48). Faustus has sought truthful premises in the Bible and arranged them into a formal argument, in keeping with the logical method he has only just foregone.

Scholars have been interested to discuss Faustus's "devil's syllogism" against the background of theological controversies at Marlowe's Cambridge, which was a hotbed of puritan agitation. In particular, Faustus's speech bears the imprint of contemporary ferment around the question of Arminianism and the establishment of Calvinist orthodoxy.\textsuperscript{42} Faustus's tendency to spurn and use logic, moreover, seems to replicate not only the ideas but also the texture of such debates, wherein he had "Graveld the Pastors of the Germaine Church" (1.112-13). In polemical writings within and between Catholic and Protestant communities, writers of all faiths tried to characterize opponents' logical arguments as arid abstractions even as they showed their own superior command of logical methods, thus "contaminating the word of God with the subtleties of sophists, and involving it in the brawls of the dialecticians," as Calvin put it.\textsuperscript{43} In the Martin Marprelate Controversy, Martin taunted his opponents over their bad reasoning and yet advised them

\textsuperscript{42} For example, Marlowe would have been intimately familiar with the famous conflict between Peter Baro and Laurence Chaderton over the existence and meaning of human freedom. Baro was punished for attacking the Lambeth articles, which affirm the Calvinist position cited by Faustus. For a brief overview of the religious context of Marlowe's writing, see Paul Whitfield White, "Marlowe and the Politics of Religion," in \textit{The Cambridge Companion to Christopher Marlowe}, ed. Patrick Cheney (Cambridge: Cambridge University Press, 2004). See Riggs, ch. 3-5, for more on the intellectual and religious contexts at Marlowe's Cambridge. Constance Brown Kuriyama provides careful discussion of Marlowe's friend networks at Cambridge, which included the likes of John Penry, a puritan agitator and participant in the Martin Marprelate controversy; see chapters 2 and 3 of \textit{Marlowe: A Literary Life} (Ithaca: Cornell University Press, 2002).

to make use of syllogisms.\endnote{44} One of Marlowe's mentors of stagecraft, John Lyly, took him up on the suggestion, showing how to dispose "all the lines of \textit{Martin} into syllogisms, every conclusion being this, \textit{Ergo Martin} is to be hanged."\endnote{45} The status of logic was similarly uncertain in more mainstream discourses of the time, such as the famous controversy between Thomas Harding and John Jewell. For example, Harding admonishes Jewell for putting his trust in philosophy, because heretics put "all the force of their poisons in logic, or dialectical disputation, which by the opinion of philosophers is designed, not to have power to prove, but an earnest desire to destroy and disprove."

This general denunciation of logic does not, of course, prevent him from telling Jewell that if he will "dispose [his] propositions in the form of a syllogism, [he] shall espy [his] own feeble reason."\endnote{46} Such bold contradictions caused Jewell's supporter, Edward Dering, to observe of Harding: "when it pleases him, he will not understand, neither the common phrase of speaking, nor what is meant by plain sayings. Again when it pleases..."

\begin{footnotes}
\item[44] Martin's first foray into controversy, the brief "Epistle" of October 1588, concludes with a lengthy summary of the "kind of arguing" the puritans will use to "be the bones of" (i.e. to kill) his episcopal opponent, John Bridges. The summary includes 14 distinct arguments and goes on for pages, a tedious method of exposition he then mockingly encourages his opponents to emulate. In the \textit{Epitome}, which appeared shortly after, Martin meets Bridges' "craft and subtlety" with ever greater craft and subtlety of his own, eventually concluding, as he did his first tract, with some argumentative pyrotechnics. The impression Martin creates is of using his opponent's crutch in order to vault a pole; a humble instrument becomes the tool of art. See Joseph Black, ed. \textit{The Martin Marprelate Tracts: A Modernized and Annotated Edition} (Cambridge: Cambridge University Press, 2008): 45; 78-9.
\end{footnotes}
him, he will use more logic, than either is true, or honest." It is almost as though authors demonstrate their mastery of logic by calling it into question. It would probably be improper, however, to speculate about whether the likes of Marprelate or Harding did more damage to the reputation of logic in the course of controversial debate.

There is a peculiar danger in putting an argument into syllogistic form, since it can give the impression of a necessary connection between unsound ideas. The authors of sophismata tried to inform readers about common errors, and religious polemicists were always alert to mistakes (by others) in excerpting, translating, and interpreting biblical concepts. A similar impulse has encouraged numerous modern scholars to comment on Faustus's selective quotations, including his handling of Romans 6: 23, the entirety of which is not to his purpose. Later in the play, when he debates Mephastophilis on the limits of hell, Faustus will quote from Calvin's commentary on the very salvific verse that he has here omitted. Such practices could be taken simply as evidence that Faustus plays fast and loose with scripture, though there is also ample evidence that he was not

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48 As many editors have noticed, Faustus would have undermined his own position if he had quoted more expansively from the passages he sees (or remembers) in the Bible: the second part of his first quotation, from Romans 6: 23, explains that "the gift of God is eternal life through Jesus Christ our Lord"; and the verse that follows his second quotation states that "If we confess our sins, he is faithful and just to forgive our sins, and to cleanse us from unrighteousness."

49 Adrian Streete observes that the salvific verse following John 1:8 is sinfully omitted again in the play, at the moment in which Faustus and Mephistophilis debate the existence of hell. As Streete points out, Mephistophilis statements about how "hell hath no limits" are exactly parallel to John Calvin's commentary on I John 1: 9, the very verse Faustus omits when he says that the reward of sin is death. See *Protestantism and Drama in Early Modern England* (Cambridge: Cambridge University Press, 2009): 156-57.
alone in such selective or disingenuous citation. ⁵⁰ If Faustus is damned because he is a bad reader, however, it is still not certain why he is. It depends ultimately on whether he chooses to be a bad reader, whether through laziness, irreverence, indifference, or whatever. ⁵¹

There is a fundamental pattern inaugurated by Faustus's initial rejection of logic, which amounts to the abjuring of that which he patently cannot do without. It is—clearly, I would suggest—the basis for Faustus's strange rejection of religion, which never seems far removed from his consciousness. As Wilbur Sanders observes: "like that of most of the 'atheist' rebels of this period, Faustus's free-thought is far from being untroubled. It is deeply involved with personal pressures, and still joined, by the umbilical cord of a terror—which-is-still-faith, to the theism it purports to reject." ⁵² Many critics—including Sanders, G.K. Hunter, and T.S. Eliot—have extrapolated from Faustus's psychodrama the

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⁵¹ There are respects in which Faustus's imperfect knowledge and largely unconscious use of logic is reflected in a deep way in his religious thinking. In particular, just as Faustus misquotes Aristotle, critics have claimed that he misquotes the Bible. As Roma Gill observes, Faustus/Marlowe did not find his Latin quotation of John 1: 8 in the Vulgate as is claimed, but rather translates the sentence from an English version (pg. 56). This reworking of biblical material is indicative of a basic pedagogical tool that Roger Ascham had introduced—ironically within the same chapter in which he denounces Ramus as a kind of rebel—that he called "double translation." Ascham encouraged students to do what Ramus seems to do: translate from Latin into English, and then back from English into Latin. It is a technique intended to show the constancy of meaning across languages and idioms. In Faustus's hands, however, the tool seems to introduce fragility into logical method, insofar as his remembrance of particular words and phrases belies his forgetfulness of their original contexts. We might ask, in the end, whether Faustus's methods of argument are the result of lack of candor (to himself—we must remember he is speaking in soliloquy) or of a mind that has become unconscious of its own methods.

idea that Marlowe himself, if he "was an atheist in the modern sense at all...was a God-haunted atheist."\(^{53}\) At the heart of *Doctor Faustus*, however—and, indeed, of all of Marlowe's work as a poet and playwright—is a basic insight about the nature of thought and the limits of psychological suppression. It is perhaps best expressed (redundantly) as the idea that one cannot not think about something one has been told not to think about.

With respect to religion, Bacon observes: "The Scripture saith, The fool hath said in his heart, there is no God; it is not said, The fool hath thought in his heart; so as he rather saith it, by rote to himself, as that he would have, than that he can thoroughly believe it, or be persuaded of it."\(^{54}\) Peter Ramus and Doctor Faustus have said in their hearts, "there is no Aristotle," but because they have said so we cannot believe them.

As logic is to religion, religion is to conjuring. It has not been lost on critics that Faustus makes use of the concepts and even language of the religion he has just rejected as he turns his attention to the magical arts.\(^{55}\) What I would like to emphasize in the next section of this paper, however, is the extent to which Faustus's conjuring is based on the same rhetorical logic that he first rejects and then makes use of in his rejection of religion. *Doctor Faustus* is a play about knowledge, insofar as a man who claims to be omniscient (but isn't) tries to become omnipotent (but doesn't). It is also more particularly about the means of acquiring and losing it. Faustus's logic—the logic of Marlowe's time—is peculiarly dependent on common-placing texts and methodically ordering the quoted material. In this respect, Marlowe's conjuring is a kind of logic in figural form.

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\(^{53}\) Qtd. in Paul Whitfield White, "Marlowe and the Politics of Religion," pg. 86.  
When he calls forth spirits from the deep, it is as though he is drawing commonplaces from texts; all that is different from his previous performances is an evident preference for secular poetry, though it will be remembered that he never abjured *this* specialty.

2. The Logic of Conjuring: The Form of *Doctor Faustus*

Faustus is guilty of a special kind of mental habit: of trying to be too skeptical, or perhaps of claiming to be more skeptical than he in fact is. In his first speech, Faustus abjures logic, but subsequently he uses it because he can hardly help using it. He similarly abjures religion, but paradoxically he does so on the basis of quotations from a sacred text. In this speech Faustus succinctly illustrates how his negation of logic is disastrous for his own process of reasoning.\(^{56}\) What is left to determine is how Faustus's unthinking employment of the thought-structures he has rejected corrupts his discourse with other individuals, particularly the spirits he raises by his conjuring. By the end of the first scene, Faustus will find what he thinks is a suitable replacement for the arts he has "abandoned":

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Then come and dyne with me, and after meate
Welle canvas every quidditie therof:
For ere I sleepe Ile trie what I can do,
This night Ile conjure though I die therefore. (1.163-66)
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It is ironic that this scene, which begins with the rejection of logic, concludes with talk of quiddities and the logical finality of the word "therefore." It is, I will argue, this

\(^{56}\) It is a kind of manifestation of the "fetishistic disavowal of belief," identified by Octave Mannoni and discussed so often by Slavoj Žižek. Julia Kristeva, indeed, goes so far as to equate fetishistic disavowal with language itself in *The Power of Horror* (New York: Columbia University Press, 1982): 37
continued use of the logic he has rejected that damns him, for it relegates him to a naive empiricism that rejects anything it cannot see—or to unjustifiable belief in things it can. In short, Faustus is given to the strange activity of calling forth demons, rejecting their discourse, and then acting on its basis.

In considering Faustus's strange relationship with the spirits he calls from the deep, it is useful to investigate Ramus's concept of "testimony," which could be used to assess the claims of reported knowledge, be it from texts, persons, or the spirits that haunt Faustus's imagination. Marlowe considers testimony as a basic problem of logic in *The Massacre*, where the Guise attempts to refute the logician's critique of the concept just before having him killed:

> And he [Ramus], forsooth, must go and preach in Germany,
> Excepting against doctors' axioms,
> And *ipse dixi* with this quiddity,
> *Argumentum testinonii est inarticulacae.*
> To contradict which, I say, Ramus shall die:
> How answer you that? your *nego argumentum*
> Cannot serve, sirrah.— kill him. (1.4.32-38)

The Guise challenges Ramus on two grounds. Most obviously, he provides a conventional attack on the ivory tower, which fails to protect a learned intellectual from the political realities that surround it and on which its existence depends. The worldly-wise politician shows that the logician's logical critique of the concept of "testimony" does not negate the value of testimony in actual, day-to-day living. Insofar as Ramists thought of themselves as doers in addition to being thinkers, it is a sharp rebuke. In
addition, however, the Guise—whether knowingly or unknowingly—cuts more deeply to the heart of the matter when he suggests the putative opponent of testimony himself "preaches" his doctrine throughout Germany. Ramus's theory of logic, in which he discountenances human testimony as a means for acquiring truth, is itself communicated by the testimony of its founder. As Andrew Hadfield observes, "in their discussion neither interlocutor does more than assert a position based on the value of authorities or supposed achievements, exactly the sort of argument Ramus's works were supposed to eliminate." In a sense, Ramus is convicted by his own testimony.

Testimony is a supposedly extraneous subject in Ramus's book of logic, but it nevertheless seems to undermine the entire structure of the theory—like a Derridean supplement, one might say. It is useful to concentrate more particularly on what Ramus says about the subject, given Marlowe's open reference to it in *The Massacre*, and its obvious relevance to the thematic negotiation of appearance and reality throughout *Faustus*. In the *Two Books of Dialectic*, Ramus discriminates between "divine" and "human" testimony in the final two chapters concerning invention. The chapter on divine testimony is brief. According to Ramus, "amongst deuine and spirituall testimonies are nombred not only the Oracles of the godds, but also the answers of prophetes and deuinours" (66). It is interesting to observe that he then provides examples of divine testimony from works by Cicero and Tibullus rather than from the Bible, though it is the implication of Ramus's devaluation of testimony for religious belief that

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58 Quotations are from Roland MacIlmaine's edition, *The logike of the moste excellent philosopher P. Ramus martyr, newly translated, and in diuers places corrected, after the mynde of the author* (1574).
made it so controversial. Indeed, it is remarkable that Ramus finds room for only two examples of divine testimony, both of which are utterly—almost comically—unlike each other. Cicero refers to the "lightning torches which did appeare by night in the Occident" and "the vehement and parching heat of the heavens" that appeared immediately before Catiline started his conspiracy, "so that the godds with a lowde voyce seamed to synge those things which now be present" (65-66). The next example is from Tibullus, and concerns advice to a woman on the verge of marrying:

Yf that in holy Churche the oracles,

Dothe tell the truthe, on my name tell her thus,

Appollo Delius dothe sure to the promise,

An happye mariagie: theryfore if thou be wyse,

Kepe well thy self, seke not the companie,

Of other men, for that is not godlie. (66)

It will be noticed that in neither of these examples is divine testimony strictly required. In the case of Cicero, he finds ill omens in retrospect, nobody having seen their significance beforehand. With regards to the example from Tibullus, many early modern ethicists would have argued that one should not need to be told by an oracle not to be sexually promiscuous. Ramus has proved that divine testimony is unnecessary by providing two examples in which divine testimony seems obviously to be unnecessary.

In Ramus's *Dialectic*, human testimony is considered immediately after divine testimony. Human testimony, Ramus tells us, can be either general, consisting in laws or famous sayings, or particular, i.e. deriving from an individual person's authority (67-8). It is probably not an intentional irony that almost the entirety of the chapter, after the single
sentence explaining this distinction, consists of quotation. Ramus begins by appealing to Cicero for an example of argument by authority or testimony: "And surely that prince of engeine and knowledge Plato, had this opinion that the common wealthes shoulede then be most happye and blessed, when that eyther learned and wyse men began to gourene them, Or that those who had the care ouer them, should geue them selues to wysdome and knowledge" (68-9). It is a suggestion that would have gratified Faustus, who claims to desire world domination before devoting himself to putting on dumb shows at court. Ramus then goes on to show that testimony applies to appeals to authority in all the disciplines: "So Christe hym self, the Apostles, and Euangelistes do confirme their doctrine, by the lawe of Moyses: The Phisicians, by the auctoritie of Hippocrates, Dioscorides, Galen, and suche others: the Philosophers, by Plato and Aristotle: the lawyers, by Iustinian: and the mathematicians, by Euclides" (69). Another kind of testimony is an individual offering his goods as surety for an action. The last kind of human testimony considered in the chapter is a person's oath. Marlowe seems to confirm Ramus's skepticism about each of these kinds of human testimony throughout Doctor Faustus. Like Ramus, Faustus takes a tour of the wheel of the arts, rejecting the authority of each in turn. The nature of oaths and surety is, of course, integral to the theme of the play.

The plot of Doctor Faustus—especially in the longer b-text—can occasionally seem random, but the concept of testimony may aid in perceiving their logic. It is, indeed, in the most apparently trivial circumstances that we may gauge the pervasiveness of the theme of human testimony in Doctor Faustus. The dialogue between Wagner and the two scholars in scene 2 is a case in point. There is no reason for Marlowe to devote 39 lines to
characters asking where Faustus has gone except to explore testimony as a possible means of securing proof:

1 Scholar. I wonder what's become of Faustus, that was wont to make our schoothes ring with, sic probo.

2 Scholar. That shall we know, for see here comes his boy.

*Enter Wagner*

1 Scholar. How now sirra, wheres thy maister?

Wagner. God in heaven knowes.

2 Scholar. Why, dost not thou know?

Wagner. Yes I know, but that followes not. (1-7)

This exchange foregrounds the potential of divine and human testimony, though the characters invoke them in passing. After alluding to how Faustus made the lecture halls ring with *sic probo* (Thus I prove it), they demonstrate how one attains evidence outside of school. The short answer is by asking someone: the second scholar says they will learn Faustus's location from his boy, who is presumably returning from wherever his master happens to be. Wagner, however, states that "God in heaven knows," before indulging in some ostensibly meaningless quibbling about how that does not affect whether or not he also has knowledge. The dangerous implication of Wagner's quibbling about the rules of implication, however, is that it never matters to humans what God in heaven knows since He always knows everything.

The most ubiquitous problem in *Doctor Faustus* is not, of course, what God knows, but rather what the demons conjured by Faustus know. What value is there in the ghostly personages—Mephistophilis himself, Alexander and his Paramour, Helen—that
Faustus raises from beneath the stage? It is perhaps significant in this regard that Ramus himself includes an example pertaining to communication with the dead in his chapter on human testimony—indeed, it is the passage that concludes the book on invention.

Ramus's example concerns Aeneas in dialogue with the ghost of Dido in the underworld, in book 6 of the *Aeneid*:

I was thy cause of death, alas,

Now by the stars I swore:

By all the gods, and if there be,

Remaining yet one where

Unfained faith, if truth on ground

Or under ground may be

Against my will (ô Quene) from thy

Dominions did I fly. (71)

This could be mistaken for some deft literary criticism. By including this passage at the end of a chapter about how we should mistrust oaths "if we consider the matter deeply," Ramus implicitly calls into question the motivations of Aeneas and indeed of Virgil himself, by suggesting that Aeneas has motives that are other than divine for leaving his beloved. But the question remains: what would be the value of the testimony of Dido's ghost if she had been willing to speak?

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59 Marlowe represents a similar interpretation of this incident in his early play based on the fourth book of the *Aeneid*. In *Dido, Queen of Carthage*, Marlowe's dramatic retelling of the fourth book of the *Aeneid*, Aeneas is depicted as leaving the shore in secret—unlike in the *Aeneid*, where the narrator is clear about Aeneas's intention to tell Dido of his movements. Marlowe's Aeneas claims to be unwilling to meet with Dido since he would be thereby locked in a permanent embrace with his love, with each word crowned with a kiss. It is not that the prospect of a life of ease in the arms of Dido would be too
The first individual summoned by Faustus is Mephastophilis. Faustus assumes that he brought the devil to him by his "conjuring speeches" (1.3.46), but Mephastophilis protests that that was the cause "but yet *per accidens*" (46). Following Mephastophilis's doubtful clarification of his origin, he engages in lengthy conversation with Faustus about the nature of hell for most of the remainder of the scene. Faustus's response to the devil's comments about the existence of hell and the afterlife has seemed to many critics to be strange, indeed absurd. In an influential discussion, for example, Stephen Greenblatt meditates on the "extraordinary, and in the circumstances, ludicrous "I think hell's a fable":

Mephastophilis's quiet response slides from parodic agreement to devastating irony: 'Aye, think so still, till experience change thy mind.' The experience of which the devil speaks can refer not only to torment after death but to Faustus's life in the remainder of the play: the half-trivial, half-daring exploits, the alternating states of bliss and despair, the questions that are not answered and the answers that bring no real satisfaction, the wanderings that lead nowhere. The chilling line may carry a further suggestion: 'Yes, continue to think that hell's a fable, until experience *transforms* your mind.' At the heart of this mental transformation is the anguished perception of time as inexorable, space as abstract."

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We are here asked to imagine what it is to change our mind—or to have it changed for us. On Greenblatt's reading, Mephastophilis is in the superior position: he knows what hell is, and where Faustus is headed. His authority seems unquestionable, though he is a devil and though he has caused Faustus to trade his soul for a short and magical life. In certain respects, Faustus's behavior seems characteristic: he conjures a devil just like he cites scripture, in order to reject its testimony and indeed the very ground of its authority. It is characteristic in another respect, too: he cannot stop talking about the "topic" in which he does not believe.

In scene 5, after having signed away his soul, Faustus reopens discussion of the devilish utopia. This conversation, at least, seems in no way "chilling" or "anguished"; it seems better described as humorous, macabre, or—to cite Greenblatt again—"ludicrous." Mephastophilis's language here is not laden with layers of dark implication. Indeed, the devil seems as alarmed by Faustus's skepticism as we are:

Faustus. ...Thinkst thou that Faustus is so fond,
To imagine, that after this life there is any paine?
Tush these are trifles and meere olde wives tales.
Mephastophilis. But Faustus I am an instance to prove the contrary
For I am damnd, and am now in hell.
Faustus. How? now in hell? nay and this be hell, Ile willingly be damnd here: what walking, disputing, &c. But leaving off this, let me have a wife, the fairest maid in Germany, for I am wanton and lascivious, and can not live without a wife.
Mephestophilis. How, a wife? I prithee Faustus talke not of a wife.

Faustus. Nay sweete Mephestophilis fetch me one, for I will have one.

Mephestophilis. Well thou wilt have one, sit there till I come, Ile fetch thee a wife in the divels name. [exit.]

Enter with a divell drest like a woman,

with fier workes

Mephestophilis. Tell Faustus, how doest thou like thy wife?

Faustus. A plague on her for a hote whore.

Mephestophilis. Tut Faustus, marriage is but a ceremoniall toy, if thou lovest me, thinke no more of it. (5.136-55)

Mephestophilis's reaction to Faustus's perversely obstinate skepticism is doggedly logical: "But Faustus I am an instance to prove the contrary / For I am damnd, and am now in hell." As Thomas Healy suggests, "it is not simply that his logic is flawed; he is just not recognizing reality as it was then perceived."61 Faustus's reaction to his own mention of an "old wives' tale" is to ask for a wife (the verbal continuity is perhaps reinforced by the suppressed but ever-present early modern association of female

61 Thomas Healy, "Doctor Faustus," in The Cambridge Companion to Christopher Marlowe, ed. Patrick Cheney (Cambridge: Cambridge University Press, 2004): 182. This may, however, be going too far. With doubt having been cast on the existence of Purgatory, there were many who were willing to doubt Hell (who did not have a devil at their door to vouch for it). For an influential discussion of the intellectual stakes of the problem, see D.P. Walker, The Decline of Hell: Seventeenth-century discussions of eternal torment (Chicago: University of Chicago Press, 1964).
genitalia with hell). What is perhaps most remarkable about the transition, however, is Mephastophilis's accurate perception of the reason for Faustus's persistent skepticism, namely, his incomprehension of a non-localized space. A man that cannot comprehend a hell that travels with him should be amenable to the idea that marriage is a mere ceremony and that the only woman who matters is the one in closest proximity.

There are two routes to the idea of a non-localized space: faith (doctrinal faith), and total skepticism (which would not care to reject it); but Faustus's skepticism only results in something like disbelief. After rejecting the sacrament of marriage, Faustus turns his eyes towards the kinds of blessings he can see and touch. He asks for books that can explain them. Eventually, in the course of his survey of natural philosophy Faustus turns his thoughts to the heavens and laments his loss of what he has never known. Again we have chopped logic (which Faustus has abjured), this time ultimately to prove the conclusion that Faustus will repent:

Mephastophilis: Why Faustus,

Thinkst thou heaven is such a glorious thing?

I tel thee tis not halfe so faire as thou,

Or any man that breathes on earth.

Faustus. How proovest thou that?

Mephastophilis. It was made for man, therefore is man more excellent.

Faustus. If it were made for man, twas made for me:

I wil renounce this magicke, and repent. (5.186-93)

Here, at the outset of his career in magic, Faustus tries to abjure his art just as he tried to abjure all the other arts. However, again he fails to reject in practice what he has proven
(logically, by the logic he has rejected) he should reject. For all the syllogistic persuasiveness of his conclusion and the apparent firmness of his desire to repent, the Evil Angel is correct to say that "Faustus never shall repent" (199).

In a parallel scene, wherein Charles V asks that Alexander and his Paramour be brought from the dead, Faustus has the opportunity to try on Mephostophilis's role. Faustus explains that he cannot present "the true substantiall bodies of those two deceased princes which long since are consumed to dust," but rather "such spirites as can lively resemble" them (9.44-49). The emperor is so credulous as to believe that he can discern whether or not Alexander's paramour did or did not have a mole (in a travesty of romance convention). Soon, he will go so far as to expressly contradict Faustus's testimony about the limits of his power: "Sure these are no spirites, but the true substantiall bodies of those two deceased princes" (68-9). This could, of course, simply be a way of speaking. We often tell ourselves that something is "surely" true simply because we wish it could be. Surely Marlowe jests. Nevertheless (or surely!), if it seems strange that the emperor could believe that the dead could be brought back to life despite Faustus's declaration that it is impossible, Faustus himself will later make the same mistake.

Faustus's scene with Helen affords a climax of sorts. It is significant that there was a tradition, started by Herodotus, that the Helen who went to Troy was itself merely an image. In a play based on the famous Greek heroine, Euripides suggested that the real Helen was transported to Egypt by the gods, while a ghostly imposter ran off with Paris and precipitated the Trojan War. On the basis of the fact that there were two Helens, Sextus Empiricus argued that one could never be certain to whom one was talking, and
that the sophisticated logical theories of Aristotle and the Stoics were not sufficient to enable one to distinguish between appearance and reality. However, with the arrival of Helen, Faustus is transported. He rhapsodizes her beauty, and wraps her in his arms. He finds heaven in her lips. Swept away by this Homeric fancy, he defies hell:

Sathan begins to sift me with his pride,
As in this furnace God shal try my faith,
My faith, vile hell, shal triumph over thee,
Ambitious fiends, see how the heavens smiles
At your repulse, and laughs your state to scorne,
Hence hel, for hence I flie unto my God. (12.104-109)

The final line is riddled with paradox, owing in part to uncertainty about what "my God" designates, whether Helen or the Christian God. Of interest are the two iterations of the word "hence," which connotes both spatial movement (in the first instance) and logical proof (in the second). Again, of course, he has *proved* (logically, using the logic he abandoned) that he will repent and enter heaven. Of course, there is still reason to fear that the hell he has just rejected travels with him whichever way he flies.

The three scenes of conjuring I have been considering—involving the devilish spouse, Alexander and his Paramour, and Helen of Troy—evince a peculiar trajectory of unbelief. In the first case, Faustus can deny the existence of hell despite conversing with a native, only to accept the latter's injunctions to think no more of marriage or heaven. In the second, the Emperor disregards Faustus's statements about spirits as soon as they are

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in front of him. In the third, Faustus disregards his own statements about spirits and embraces a ghostly heaven. In each case, a character expresses doubt about eminently persuasive—perhaps even indubitable—verbal testimony, only to accept the less trustworthy evidence of their eyes and the motions of the heart. Faustus and the Emperor are skeptics on principle but believers by nature. The difficulty is one that was considered in the tradition of ancient skepticism, which amply explained the possible disjunctions between practical and theoretical kinds of doubt, and the necessity of living with what one cannot bring oneself to believe in. In the Outlines of Pyrrhonism, Sextus suggests that Pyrrhonian skepticism is a way of life, by which one learns to balance equipollent views and reserve judgment upon them—or, as Francis Bacon puts it, "not to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider." Even skepticism itself, Sextus suggests, may not be true; but it is a useful stance to adopt as one considers the fleeting images that pass before one in the uncertain lives we lead. There are equipollent views depicted throughout Doctor Faustus—indeed we have the proverbial good and evil angels resting on the protagonist's shoulders. Like an academic skeptic (which, in a banal sense, he is), Faustus frequently tries to reject everything—but he also contradicts himself (necessarily) and chooses his own path (perhaps) as he keeps reaching out to embrace spirits and divinities. Unlike

63 The difference between Academic and Pyrrhonian skepticism is relevant to the issue insofar as the latter asserts against the former that skepticism itself is not necessarily correct, but rather serves as a useful corrective against innate credulity. For a recent discussion of their differences, and the "therapeutic" purposes of Pyrrhonian skepticism, see Harald Thorsrud, Ancient Skepticism (Berkeley: University of California Press, 2009). For a more general account of therapeutic ideals in ancient philosophy in conjunction with interesting ideas about ancient logic, see Martha C. Nussbaum, The Therapy of Desire (Princeton, NJ: Princeton University Press, 1994).

64 Vickers, ed., 439.
Sextus, however, his skepticism makes him less rather than more conscious of alternatives.

In the final scene of *Doctor Faustus*, there is a last instance of conflict between equipollent views. Here, in Faustus's final speech in the play, Marlowe effectively reverses the terms of the paradox with which it begins:

Oh soule, be changde into little water drops,
And fal into the Ocean, nere be found:
My God, my God, looke not so firece on me:
Adders, and Serpents, let me breathe a while:
Ugly hell gape not, come not *Lucifer,*
Ille burne my bookes, ah Mephastophilis. (13.112-117)

In order to understand this speech, it is necessary to realize that Faustus actually repents and rejects his sinful art. It is a fact perhaps only fully appreciated by William Empson, who thought that Faustus's damnation was so unjust as to be the addition of a moralizing editor. One could, in fact, argue that the scene is so mocking and bathetic that Faustus's disappearance into the cellerage is really an ascent, just as some music scholars suggest that the final sextet in *Don Giovanni* is so comical as to render ridiculous the idea that the don is destined for hell. The ending, however, is appropriate—indeed, logical. It bespeaks a diametrical reversal of terms. Earlier in the play, Faustus had *acted* as though he believed the things he claimed not to believe; now he is drawn down against his will. Whereas before he abjured logic and religion but could not help but make use of them, now he consciously affirms his religious faith even as he becomes eternally damned.

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Marlowe's cruel joke here is that Faustus's body sinks downward even as—at last—his thoughts to heaven go.

CONCLUSION

The skeptical challenge to skepticism has had significant influence on modern philosophical theory, though it seems not to have permeated literary scholars' iterations of philosophers' beliefs. It is, of course, present in negative critiques of modern forms of relativism, postmodernism, and deconstructionism, all of which seem open to the charge of self-contradiction. Nagel provides an example of this kind of critique. Perhaps most interesting, however, are attempts to explain the problem away. An example of this kind of effort appears at the outset of one of the foundational projects of modern critical theory. In his early course of lectures, Logic: The Question of Truth, Martin Heidegger suggests that to contradict skepticism is to conceive of logic as diction or discourse, and thus to distract oneself with words from the meanings and perplexities of being in time; a Nagel-like refutation of logic is "only the semblance of a self-evident presupposition, only the mirage of a limit." Heidegger, then, raise the paradox of total skepticism only to reject it. Indeed, it is a precondition for learning to live in the world that we disregard the evidently self-refuting character of skepticism.

We are used to treating early modern logic with disrespect. E.J. Ashworth admitted that she found the state of logic in England in the 1590s "somewhat

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depressing." Walter Ong attacked the most famous early modern logician with savage indignation. The historians of logic make only passing mention of the humanists' achievements in the discipline. Nevertheless, we do well to remember that it was probably the only logic that Marlowe knew. Even if he were as aware as any modern scholar of its intellectual poverty, he also would have been more mindful than we are of logicians' protestations of objectivity, and indeed the view that logic inhabits a kind of Platonic world of ideal forms. When Faustus rejects logic, one should believe that he is doing something significant. The self-contradictory nature of Faustus's rejections—not only of logic, but also of the Bible, hell, repentance, and salvation—is self-evident, though many interpreters have esteemed them. I have argued that Faustus tried to doubt more than he is capable of doubting, and consequently falls back on old habits in a peculiarly unconscious way—he even, at times, seems unduly credulous, as when he thinks he can have his Helen away from hell. His skepticism is a distraction from what is important. It does not work. Indeed, it brings him early death and endless suffering. I have tried to prove all this. But I would like to conclude this chapter about the limits of doubt, using Heidegger as a guide, with an observation that I cannot prove but nevertheless believe to be true. I have argued that Marlowe portrays the dangers of doubt, but I would not like to say in the end that he truly believed that it was dangerous to doubt everything—at least, for himself to doubt everything. Although he was aware of the self-contradictory nature of his position, I believe that he was a total skeptic at heart. Jacques Derrida cheerfully admitted that deconstruction could be deconstructed.

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The following is a typical critique of early modern logic, extracted from one of Shakespeare's favorite books, the *Essais* of Michel de Montaigne:

1. It is simply a game.

"Chrysippus said that what Plato and Aristotle had written about logic they had written as a game and for exercise, and could not believe that they had spoken seriously of such an empty matter."

2. It brings no comfort.

"Did [Varro and Aristotle] derive from logic some consolation for the gout?"

3. It teaches us what we already do by habit.

"This act of pure logic, and this use of propositions divided and conjoined and of the adequate enumeration of the parts, is it not as valuable for the dog to know it by himself as to learn it from Trapezuntius?"

4. It does not help us describe people, who are inconsistent.

"I have nothing to say about myself absolutely, simply, and solidly, without confusion and without mixture, or in one word. *Distinguo* is the most universal member of my logic."

5. Even the clearest sentences are ambiguous.

"Let us take the sentence that logic itself offers us as the clearest. If you say 'It is fine weather,' and if you are speaking the truth, then it is fine weather. Isn't that a sure way of speaking? Still it will deceive us. To show this let us continue the example. If you say 'I lie,' and if you are speaking the truth, then you lie. The art,
the reason, the force, of the conclusion of this one are the same as in the other, and yet there we are stuck in the mud."  68

Shakespeare's ridicule of logic is conspicuous in many plays, none more so perhaps than in *Hamlet*, which is mostly populated by current and former university students, who would have received at least a year of intensive training in the subject. In general, critics assume that Shakespeare's orientation to logic is like Montaigne's: that he derides it as a useless academic discipline, irrelevant or even inimical to the people and problems one encounters in real life. It is less often understood that whereas Montaigne rejects logic, Shakespeare works with it—even when he works against it. Moreover, I will argue that the logical instrument he works with is more versatile than it has been taken to be.

Drawing on works of Aristotelian logic and cultural attitudes towards logical thought, Shakespeare enables us to see how logic is itself embedded in the social conditions that give rise to it, its ostensible abstraction and objectivity belied by sociopolitical concerns that appear even in technical demonstrations of how to manipulate propositions and syllogisms. I will argue in particular that Shakespeare exploited the potential of logic as a cultural-formalist medium throughout *Hamlet*, which offers profound, original, and yet historically contingent explorations of the difficulties of securing proof of an individual's thought or intention that "passes show."  69

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Portions of this chapter were presented at the American Comparative Literature Association Conference at Brown University, March 29-April 1, 2012; and the Renaissance Society of America Conference in Washington DC, March 22-24, 2012.

68 Donald Frame (ed.), *The Complete Essays of Montaigne* (Stanford, CA: Stanford University Press, 1958): 376; 358; 707; 242; 392. time he comosed *Hamlet* is uncertain, but Montaigne's statements about logic were common enough for Shakespeare to have encountered them in many sources.

There have been numerous efforts to show that Shakespeare—in Hamlet and elsewhere—goes "beyond" logic to create a more imagistic, associative, or poetic style of argument. At the outset of his influential study, *Shakespeare's Skepticism*, Graham Bradshaw announces his intention "to emphasize those respects in which the processes of poetic-dramatic thinking are not like those of logical-discursive thought." With particular reference to *Hamlet*, Maynard Mack suggests that it "seems to lie closer to the illogical logic of life than Shakespeare's other tragedies." Such events as the opportune kidnapping of Hamlet by pirates, like the famous discussion of a sea-battle in Aristotle's *Of Interpretation*, put pressure on the notion that future contingents have a necessary logic. In this essay, I will accordingly agree with Maynard Mack's suggestion that "the play's very lack of a rigorous type of causal logic seems to be part of its point." What receives less comment is that there is nevertheless ample evidence of logical-discursive thought in the play, and language that while fallacious calls attention to its logical-discursive properties. One index of the importance of logic in Shakespeare is the presence of hair-splitting distinctions in ostensibly inappropriate contexts: Hamlet's quibbling about commonplaces before the entire court at Elsinore; Hamlet and Ophelia's parting, during which Hamlet seems to quote from a logic textbook; the gravediggers' logic.

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72 Shakespeare may well have had Aristotle's much-discussed 9th chapter in mind in *Antony and Cleopatra*, where the idea that "there will be a sea-battle tomorrow" is almost a leitmotif in Act 4.
73 Mack, 109.
74 I refer to Hamlet's "paradox" about how fair women are unfaithful at 3.1.111-115. In *The Rule of Reason* (London, 1551; repr. 1552, 1553, 1563, 1580, 1584), Thomas Wilson instructs the reader on how he can find consolation for the fact that he must either marry an ugly woman or be a cuckold (appropriately, during his explanation of the "horned
chopping before Ophelia's grave. In *Hamlet* in particular Shakespeare makes frequent and conspicuous reference to formal logic—testing it, as it were, in a variety of limit cases. If Shakespeare seems skeptical about logic and its application, however, there is still the paradoxical fact that he *uses* logic in the process of interrogating it—just as contemporary logicians equally paradoxically used logic in order to define it.

In this essay, then, I will raise a series of historically informed philosophical questions about Shakespeare's logic through an examination of *Hamlet*, establishing first what it is (and is not), when it should (and should not) be used, and its ultimate power (and limitations) for securing the truth. This inquiry will necessitate a complex methodology. First, taking into account the absence of formal logic as we now know it in Shakespeare's time, I will attempt to account for the meaning of "logic" within the early modern grammar school and university curriculum, with particular care to distinguish it from the better known sister art of rhetoric. Too many scholars have tried to demystify early modern logic or to describe it as simply a kind of rhetoric, but recognizing the different aims of these disciplines is essential to understanding their social and literary reception. Secondly, I will demonstrate that logic is not simply a dry and scholarly subject, but rather an instrument for describing and motivating action. This was an urgent issue among contemporaries who debated the rationality of biblical precepts and the utility of what Theodore Beza and his English disciple William Perkins called the "practical syllogism." Recovering this ethical valence of logic use is essential for grasping the meaning of the frequent and sometimes strained logical arguments in

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Hamlet, which after all is notoriously concerned with a protagonist who oscillates
between dilatoriness about murder and sudden bursts of violence. Thirdly, I will progress
from ethics to metaphysics, showing how Shakespeare exploits confusions within the
logic manuals about words and things, definition and causation, and the status of
immutable syllogisms in a mutable world. The ultimate question will be whether in the
process of his critique Shakespeare conceives of an orientation to logic that could
reconcile better than the formal logic of the logicians the forces exerted by an individual's
passions, his ties to the social world, and the seemingly irrational tides that flow between
Denmark and England.

1. Identifying Logic

Hamlet is traditionally viewed as a rhetorical play, and for good reason. As
Richard Lanham observes, "everyone is manipulating everyone else with speechifying
and then admitting he has done so."\footnote{75 Richard A. Lanham, The Motives of Eloquence: Literary Rhetoric in the Renaissance (New Haven: Yale University Press, 1976):132.} Due to the conspicuousness of rhetorical practices
in the play, scholars have understandably devoted considerable space and ingenuity to
explaining its contemporary humanistic and pedagogical backgrounds. There are
catalogues of the tropes and schemes Shakespeare employs. There are reflections on the
presence and meaning of the numerous aphorisms and commonplaces that permeate the
play's text. There are studies of how the rhetorical arts shape the self-fashioning of
characters and frustrate or serve the ends of political power. Although we have learned a
great deal from the many foragers in early modern rhetorical silvae, there is some danger
in missing the forest for the trees. There has been a dangerous neglect of a principal

theme of the play, namely, the inherently rational character of human beings, and the palpable tragedy in a person's loss of reason, from Hamlet's antic behavior to Ophelia's mad singing. It is the purpose of this essay to redress this imbalance, and specifically to ask if there is not also logic in addition to rhetoric in Hamlet—or, at the least, logic to the play's seeming lack of logic. The methodological problem at the outset is to determine what logic is, and particularly to discriminate between it and rhetoric, despite scholarly attempts to prove that logic is simply rhetoric in disguise. There are accepted standards by which scholars judge a given speech to be more or less rhetorical, but—almost paradoxically—whether a speech is logical seems to be a matter of opinion.

The most influential ancient theorist of the arts of language in the renaissance offered little guidance in logic, though this did not prevent later logicians from appealing to his authority. For Cicero, logic is merely one facet of rhetorical speech, useful for persuasion rather than for the pursuit of truth. In De oratore, for example, he states that "in an orator we must demand the subtlety of the logician, the thoughts of the

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77 There is significant—perhaps insurmountable—difficulty in discriminating the usage of words like "logic," "dialectic," and even "rhetoric." In general, the intellectual historian must employ caution in treating a given author's usage of such words in particular circumstances, without relying on prevailing ideas from earlier periods. For a good introduction to early modern logic and terminological complications surrounding it, see William Dean Howell, Logic and Rhetoric in England, 1500-1700 (Princeton, NJ: Princeton UP, 1956).
philosopher, a diction almost poetic, a lawyer's memory, a tragedian's voice, and the bearing almost of the consummate actor.  

In his description of the "ideal orator, perfect down to the smallest detail," Quintilian follows Cicero in minimizing the importance of logic. Here, logic takes the place of "the smallest detail":

For when the philosophers describe the ideal sage who is to be consummate in all knowledge and a very god incarnate, as they say, they would have him receive instruction not merely in the knowledge of things human and divine, but would also lead him through a course of subjects, which in themselves are comparatively trivial, as for instance the elaborate subtleties of formal logic: not that acquaintance with the so called 'horn' or 'crocodile' problems can make a man wise, but because it is important that he should never trip even in the smallest trifles.  

These are totalizing descriptions of the province of rhetoric, which was surveyed and charted by many successors, including early modern exegetes like Erasmus, George Puttenham, and Henry Peacham. Knowledge of logic, which seems to be almost synonymous with trivial detail, is simply an inessential adornment of the consummate, know-it-all rhetorician.

Critics generally seem to believe that Shakespeare's view of logic does not differ very much from Quintilian's. Thus far, the examination of Shakespeare's logic has focused on his use of specific constructions or what Quintilian calls "the smallest trifles,"

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including formal syllogisms, sorites arguments, and "horn problems" or paradoxes. The presence of these constructions in Shakespeare's plays becomes for many critics an indication of his total mastery of the art of rhetoric rather than logic. The comparative triviality of logical discourse is arguably reflected in the fact that it is most frequently present in the language of Shakespeare's servants, clowns, and fools; as his contemporary Abraham Fraunce observes, "any cobbler can cog a syllogism," and the use of formal logical techniques by Shakespearean characters therefore does not necessarily indicate more than a superficial acquaintance with logic. In many cases where characters of high rank make conspicuous use of syllogistic reasoning—as when Falstaff challenges the major premise of Hal's argument, or Hamlet proves that Claudius is his mother—they are playing the fool. As many scholars have observed, then, it seems to be rhetoric rather than logic that is the proper mark of rank in early modern England.

Early modern logicians, unsurprisingly, attributed more importance to logic. The author of the first handbook of Aristotelian logic in English, Thomas Wilson, had a more generous understanding of the role of logic in rhetoric, which he viewed as complementary disciplines. Even in The Arte of Rhetorique (which preceded his logic primer, The Rule of Reason), Wilson discusses logic as integral to any comprehensive


81 Abraham Fraunce, the Preface to the The Lawyer's Logic (London, 1588). The spelling has been modernized.

program in language instruction. Instead of distinguishing between logic and rhetoric in terms of triviality and importance, Wilson discusses their relative applicability to specific and general circumstances. Again, Cicero is the warrant for this view: "Thynges generally spoken without al circumstaunces, are more proper unto the Logician, who talketh of thynges universally, without respect of persone, time, or place. And yet notwithstanding, Tullie doeth saie, that whosoever will talke of a particuler matter, must remember that within the same also, is comprehended a generall." The difference between rhetoric and logic in Wilson's view, then, is one primarily of degree of abstraction: rhetoric considers problems in their local circumstances, whereas logic appeals to universals (though universals also inhere in particulars). Wilson elaborates the point using the following example, which resonates with Hamlet: "If I shall aske this question, whether it be lawfull for Willyam Conqueroure to invade Englande, and wynne it by force of armour, I must also consider this, whether it be lawfull for any man, to usurpe power, or it be not lawfull." One considers the legitimacy of rebellion before arguing a particular case. The difference between logic and rhetoric is also, Wilson says later, a difference in the degree of ornament: "for by plaine teachyng, the Logician shewes hymselfe, by large amplification and beautifiyng of his cause, the Rhetorician is alwaies knowne" (17). Even if in a sense a character in a drama is always using a rhetorical logic rather than one discipline or the other, Wilson's distinctions can enable one to observe when the logician or the rhetorician intends to "show himself."

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84 It also resonates with the historical moment in which Wilson wrote. Usurpation was always an incendiary topic, but perhaps particularly in the wake of a disastrous English invasion of Scotland in 1649, and more particularly as the boy monarch, Edward VI, fell ill, with the line of succession in doubt.
Because logic and rhetoric could be located on opposite poles on a linguistic
continuum, they could also be viewed as competitors. While Wilson observes that logic is
an essential part of rhetoric, it will be noticed that he provides a comprehensive treatment
of the subject in a separate work, *The Rule of Reason*, which is nearly the same length of
his treatise on rhetoric. Such a separation, even if it is intended as a mere pedagogical
convenience, could seem essential. Peter Ramus was notorious for expanding the
province of logic to include the rhetorical places or *topica*, in addition to syllogisms and
method, thus relegating rhetoric to the study of ornamentation, memory, and delivery.\(^85\)
English followers of Ramus, who were mostly puritans, tended to treat logic as sufficient
preparation for a godly, plain style of speaking and writing, abjuring rhetoric altogether.
Logic, in a sense, could usurp the position that rhetoric had in the Ciceronian tradition: it
becomes the totalizing discipline, whereas rhetoric is learned merely to demonstrate the
finer points of linguistic mastery. In the wake of Ramus, there was a dispute—indeed a
kind of dialectic—between the arts of rhetoric and logic.

There is evidence of this historical meta-dialectic about the rhetorical and logical
qualities of argument in *Hamlet*. The opposition of rhetorical and logical arts of language
is apparent in the third scene of Act 1, for example, when first Laertes and then Polonius
visit Ophelia in order to persuade her to break off her relations with Hamlet. It is an
oratorical set piece, and the fact that both Laertes and Polonius are university men gives a

\(^{85}\) It is of course true that Ramus was famous (or notorious, depending on one's
perspective) for driving a hard wedge between the disciplines of logic and rhetoric.
Nevertheless, Peter Mack argues that this division was effected merely for simplicity of
instruction rather than in accordance with any kind of essential opposition; see his
"Ramus and Ramism: Rhetoric and Dialectic," in *Ramus, Pedagogy, and the Liberal
Arts: Ramism in Britain and the Wider World*, ed. Steven J. Reid and Emma Annette
notable scholastic tinge to the scene. Indeed, the fact that both men give extended speeches on the same topic—the unsuitability of a prince for marriage with a woman of lower rank—recalls the academic tradition of argumentation in utrumque partem that various critics have seen as a major background for Shakespeare's tendency to organize speeches in pairs in all his dramatic work. ⁸⁶ There are, however, several ways in which Shakespeare controverts the scholastic controversiae. First, there is the obvious irony that, although both Laertes and Polonius counsel Ophelia to break with Hamlet, they offer arguments that are opposed to each other: Laertes suggests that Hamlet may not "carve for himself" (19) because he has too many responsibilities to the state, whereas Polonius argues that Hamlet is still a boy and may thus walk with a longer tether than others. They disagree in arguing the same side of the question. But they also differ in how they use language, specifically in the arts of logic and rhetoric they employ. Laertes, who will soon be returning to Paris—where, lest it be forgotten, the teachings of Ramus held sway—makes conspicuous use of the syllogism:

Perhaps he loves you now;

And now no soil nor cautel doth besmirch

The virtue of his will: but you must fear,

His greatness weighed, his will is not his own;

For he himself is subject to his birth:

He may not, as unvalued persons do,

Carve for himself; for on his choice depends

⁸⁶ In Shakespeare and the Origins of English, Neil Rhodes argues that "Shakespeare's much-admired ambiguity, his ability to give us both sides now, is to a quite considerable extent the product of his exposure to rhetorical exercises such as the progymnasmata and, more specifically, the controversiae" (98-9).
The safety and health of this whole state;
And therefore must his choice be circumscribed
Unto the voice and yielding of that body
Whereof he is the head. (13-24)

Laertes offers curt reasons and explanations, and his "therefore" is valid even if we—or, more pertinently, Ophelia—remain unconvinced. In Polonius's speech, by contrast, there is less matter and more art:

From this time
Be something scanter of your maiden presence,
Set your entreatments at a higher rate
Than a command to parley. For Lord Hamlet,
Believe so much in him that he is young,
And with a larger tether may he walk
Than may be given you. In few, Ophelia,
Do not believe his vows; for they are brokers
Not of that dye which their investments show,
But mere implorators of unholy suits,
Breathing like sanctified and pious bawds
The better to beguile. This is for all.

I would not, in plain terms, from this time forth

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87 Laertes's Ramism would, in contemporaries' minds, lend itself to his literalism, and particularly his willingness to "cut [Hamlet's] throat i'th' church" (4.7.125). For a sensitive analysis of how university affiliation can complicate one's social status at court, see Elizabeth Hanson, "Fellow Students: Hamlet, Horatio, and the Early Modern University," *Shakespeare Quarterly* 62.2 (2011): 205-301.
Have you so slander any moment leisure
As to give words or talk with the Lord Hamlet. (120-134)

While Laertes develops a single point over the course of his speech without any except the most conventional metaphors, Polonius repeats the same point over and over, rephrasing it in combination with increasingly strained imagery so that by the end not only Ophelia but also all his auditors probably require his summary "in plain terms." It is difficult, of course, to declare a winner between the two, and not only because they are fighting against each other on the same side: Ophelia, after all, comes close to calling her brother a hypocrite; and at the end of Polonius's speech she briefly declares that she will obey without commenting on his reasons.

Logic is a field of variable extent: it shrinks to a radical smallness in the works of rhetoricians, and grows to subsume all discourse in the works of logicians. In a work like Hamlet, logic could be found anywhere one finds argument, which pervades the whole—or nowhere, if one maintains a high standard for valid inference. In determining what Shakespeare intends to be perceived as logical argument, however, it can be helpful to hold up pairs of speeches for stylistic comparison. A survey of the techniques of logical argument in the play is essential, I suggest, for arriving at an understanding of the ethical valences of characters' language. The scene with Ophelia raises questions, then, not only about what logic is, but also about its utility. And its danger: it will be remembered that just before being murdered Polonius will regret his disbelief in the sincerity of Hamlet's affection for his daughter (in what may be the only approximation of an Aristotelian anagnorisis in the play). What, ultimately, is the ethical purchase of logical argument—or is it even legitimate to generalize? The question had to be broached in an era where
logicians erected formal systems of logic on the basis of conventional moral maxims, theologians argued about the logical construction of the bible, and preachers adjudicated cases of conscience with the severe instrument of syllogistic logic.

2. Using Logic

Claudius—or "King," as Shakespeare typically calls him—tends to have an objective and functional way of speaking. His first speech, as many have observed, radiates competence and comfort in his new role of head of state. The texture, if not the form, of his speech is logical: his opening sentences, clouded though they are by some conventional rhetorical flourishes, possess a clear logical development, with words like "Though" (1), "Yet" (5), "Therefore" (8), and "Now follows" (17) serving as signposts. The argument is that though he remembers his brother with grief, yet he must think of the future, and therefore is right to have taken his former sister as wife. The point that I would like to emphasize here is that Claudius begins his role in the play with an argument containing reasons for acting. Logic can seem a rarified and abstract subject, but in order to understand Hamlet and the widespread interest in logic in the early modern period it is necessary to perceive its relationship to practical action. Throughout Hamlet—as in any other Shakespearean play—characters utilize logic in order to decide what needs to be done, or to get someone else to do it, or simply to strengthen their own resolve. For Shakespeare, logic is not simply "bookish theoric," but rather a tool for making things happen in the normal or abnormal course of daily life. Indeed, one did not merely use logic to facilitate action, but in the course of acting one changes the logical instrument—bends logic itself, as it were, to the action. In recovering this conception of
logic, it will be possible to see how Shakespeare could conceive of it as a dramatic—indeed, as a theatrical—subject.

Claudius's pragmatic use of logic to justify a past or present action seems more representative of how characters speak in Shakespeare's plays than Hamlet's nuanced self-scrutiny in his soliloquies, or indeed the rhetorical grandiloquence of a Polonius in the midst of an intimate colloquy with his daughter. This is frequently the case even when characters seem less reasonable than Claudius. At the outset of Richard III, for example, the protagonist seeks to justify himself rationally to himself:

And therefore, since I cannot prove a lover
To entertain these fair well-spoken days,
I am determinèd to prove a villain
And hate the idle pleasures of these days. 88

It is rather like Milton's Satan when he says, "evil be thou my good," with the difference that Satan does not—and in soliloquy probably cannot—formulate a pretext for villainy, let alone a valid syllogism to justify his apostasy. In Measure for Measure, Duke Vincentio supplies an argument to justify his chosen deputy taking a public role, asserting that one's virtues are empty unless they are seen in the world:

Hold therefore, Angelo:

In our remove be thou at full ourself.

Mortality and mercy in Vienna

Live in thy tongue and heart. Old Escalus,

Though first in question, is thy secondary.

Take thy commission.89

Many arguments are less ingenious, and have consequently seemed to be less worthy of comment. In *As You Like It*, Orlando observes that his father's will states that he should be given a good education, and demands that his brother "therefore allow me such exercises as may become a gentleman." When Oliver shortly after this goes to the wrestler Charles, he asserts that Orlando is "a secret and villainous contriver against me his natural brother," concluding that Charles should "therefore use thy discretion. I had as lief thou didst break his neck as his finger."90 Even if we might question whether the arguments of Claudius, Richard, Vincentio, and Oliver are sound, it is nonetheless important to observe that they present their actions in a rational framework.

A systematic examination of logic in *Hamlet*—predicated on tactful comparisons of lengthy speeches—cannot be attempted here. One way to get a snapshot of how logic is used in *Hamlet*, however, is to trace the apparently innocuous but rather insidious word "therefore," which plays a structural role in the speeches from *Hamlet* and elsewhere that I discussed above. This word (and "argal," a synonym used by the clowns in Act 5) conveniently announces that a speech has the paradigmatic form of syllogistic: x; if x, then y; therefore y.91 It is the most ubiquitous logical term in Shakespeare that also appears frequently in the logical primers of Wilson, Ramus, and other logicians.92 The

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91 Shakespeare's contemporaries generally held a statement with the form "x, therefore y" to be an *enthymeme* or incomplete syllogism.
92 It should be observed that in this essay I am making reference to translations of logic books rather than to Latin versions, despite the greater prevalence of the latter in the early modern period. I do so for the simple reasons that I believe Shakespeare's audiences (and
term is used in a wide variety of contexts throughout the play. In Marcellus's easy first speech in the first scene of the play, he states that, because Horatio would not believe in the Ghost, he has "therefore" brought him along to speak to it (1.1.29); in the next scene, Claudius observes that, because he must not only think of the death of his brother but also get on with his own life, he "therefore" has taken Gertrude to wife (1.2.8); as we have just seen, Laertes states that Hamlet is constrained by the will of his subjects and therefore cannot choose a wife out of his own inclination, and consequently commands his sister to withdraw her attentions from him; Polonius states that, since engaging in abstract explanations about majesty or duty or day or night is useless, he will "therefore" be brief and state the source of Hamlet's madness (2.2.90); Claudius remarks how Hamlet's madness is dangerous to the state, and commands that Rosencrantz and Guildenstern "therefore" prepare to take him to England (3.3.2); speaking to Hamlet, Claudius states that he sends him to England for his "especial safety," and asks that he "therefore" should prepare himself to leave (4.3.40); having determined to bait and poison Laertes' blade, Claudius acknowledges that this might fail, and states, "therefore this project / Should have a back or second," which shortly proves to be the poisoned chalice (4.7.151-2); having learned of his sister's death, Laertes somewhat speciously argues, "Too much of water hast thou, poor Ophelia, and therefore I forbid my tears" (4.7.185); Claudius worries that the news of her death will re-ignite Laertes' rage, and states to Gertrude, "therefore let's follow" him (4.7.3); having asserted that Ophelia is to have a Christian burial, the Second Clown says "therefore make her grave straight" (5.1.3). In recounting all these examples, I want merely to make a very simple point about them: in every perhaps Shakespeare himself) would have had greater familiarity with vernacular logics, and that in any case they are more likely to impinge on the language of English plays.
instance, a given character states that such and such is the present (or past) state of affairs, and that therefore he or someone else must do (or has done) something to change them. Only once—when Claudius declares that, having seen both Laertes and Hamlet fence, he is therefore capable of setting odds (which would be misleading)—does a syllogistic statement fail to predict an action.

In a play that for many has been almost synonymous with the protagonist's delay, it is useful to recount so many examples of characters taking quick account of their circumstances and proceeding to act on the basis of that knowledge. This general pattern is in keeping with how logic was viewed in the early modern period. At this time, logicians resurrected those aspects of ancient logical theory that are most applicable to advancing one's personal, professional, and intellectual ambitions. Ramist logicians in particular asserted that their method constituted a breakthrough in efficiency, allowing students to move more rapidly through a diverse humanist curriculum, and statesmen to cut a figure in public life. One of the first to popularize Ramist logic in England, the Cambridge polemicist William Temple, observes: "It succeedeth with the Art of Logike, as it doth with a drug of rare vertues: which resting confined within the limits of the Apothecaries shop, winneth not anie opinion or credit with men: but being taken out and skilfully applied, discloseth her value & merit." In his Lectures on Dialectic, Ramus himself states the main motive of his career, with customary brevity, as "to put the logical arts to use." In a sense, one could argue that early modern logicians—whether they

94 Qtd. in Walter Ong, 41. For a very useful, extended discussion of Ramus's declarations of the use-value of his system, see 41-45. Other logicians made similar points. An early Ramist logician, Roland MacIlmaine, asserts that there "is nothing appartayning to dialectike eyther in Aristotles xvii booke[s] of logike, in his eight bookes of Phisike, or in
were Ramists or self-described Aristotelians—were interested in logic precisely insofar as it could facilitate action, in contrast to the more rarefied academic interpretation of logic that took place in the medieval period (or at least the early modern imagination of the medieval period). To understand the meaning of logic in Hamlet, then, it is necessary not only to investigate how characters debate with one another or with themselves in soliloquy, but also those situations where they do not debate but simply do. Whereas it is common to think of logic as pertaining to theoretical problems, in these speeches general ideas are associated with contingent details in order to guide behavior, rather like Thomas Wilson said they should in his books about rhetoric and logic.

The ethical valence of practical logic was apparent in Aristotelian works like the Nicomachean Ethics. In this work, Aristotle provided a suitably complex discussion of the structure of action on logical principles, effectively showing how the Organon could be vital in day-to-day life. One of Aristotle's purposes is to show that, having established a given end as good, employing the means to attain it is a logical necessity. This is, indeed, the main presupposition underlying the so-called "practical syllogism," a conceptual structure he uses to describe rational behavior. The idea is that rational action consists in a kind of syllogism, where an ethical precept forms one premise, one's practical knowledge of how to meet its requirements in particular circumstances forms
another, and these premises issue in an action that concludes the syllogism. The idea was current in Shakespeare's time. In a series of works—including *A Discourse of Conscience* (1596), *A Golden Chain* (1600), and *How to Live* (1601)—William Perkins uses the phrase "practical syllogism" particularly to describe the idea that if one has faith one will be saved, and moreover that it can be efficacious in motivating one to perform moral actions even if one can never really be certain about the state of one's soul. In formulating one's prospects for salvation as a syllogism, Perkins served to integrate logical method into the phenomenological experience of active, religious experience.

We tend to think of logic as akin to mathematics, consisting in valid deductions from incontrovertible premises, but the idea of practical logic suggests that it may require a base of accumulated knowledge found by imperfect and unreliable means. One negotiates the problems that beset one in social and religious life with recourse to rules—many of which may be found in works of practical divinity like Perkins's—in conjunction with one's knowledge of what has worked for one in the past by trial and error. Logic, in short, is not merely a matter of mastering precepts, but also of experience. This is evident in Thomas Wilkinson's Christianized redaction of *The Nicomachean Ethics*, for example, which starts off with a discussion of how learning about grammar is not the same as knowing about virtue. We learn about virtue not by studying but by doing, "for to knowe

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There is accordingly a time lag between the acquisition of knowledge about universals and particulars, as is evident in Aristotle's comparison of the young man and the old man:

...while young men become geometricians and mathematicians and wise in matters like these, it is thought that a young man of practical wisdom cannot be found. The cause is that such wisdom is concerned not only with universals but with particulars, which become familiar from experience, but a young man has no experience, for it is length of time that gives experience; indeed one might ask this question too, why a boy may become a mathematician, but not a wise man or a natural scientist. (1803)

Over the course of one's life, the amount of time one needs in order to think through the facets of a given situation generally becomes less and (in theory) more reliable, as one has a larger store of memories of successful and unsuccessful experiences on which to draw. Aristotle consequently states that the words of old men, even if they lack formal education, should be respected.

In the following speech by Hector in *Troilus and Cressida*, Shakespeare makes his only mention of Aristotle by name:

Paris and Troilus, you have both said well;

And on the cause and question now in hand

Have glozed—but superficially, not much

Unlike young men, whom Aristotle thought

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Unfit to hear moral philosophy.

The reasons you allege do more conduce
To the hot passion of distempered blood
Than to make up a free determination
'Twixt right and wrong; for pleasure and revenge
Have ears more deaf than adders to the voice
Of any true decision. Nature craves
All dues be rendered to their owners. Now,
What nearer debt in all humanity
Than wife is to the husband?98

Hector here emphasizes the ageist implications of Aristotle's moral theory, recognizing in his subordinates typical failings of "young men." Paris and Troilus have both said well, but they have not done well in saying so, because their "reasons" conduce merely to their "hot passions" rather than to reason. What Hector offers here in opposition to their arguments is a rhetorical question about what the wife owes to the husband. It will be my purpose now to ask what, in fact, the wife owes to the husband? In discussing practical logic from the standpoint of the person with specific desires and goals in mind, as was common in Shakespeare's time, it is easy to neglect those constraints on behavior one feels as a result of inhabiting a social environment. In the next section of this paper, then, I will consider logic—and the "practical syllogism"—in the light of the social world, and the ways in which disruptions in the social world affect practical logic. Hamlet—and, I

98 William Shakespeare, The History of Troilus and Cressida, ed. Orgel and Braunmuller, 2.2.163-76.
will argue, *Hamlet*—offers a critique of contemporary action-oriented logic, predicated on the fact that time can put social relationships "out of joint."

3. Subverting Logic

In his essay "Nature," Ralph Waldo Emerson observes that "man...is placed in the center of beings, and a ray of relation passes from every other being to him." 99 Although it can seem that Hamlet is intellectually isolated, Franco Moretti reminds us with his fascinating diagrams of character networks that the nominal hero is enmeshed in a complex web of relations. 100 In the previous section of this paper, I explored a range of actions within the play that occur suddenly without much apparent forethought, a level of efficiency that is possible because individuals build on bases of accumulated knowledge. In this section, I will show how Shakespeare troubles normative conceptions of logic, in large part through the comments and practices of the protagonist. When Hamlet puts on his antic *disposition*—a word, it should be noted, that denotes not only one's character or temperament, but also the second part of logic by which one formalizes propositions as syllogisms—he shows how the easy logic of the other denizens of Elsinore is inadequate for negotiating the new political order. In what follows, I will argue that Hamlet's "antic" logic is particularly prone to unmask confusions of relational terms, such as the wife to the husband. Indeed, it is essential to understand the logical concept of the "relative" in order to discern the overall structure of the play, particularly its almost obsessive

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characterological doubling, in addition to specific cruxes such as why Hamlet should wish to prove that Claudius is his mother.

In the *Categories*, Aristotle states that "we call relatives all such things as are said to be just what they are, of or than other things, or in some other way in relation to something else" (6a7). As Thomas Wilson more simply puts it, "relatives are those, which are comprehended with other, or the which are named, one with another, and (as a man would say) have a mutual respect, one to another." Despite the rather bloodless character of these definitions, the concept has latent political implications even in the supposedly antiseptic environment of the logic handbook. Like Hegel's master-slave dialectic, Aristotle's allusions to masters and slaves when discussing the topic of relation establishes multiple valences of dialectic encompassing the rules of reason, affairs of state, and potentially historical change. Later in the seventeenth century, indeed, John Milton would show anger and discomfort over the putative logic that grounds the relation between the monarch and his subjects:

We know that King and Subject are relatives, and relatives have no longer being then in the relation; the relation between King and Subject can be no other then regal autority and subjection. Hence I inferr past their defending, that if the Subject who is one relative, take away the relation, of force he takes away also the other relative; but the Presbyterians who were one relative, that is to say Subjects, have for this sev'n years tak'n away the relation, that is to say the Kings autority,

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101 The Rule of Reason, 27-28. The "relative" is one of Aristotle's categories, which describe the different kinds of subjects and predicates—or, as Wilson puts it, "show the largeness, and the narrowness of the most general words" (19). For further information about Aristotle's categories in the English context, see Wilbur Samuel Howell, *Logic and Rhetoric in England*, 1500-1700, especially ch. 2, "Backgrounds of Scholasticism," pp. 32-56.
and therfor the Presbyterians for these sev'n years have
remov'd and extinguished the other relative, that is to say the King, or to speak
more in brief have depos'd him."\textsuperscript{102}

Here, Milton "infers past the defending" of the prelates to inaugurate a new logic of
relation that would permit the populace to depose the head of state. Hobbes, by contrast,
would develop a monarchical political theory asserting that there is a logical entailment
that binds the ruler and subject. In general in this logic-obsessed period, there was
competition to establish the strength of the logical relations that inhere between ruler and
subject, father and son, and master and student in order either to affirm or deny political
convention.

*Hamlet* begins in the wake of a series of shifts in relation: Hamlet’s uncle
Claudius has become his father, while Claudius’ “sometime sister” Gertrude is now his
wife. The Ghost disrupts the general cosmological relations between the earth and the
spiritual realms. As the play progresses, we are made aware of more broad, self-
referential understandings of the scope of relation: in his instructions to the players, for
example, Hamlet posits that they are meant to hold up a mirror to nature, making art and
nature themselves to be reciprocal terms in a relation. Hamlet may even make use of the
technical logical meaning of the concept when he says: "I'll have grounds / More relative
than this. The play's the thing / Wherein I'll catch the conscience of the King" (2.2.599-
601). When the King sees the Player King, he will in effect see himself on the stage, thus
constituting the "grounds relative" Hamlet is looking for. It is probably not a coincidence,

\textsuperscript{102} Milton, John. *The Tenure of Kings and Magistrates*, in *Complete Prose Works of John
230.
moreover, that these lines terminate a speech in which he speculates about what an actor is to Hecuba or she to him, and an entire scene in which Hamlet engages in prolonged jesting with Polonius about Jephtha and his daughter (2.2.599-601). The play accordingly holds up terms in relations, but only to *dissolve* their individuality: relations are conflated into identities. This is, I will suggest, the structural principle of the play.

In what follows, it is my purpose to highlight the method whereby Shakespeare puts subjects and objects into reciprocal logical relationships, and then uses that constructed relation to obscure individual differences. Many of the complications regarding relations that ensue in *Hamlet* have to do with the notoriously "polysemous" character of language. In particular, many critics have discussed the frequent use in *Hamlet* of words that possess more than one meaning—such as "father" (in 3.4, lines 8-9)—and of multiple words—such as "act," "do," and "perform" (in 5.1.10-12)—that possess the same meaning. One could, if so inclined, describe these linguistic phenomena as *paranomasia* or *hendiadys* respectively, in keeping with the nomenclature of handbooks of tropes and schemes by the likes of George Puttenham.103 But I think we should see them instead as instances of the kind of "doubtful terms" that are described at length in ubiquitous logic books and school primers, such as Thomas Wilson's *The Rule of Reason*, Thomas Blundeville's *The Arte of Logike*, and Abraham Fraunce's *The Lawyer's Logic*. Authors discuss particularly vexing examples of doubtful words in connection with the relative, which could result in a world turned upside down if writers did not take care in defining their terms (as Milton illustrates). Throughout *Hamlet*, there

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is a powerful and detailed exploration of the ethical implications of such confusions—and indeed of the logical coherence of what seem to be confusions.

Hamlet's use of logic is everywhere affected by his unique status in the play as an avenger. The predicament of the revenger complicates the apparently set patterns of the Aristotelian conception of relation, since he is always in danger of becoming the man he opposes in trying to destroy him. As John Kerrigan writes, the "structure of vengeance" is such that "when B, injured by A, does to A what A did to him, he makes himself resemble the opponent he has blamed, while he transforms his enemy into the kind of victim he once was." This is a good way of putting it, since it allows us to see characters as variables, when historically critics have mined them—including, in particular, Hamlet—for their interior selves. It is useful, first of all, to conceive of characters in Hamlet as something like letters from the alphabet, or more specifically terms in a syllogism; and secondly to recognize that what seem to be two separate variables may turn out to be equal.

The phenomenon of one character becoming another transcends the revenge plot. In the scene following directly on Hamlet's first conversation with the Ghost, Polonius advises Reynoldo to "Observe [Laertes's] inclination in [himself]" (2.1.71), which—as Harold Jenkins suggests in his edition—means that Reynaldo should basically turn himself into Laertes in order to observe him. Claudius gives Rosencrantz and Guildenstern similar advice, intimating that they can more effectively spy on Hamlet if they perform their shared identities as students when they are with him. Turning the tables, Hamlet discusses "the sport to have the enginer / Hoist with his own petard"

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After stating the pointlessness of explaining "Why day is day, night night, and time is time" (87-8), Polonius comments, "to define true madness, / What is't but to be nothing else but mad?" (241). Most spectacularly, the Gravedigger claims that in being mad Hamlet is like everyone in England (5.1.145-6). There are also two culturally valued models of relational identity in the play, but these are given short shrift. At the conclusion of his doggerel love poem, Hamlet suggests that his soul is Ophelia's as much as his body is his own (2.2.122-3), and the abortive friendship between Hamlet and Laertes reflects the renaissance commonplace that two friends are like one person. Aside from these hints of alternative possibilities for identity sharing, however, every suggestion in the play that A might equal B is seen as a threat. Given this pattern, how may Hamlet pursue vengeance on Claudius without, as Kerrigan suggests, becoming more like Claudius or, as the Ghost puts it, "taint[ing] [his] mind" (1.5.85)?

Considered abstractly, each of these examples elucidates potential—and productive—confusions about terms in what contemporary logicians called problems of relatives. In *Hamlet*, there is an increasing possibility for the substitutability of terms in a relation, beginning with situations in which one person observes another, then comprising social or class affiliations like the university, and culminating in an entire country where everyone thinks alike. Hamlet, in particular, finds creative ways to suggest that in entering into contact with someone else one risks turning into them. In Act 1 scene 5, Horatio calls the Ghost "strange," and Hamlet says "therefore as a stranger give it welcome." In Act 4 scene 3, Hamlet calls Claudius his mother, and attempts to prove it in the following comic syllogism: "My mother: father and mother is man and wife; man

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105 172-73. It is also significant that Hamlet says he will "make a ghost" of the person who tries to stand between him and the apparition (1.5.85).
and wife is one flesh; and so, my mother" (54-5). When Hamlet speaks like this, one might as well say he is mad because there is method in it.

I believe that Hamlet's "antic disposition," insofar as that describes his penchant for casting doubt on terms like "son," "mother," and "father" in absurd syllogisms, is intended to trouble the easy logic—the practical syllogism—that enables almost every other character in the play to pursue their objectives. Unlike many critics, I do not see any essential difference between Hamlet's language in Act 5 and the first four, by which time he is often said to have achieved a new maturity or even "quietism." What else do his speculations regarding Caesar or Alexander or any other person making a posthumous career through the guts of a beggar do except give his earlier insights into shared identity the most extensive possible application? In the longue durée, one's body may become another's. And does his famous speech in which he states that "the readiness is all" constitute any real change of attitude? Given that Aristotle himself opposes readiness and practical logic in book 6 of the Nicomachean Ethics, I think it should be seen as Hamlet's self-declared victory over the normative system of practical logic.106 The danger of practical logic, as Hamlet suggests from the beginning to the end of the play, is that circumstances change, while logical reasoning does not seem to admit this inevitable fact. Any practical syllogism, conceived as a static, symbolic structure, is destabilized by the transforming effects of time.

The play produces a twofold critique of logic that moves along two conceptual axes. Claudius, Laertes, and Polonius trouble the conventional structure of practical

106 In The Nicomachean Ethics, Aristotle suggests that "it is characteristic of men of practical wisdom to have deliberated well" (1142b32-3), but states unequivocally that "readiness of mind is different from excellence in deliberation" (1142b5-6).
wisdom by being too expeditious in pursuing villainous, or at least morally questionable, ends. Hamlet, on the other hand, makes use of his antic technique of disposition to show that time is not sufficiently taken into account when constructing a practical syllogism, since in the long term one's assumptions are liable to change. In analyzing terms in such a way that they lose their self-sameness over time, Hamlet subverts the assumption that syllogistic reason can be the whole of reason. Hamlet's logical analysis is, however, itself culpable, as one observes in his ingenious justification to Laertes of his bad behavior as the work of his madness rather than himself: that is, his use of his characteristic method of confusing terms in a relation becomes problematic when it is used to justify his own actions rather than to criticize others'. It should also be said that Hamlet's foregoing of the practical syllogism causes him to act in an alarmingly unconscious way throughout the play, as when he stabs Polonius or wrestles with Laertes. By the end of the play, as the dead bodies clog the stage, it is clear that both the practical syllogism and Hamlet's radical disjunction of logic and action have precipitated tragedy. Both practical and theoretical logic are caught in a kind of meta-logical *reductio*. The question is what we are left with.

My argument in this essay presupposes that Shakespeare had an at least passing acquaintance with logical method, as it is discussed in the handbooks of Lyly, Wilson, Seton, Ramus, and the like, though where exactly he got his information is open to doubt. A recent critic has gone so far as to suggest that Shakespeare was familiar with the details of Stoic logic, and that this is an ideal model for logic use in *Hamlet*. Nevertheless, it is surely significant that every time authors that were important to Shakespeare—including

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Plutarch, Erasmus, and Montaigne—mention logic, they comment on its futility, and specifically its liability to distract one from the most important and idiosyncratic human qualities of one's interlocutors. The common critique is that logical reason makes one unfit for conversation; Plutarch even suggests that syllogistic argument is inappropriate among the participants in a philosophical symposium. The danger is in treating arguments as though they did not emanate from human beings, who have a range of idiosyncratic desires that undergird their arguments, and which sometimes indeed constitute their real arguments: it is no accident, for example, that Laertes, a young man, thinks young men are constrained, while Polonius, an old(er) man, thinks a young man runs with a longer tether. To put the issue in another way, the danger is in treating people as variables and not as people.

In a letter of July 13th, 1802, Coleridge asks and answers a very important question: "It is easy to clothe imaginary beings with our own thoughts and feelings; but to send ourselves out of ourselves, to think ourselves in to the thoughts and feelings of beings in circumstances wholly and strangely different from our own, hic labor, hoc opus—and who has achieved it? Perhaps only Shakespeare." Critics have disputed this judgment, or have charged Coleridge with inaugurating a misleading view of character in Shakespearean drama. I would like to suggest in conclusion, however, that we should transform this aesthetic judgment of the play into an ethical standard within the play. If Shakespeare, whether through temperamental or professional instinct, valued the ability

108 Plutarch discusses the proverbial young man, who introduces "trivial and paltry problems" in order "to display a philosophical or mathematical turn of mind, such as the one about the logical division of simple indefinite propositions," in "Of Hearing," in Essays, trans. Robin Waterfield (New York: Penguin, 1992).
to sympathize imaginatively with another person while preserving a sense of his or her differences from oneself, we might judge Hamlet by this standard—rather than, for instance, his "modernity," which is, in one way of thinking, a comic expansion of the 1st gravedigger's comment that Hamlet is like everyone in England. In the end, I suggest that the play asks us to see what Hamlet cannot see, and to refuse to follow where his mocking and fallacious arguments lead.
Walter Ong famously discussed how simplified early modern logics resulted in a decline in specifically oral ways of using language, and a general decline in humanistic learning in favor of mastering facts and principles. Logic performed a "techologizing of the word." In what follows, it will be my purpose to think about what one might rather paradoxically call the humanization of this technologizing. Ong referred to Ramist logic as a kind of prototypical computer, and it was his intention to indicate thereby the mechanical and predetermined quality of logical reasoning.\(^{110}\) Despite the fact that computers are machines, however, it is common to observe that people often form various kinds of emotional attachments to them. Today, it is possible to put one's "personal stamp" on a computer: one can choose a desktop image, bookmark internet sights, and decorate the exterior of one's computer to make it seem somehow special and one's own. It is this basic, arguably irrational phenomenon I would like to equate to dramatic depictions of logic use through a reading of works by Thomas Middleton. In his plays and other occasional writers, characters not simply employ logic to attain specific ends; they define themselves in various ways by their relation to it. Logical language becomes a kind of style, indeed a manifestation or expression of personality.

The psychologist Alfred Adler used the phrase "private logic" to describe "an antithetical scheme of apperception that the person uses rigidly to classify self, others,

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\(^{110}\) For a strong version of his argument, see Walter Ong, *Orality and Literacy: The Technologizing of the Word* (New York: Routledge, 2002).
and experience." In Middleton's works, one finds characters that more closely resemble the Jonsonian "humors" than Shakespeare's famously well-rounded if not unfathomable personalities. Middleton's characters are competitive, acquisitive, and self-interested, but often remarkable closed off from others as they navigate the social world. Like the individuals who populate Sterne's *Tristram Shandy*, they often have their "hobby-horses," which sometimes do not conduce very well to their own benefit. In particular, many of Middleton's characters, like Walter Shandy, have a hobby-horse or "private logic" that corresponds to the use of logic itself. For whatever reason, whether as a result of training or instinctive sympathy, they take delight in logic, obsess over it, constantly use and misuse it, demonstrating in a variety of circumstances that they need it.

This chapter will be devoted primarily to interpreting the use and thematization of logic in *The Changeling* and *The Chaste Maid of Cheapside*. In the first of these, I will explore Middleton's dramatization of how a peculiarly logical method of reasoning can be psychologically destructive, resulting in basic confusions about one's own self and desires. In particular, I show how the comic subplot featuring a fool who uses logic to test one's sanity in a mental institution is integral to the play's theme. In *The Chaste Maid*, a university wit and his tutor have a similar function, instructing an uneducated community in how to employ logic as a tool of analysis. In this comedy, there are similar dangers from a rhetorical, ad-hoc method of logic, but in the end Middleton suggests that for all its inadequacies his characters are better off with it—that, in short, even the abuse of logic can offer compensatory, therapeutic benefits that legitimize it's use in difficult, real-

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world circumstances. In both plays, logic is an individuating form of expression, bespeaking an individual temperament that is particularly oriented towards logical forms of expression—that takes an interest in logic for its own sake. In viewing a comedy and a tragedy, I will show the inherent danger and possible rewards of putting one's trust in logic. Middleton illustrates the rewards of using logic, but also the danger of—one might almost say—being used by it.

1. Middleton's Logical Humor

Much of the criticism on Middleton is divided about his ideology, and indeed the extent to which he is ideological. Perhaps the most influential study of Middleton's politics is Margot Heinemann's *Puritanism and Theater*, in which she argues that Middleton's drama represents an uncomplicated and aggressive defense of hardline Calvinism. In an important recent article, N.W. Bawcutt has expressed concern over the influence of Heinemann's study, showing that there is ample reason to be skeptical of the claim that Middleton was a Puritan. Bawcutt suggests that Middleton's ideological beliefs were neither radical nor stable, but were responsive to perceived desires of current or potential patrons, and furthermore argues that by the standards of the period Middleton's political and religious views were accommodating. The case for Middleton as a broad-minded, humanistic, and even tolerant writer is aided by stylistic analysis, and particularly his measured and developing attitudes towards logic. Throughout his prose

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112 Margot Heinemann, *Puritanism and Theater* (Cambridge University Press, 1982).
works and plays, there is indication of a mind working through the implications of logical

method even as he uses it in shifting circumstances.

By the standards of his time, Middleton was well educated, having attended

Oxford (which he left without a degree after three years) and having acquired knowledge

of several languages, including, of course, Latin, which he frequently makes use of in his

poetry, pamphlets, and plays.\footnote{See Gary Taylor's essay "Lives and Afterlives" in \textit{Thomas Middleton: The Collected Works} (Oxford: Clarendon Press, 2007): 25-58. Taylor discusses Middleton's fluency in Latin, and notes how he acquired books in numerous languages while developing plots for his plays. As Taylor notes, "the ability to read and write other languages may have been less formative than the linguistic habits associated with translation itself," since Middleton—like many educated early modern writers—frequently adapts the vocabulary and syntax of English in order to encompass the meaning of a given source text. In
general, it will be my purpose to suggest that a major aspect of Middleton's

multilingualism is the necessity of \textit{arguing} using Latin, where the knowledge of extra-
linguistic logical forms and the culture of their use affected his vernacular style.}

His early works and juvenilia bespeak a particular interest in argument, which would of
course have been fostered at Oxford. His early \textit{Paraphrase of Solomon} is indicative of his

knowledge of religious controversy, and shows subtlety in its handling of controversial
doctrines.\footnote{For a careful analysis of Middleton's religious views in this work, see Deborah Shuger's introduction in \textit{The Collected Works}, pp. 1915-18.} The didactic spirit never left him. In subsequent years he would compose

"snarling satires," councils for the King, and plays governed by the principles of poetic

justice. As might be expected of an author who has chosen to make a living in a

professional rather than an academic career, his opinions about specifically academic

forms of discourse are ambivalent.
Much of Middleton's early work was composed in the shadow of Thomas Nashe, with whom he was may have been personally acquainted.\textsuperscript{116} In works like Pierce Penniless (for which Middleton wrote a sequel, called The Black Book) and especially Summer's Last Will and Testament, Nashe satirizes the pretentions of academic ways of speaking, but also castigates society for taking so little heed or material care over the learned. His true anger is for the contemptuous rich: "It is no matter what Sic probo [a synecdoche for the logician] and his penniless companions prate, whilst we have the gold in our coffers." It is a concern that permeates much of Middleton's work, including the early Father Hubbard's Tales, in which Middleton presents the strange reflections of an ant that lived several lives of a man before returning to the shape of an ant. Of particular interest is how Middleton represents himself (in the guise of an ant) as a precocious and successful scholar. Middleton writes of how he "sucked the honey of wit from the flowers of Aristotle" and "steeped his brain in the smart juice of logic, that subtle virtue" (180). Like Nashe, Middleton bemoans the poverty of this knowledge: "for all his weighty and substantial arguments, being able indeed to prove anything by logic, I could prove myself never the richer, make the best syllogism I could" (180). The logician is a kind of Cassandra, producing weighty arguments that fall on deaf or indifferent ears.

Middleton never gave up trying to influence public opinion, of course. "The World Tossed at Tennis" is a measured political statement, intended, as C.E. McGee notes, "to mediate between the scholarly pacifism of the King and the Protestant militancy of his son."\textsuperscript{117} The Masque was to be performed at Denmark House in 1620,

\textsuperscript{116} According to Gary Taylor, Nashe was not only "an important influence" on Middleton, but perhaps also "a personal mentor" to him (\textit{Works} 58).
\textsuperscript{117} \textit{The Collected Works}, 1405.
with both King James and Prince Charles present, though there is no evidence that this performance took place. McGee speculates that James may have scuttled the entertainment because it pointedly solicits his approval for war in its concluding speech. Despite this possibly offending passage, and the fact that its whole point is to promote a war, the masque as a whole bespeaks reconciliation and harmony. Just as Prince Charles could become lord of Richmond, St. James's, and Denmark House through the beneficence of King James (in the form of a grant of 28 September 1619), so could all of England be united under a common resolution to further the cause of Protestantism on the Continent. The details of Middleton's representation are interesting from the perspective of his conception of logic. In this masque, every character has "the peculiarity of his rhetoric and comportment," in keeping with his unique temperament, but in addition to rhetorical styles there is a logic that binds characters together in a principled endeavor. The World Tossed is not only about the reconciliation of individuals but also of language itself.

In The World Tossed, Middleton considers the general problem of the extent of the binding force of rules, which was an important problem for logicians who tried to create rules for structuring thought and language. The symbol of the tennis match of the title is indicative of the theme. The idea that rules could be constitutive for language is broached at the outset of the text, which, because it fails to observe conventional rules, is given the strange name of "device": "This, our device, we do not call a play, / Because we break the stage's laws today / Of acts and scenes..." (p.1410). Since the "laws" of act and scene are constitutive of a play, Middleton will not call his production a "play." As the

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118 Ibid., 1406.
text progresses, however, there will be a sense that there is room for abstract conceptions—of an individual, a literary text, or a legal principle—that admit of significant deviation from the rule. In part, this is because Middleton adumbrates a conception of logic predicated on practice and real-world use rather than the slavish mastery of forms.

According to a recently influential theory, "practice has a logic which is not that of the logician." 119 For all the criticisms against early modern logic, there has been insufficient appreciation of how theorists and practitioners attempted to mold a logic that was conducive to being developed over the course of one's involvement in daily pursuits and problems. The constitutive force of logic is evident in Middleton's depiction of it, which is analogous to any discipline or art that one learns through practice:

As boys learn arithmetic, practice with counters
To reckon sums of silver, so with their tools
They come to grammar, logic, rhetoric,
And all the sciences; as, for example,
The devout weaver sits within his loom
And thus he makes a learned syllogism:
His woof the major and his warp the minor,
His shuttle then the brain, and firm conclusion
Makes him a piece of stuff that Aristotle,
Ramus, nor all the logicians can take a' pieces" (1414)

The logic behind this depiction of logic is derived from Ramus, who described logic as a practical skill analogous to painting or building, and used logical method to delineate the contents of arithmetic, grammar, logic, rhetoric, and as many of the other sciences as he had time or ability for (by his own standard). The picture of reasoning at work here is material, practical, and organic: one cannot take it into pieces, though the logicians tried to enumerate separate elements of logic in their textbooks. To itemize the motions of thought is rather like trying laboriously to explain how to talk and chew gum at the same time. One reasons well because one has been trained to reason well, and has done the necessary practice. Moreover, if one neglects any one part of reasoning—just as if one neglected the warp or woof while weaving—the whole action would be destroyed. The art of logic is a seamless whole.

Middleton shows throughout *The World Tossed at Tennis* that he is sensitive to paradoxical characteristics and employments of logical method, particularly in the exchanges between the Soldier and the Scholar, the latter making absurd use of the logical forms he has mastered—such as to "make[s] a proof" that there are no scholars in existence. It is in this series of delicate, gently paradoxical instantiations of logic that Middleton moves towards his central idea, namely, that "Thou art no soldier unless a scholar, / Nor thou a scholar unless a soldier" (1416). In the conclusion of the masque, James himself will offer an enumeration of the goods achieved by different kinds of men (1429). In the end, the soldier will go abroad and the scholar will stay, each fulfilling his intended function—which is every bit as constitutive for him as the rules of tennis are for that game. In the end, the King, the one person that may unite the diverse professions in a
single enterprise and a common language that appeals to all of his subjects, and indeed to "measure the soldier and scholar by the same syllogism," as Thomas Greene put it.\textsuperscript{120}

In the works considered to far, Middleton presents himself (in the case of *The World Tossed*, in collaboration with Thomas Rowley\textsuperscript{121}), as a learned academic, capable of producing rational proofs to justify a given course of action. It could, though, be argued that he spends more time suggesting that he could use logic than in making really productive use of it in real-time, as it were. In various plays, such as *The Roaring Girl* and *Wit at Several Weapons*, Middleton makes use of ubiquitous tags of academic argument, with characters asking for reasons, proof, and even "sic probo." The rapid cut-and-thrust of witty dialogue sounds rhetorical rather than logical: one does not expect a given character to produce a truly well-reasoned argument in such cases, but rather a piece of wordplay or a bad joke. There is a more general problem in longer speeches, one that holds not only for Middleton but also for any dramatist that holds academic argument to consist in the ability "to make the baddest matter good," as Nashe puts it.\textsuperscript{122} Such a description is more reminiscent of the ancient Sophists, or else the handbooks of popular

\textsuperscript{120} Thomas Greene, *Greene's Farewell to Folly* (London, 1591): 11.

\textsuperscript{121} It is only as a matter of shorthand that I discuss "Middleton's" works and plays, even when it is a product of what Taylor calls "the best doubles team in the history of English drama" (*Works 44*). In what follows, I will discuss scenes that are partially or wholly attributable to William Rowley, such as the first scene of *The Changeling*, with the understanding that Middleton read and accepted responsibility for the whole text of the plays he put his name to. For a recent study of the special problems presented by these playwrights' collaboration, see David Nicol, *Middleton and Rowley: Forms of Collaboration in the Jacobean Playhouse* (Toronto: University of Toronto Press, 2012).

\textsuperscript{122} In *Summers Last Will and Testament* (New York: Penguin, 1972), for example, when Summer and Autumn ridicule Orion for his nickname, "the dog-star," and Autumn goes on to list the bad attributes of dogs, Orion comes to their defense, giving an oration in their praise concluding with dozens of lines concerning why "Chrysippus holds dogs are logicians" (168-9). Such jesting about logic had become common, in particular as a result of the Marprelate Controversy. See Travis L. Summersgill, "The Influence of the Marprelate Controversy upon Thomas Nashe," *Studies in Philology* 48.2 (1951): 145-60.
fallacies such as Aristotle's *Sophistical Refutations*, in which one would appreciate common fallacies and the ways in which savvy debaters try to mislead their audiences.\footnote{123} This kind of "logic," used merely for humorous purposes, does not announce itself at logic at all.

In this chapter, however, I try to take seriously the notion that Middleton took logic seriously as *logic*, and not just as rhetorical syllogistic. Unlike Nashe (in the works that have been quoted), Middleton makes it clear at times that he maintains a respect for the truth, and not just in a sober attempt at biblical exegesis like "The Wisdom of Solomon Paraphrased." In works like "The World Tossed at Tennis" and even his animal fable, Middleton shows respect for the profession of the scholar, not least, perhaps, because he considered himself to be one. In mentioning "the Logical Humor" in my subtitle, it was my intention to indicate Middleton's idea that there are some people with the requisite training and instincts to use logic in the service of rational inquiry and "right reason," to use an early modern phrase. In "The World Tossed," Middleton takes the ostensible pursuits of the various professions seriously as actual roles, and there is the sense at the end that the scholar is *needed* at home while the soldiers are at war. In what follows, I will continue to focus on characters—in this case, from *The Changeling* and *The Chaste Maid of Cheapside*—who have a professional, if not necessarily positive, interest in logic as a rational discourse. Even in the clowning of the Fool in the madhouse

\footnote{123} For a general introduction to sophistry in antiquity, see William and Martha Kneale’s *The Development of Logic* (Oxford UP, 1962): 12-22. For an influential late-medieval example of the genre containing a helpful introduction to the aims and methods of sophistic reasoning, see John Buridan’s *Sophisms on Meaning and Truth*, trans. Theodore Kermit Scott (New York: Meredith, 1966). Sophistic arguments have an outsized importance in many works of early modern logic, where the emphasis is on avoiding common errors rather than on memorizing the complex rules and nomenclature associated with medieval scholastic logic.
within *The Changeling*, it is significant that the syllogisms are meant to prove that individuals are or are not rational; even in the generally cynical arguments of the student Tim, there is concern to show that he has not merely wasted his time at university—that there is an inherent dignity in logical disputation, even when it does not live up to an ideal of sound argument. For individuals who cannot help but use logic—because of the kind of people they are—logic is a serious matter even when it is abused.

**2. The Changeling: Logic and Passion**

Much of the early criticism on Middleton's *The Changeling* was written in response to T.S. Eliot's provocative suggestion that the dramatist stood aloof from his plays, showing little of his views or personality. Eliot stressed the negativity rather than the capability of Middleton's representations.\(^{124}\) Arthur Kirsch is eloquent about the "ironic tone" and "retributive patterns of action and characterization" that permeate his work:

"it is virtually Middleton's first law of moral dynamics that every foolish or vicious action has its equal and opposite reaction. Both the guller and the gulled are subject to it: there is no folly or vice which is not precisely repaid in kind, no evil which does not bring its own destruction. A perfect symmetry governs Middleton's better plays—fearful in the tragedies and delightful in the comedies,

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but always inexorable." There is, indeed, "an absolute conservation of the energy of sin."\textsuperscript{125}

One could be forgiven if, having read such statements as these without having attended to Middleton's plays, for believing that the dramatist approached stagecraft with the analytical perspective of a scientist. As Douglas Bruster states, "if the human figures populating Middleton's black and white worlds sometimes behave in uncannily mechanical ways, the almost mathematical law of agency that governs their actions hints at an important principle behind his works and their interpretation."\textsuperscript{126} The conspicuously mechanical quality of Middleton's characters is indicative of their rationalistic—which is not, of course, to say reasonable—approach to inquiry and experience. In \textit{The Changeling}, Middleton represents characters using logic to assess their character and to rationalize the moral and material changes they undergo, but the most troubling aspect of the play is that its static moral economy only reflects the external acts that they perpetrate. There is, indeed, the possibility that characters are punished to the extent of their ability and determination to understand their own guilt.

In considering the use of logic in \textit{The Changeling}, it is essential to grasp the literary context from which it originated. Scholars have generally been unkind to the principal source for Middleton and Rowley's play, John Reynolds's \textit{The Triumphs of God's Revenge against the Crying and Execrable Sin of Wilful and Premeditated Murders}, which was printed in London in 1621. A recent editor of \textit{The Changeling}, Joost Daalder, is representative in dismissing Reynolds' text: "The characters are flat and


contrived; there is little by way of convincing (leave alone profound) psychological treatment; and the plot (which is not firmly related to the characters) is crudely manipulated for its banal moral purpose.\textsuperscript{127} All of this may be true, and it may not be true of \textit{The Changeling}, but there has been an unjustifiable extent to which critics have adopted the standards of Middleton and Rowley and castigated Reynolds for failing to meet them. A better introduction to Reynolds may well be to consider a presumed weakness of \textit{The Changeling} rather than its virtues and to reflect on how it may derive from his source. According to T.S. Eliot, \textit{The Changeling} is a "mixture of tedious discourse and sudden reality."\textsuperscript{128} Such a characterization nicely captures the peculiarly discursive character of Middleton's writing in \textit{The Changeling}, which, for all the differences in the plot, is in part owing to Reynold's presentation of significant elements of his story in the form of letters between the protagonists and their reflections on them.

Reynolds' \textit{The Triumphs of God's Revenge} is not only a story containing actions, but also a story about reading and interpreting stories. The "banal moral purpose" of the text is to dissuade readers from adultery. But there is a deep uncertainty at the outset that a series of moralistic tales is the way to facilitate this moral purpose. According to Reynolds, "if in the day of Iudgement we shall answer at Gods great Tribunall, for every lewd thought our hearts conceive, and idle words our tongues utter, how then shall we dare appeare (much lesse thinke to scape) when we defile our bodies with the pollution of adultery, and taint our soules with the innocent bloud of our Christian brethren?"\textsuperscript{129} If,

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\textsuperscript{128} T.S. Eliot, "Thomas Middleton," 141.  
\textsuperscript{129} John Reynolds, \textit{The Triumphs of God's Revenge against the Crying and Execrable Sin of Wilful and Premeditated Murders} (London, 1635). Hereafter, this work is cited parenthetically in the text.
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indeed, it is true that people are punished for every lewd thought, one might question what purpose is served by presenting them with a book containing little else? Insofar as critics of Middleton and Rowley's play have been interested to debate the extent to which the playwrights intend to make the audience complicit in the actions on the stage and more generally to make its reactions integral to the meaning, it is useful to consider that the source text on which the play is based contains paradoxical reflections on what one may think while being told not to think in a certain way. Throughout the text of God's Revenge, moreover, Reynolds tends to both give ample space to the thoughts of his characters and to judge their immorality, while at the same time showing how they claim—in some cases, quite plausibly—to lack control over them. The subtitle of the book includes the phrase "willful and premeditated," but the spontaneous appearance of many of the actions characters perform may give it a merely legal application. Indeed, Reynolds—like Middleton and Rowley—seems to delight in paradoxes of volition in the midst of his highly discursive representations of immoral acts.

Every speech in The Triumphs of God's Revenge contains rational justifications for a chosen course of action, but in many cases the rationale paradoxically rests on the irrationality of human desire. The brief courtship of Alsemaro and Beatrice-Joanna represents, to use Eliot's phrase, a "mixture of tedious discourse and sudden reality," but throughout there is a sometimes gentle and more often overt spirit of irony. Over the course of the speeches they address to each other and the letters they send to each other, the lovers employ remarkably unvarying patterns of formal argumentation, even as the narrator describes them as given over entirely to lust. Indeed, the "tediousness" of their discourse is offset by the contexts in which it is delivered and the narrator's frequently
amusing reactions to it. In his first speech to Beatrice-Joanna, for example, Alsemaro offers a splendidly reasonable account of the state of his relations to his new beloved, despite having been the single-minded soldier for so long:

Faire Lady, it seemes, that these two mornings my devotions have beene more powerfull and acceptable then heeretofore; sith I have had the felicitie to bee placed next so faire and so sweet a Nymph as your selfe, whose excellent beauty hath so sodainely captivated mine eyes, and so secretly ravished my heart, that hee which heretofore rejected, cannot now resist the power of love; and therefore having ended my devotion I beseech you excuse mee, if I begin to pray you to take pittie of mee: sith my flame is so fervent, and my affection is so passionate, as either I must live yours, or not dye mine owne. (48)

This speech is not obviously immoral unless one remembers the context in which it is spoken, namely, the confines of a church. It is then that words like "devotion" and "pray" sound jarringly inappropriate. Beatrice-Joanna, in any case, replies in similar fashion—with modesty, disclaiming her attractiveness by comparison with other women, after which she suggests "therefore directing your zeale to them." (49). It is just the kind of thing most contemporaries would agree one should say in such a circumstance, and in what follows it is indeed the "perfections of her minde" that serve as an aphrodisiac to Alsemero (49). Throughout the remainder of the tale, and in the other tales, there is a similar emphasis on the logical-rhetorical presentation of personages' arguments, in letters or else in oddly formal monologues. Middleton, I suggest, was alert to the valences of dialectic in Reynolds—and to its tedium, but particularly to the irony of its supposed tedium.
In *The Changeling*, there may be tedious discourse, as Eliot said, but the courtship between the lovers has less to do with logic. Indeed, Middleton and Rowley seem to go out of their way to suggest that their protagonists are acting in a deeply illogical fashion, in accordance with ungrounded, unpredictable desires. From the outset, *The Changeling* distributes an ample selection of logical and philosophical concepts, often in the formation of paradoxical ideas and clowning asides. As in Reynolds' story, the action takes place in a church, but unlike in Reynolds the suitor is self-conscious about what he is doing: "The place is holy, so is my intent" (1.5). In addition to this bald irony from Reynolds's text, Middleton replicates his more subtle dialectic between action as either premeditated or as the immediate fulfillment of an irrational desire. In his first speech, Alsemero inaugurates what will shortly be a pattern of paradoxical images of instant fulfillment: "The church hath first begun our interview, / And that's the place must join us into one; / So there's beginning, and perfection too" (9-11). Subsequently, Alsemero continues to play on the idea of instant perfection, arguing that he has fallen in love at the first sound of Beatrice-Joanna's voice:

And I have showed you all my skill at once.

I want more words to express me further,

And must be forced to repetition:

I love you dearly. (68-70)

The attempt to contract actions into instants contrasts ironically with the dilated timeframe of his projected journey, about which Alsemero cannot "know the end" (52).

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130 My sense that these texts are similarly dialectical contrasts with Margot Heinemann's contrast of "the strictly naturalistic psychology, the secular logic of cause and effect, sin and retribution which...distinguish *The Changeling* from its popular pious source, in which divine intervention is much cruder and more external" (199).
In both of these instances—of a brief encounter where the end is known in the beginning, and the contingent sea-voyage about which one must be uncertain—Middleton plays with the problematic notion of causation as it pertains to human behavior, setting up what will emerge as a major theme and goal of logical explanation. However, in neither case is there logical explanation. Indeed, Ansemero abjures it, stating in the end that he is reduced to "repetition." Beatrice-Joanna must give in to his desires because he loves her—because he loves her—because he loves her. All he has is his assertion.

_The Changeling_ is filled with questions about "what might be the cause?" (39), and the idea that with respect to any given behavior there might be "no cause for't but a peevish will" (106). The "willfulness" of individuals—their tendency to act on the basis of passions that have no reasonable basis—is a main idea of the main plot. Ansemero makes this clear at the outset:

This is a frequent frailty in our nature.

There's scarce a man amongst a thousand found
But hath his imperfection: one distastes
The scent of roses, which to infinites
Most pleasing is, and odoriferous;
One oil, the enemy of poison;
Another wine, the cheerer of the heart
And lively refresher of the countenance.
Indeed this fault, if it be so, is general:
There's scarce a thing but is both loved and loathed. (115-24)
Ansemero, indeed, is no different: "Myself, I must confess, have the same malady" (125). Ansemero is a slave to his desires. This is a conventional statement of the irrationality of desire, but in the case of Joanna-Beatrice's infatuation with De Flores there is, if anything, a deeper problem. She, apparently, loves the thing she hates: she is simultaneously attracted to what repels her. Joanna-Beatrice's action on the basis of the opposite of her desires flies in the face of the Aristotelian idea of the "practical syllogism," by which one was encouraged to fulfill a desired action as one discovered the means to do so, one famous example being to eat a fruit because one knows it is "sweet." Indeed, it is against this background of practical logic that we may appreciate the irony of Ansemero's question to his beloved: "What might be your desire perhaps: a cherry" (127).

In the main plot of The Changeling, the main actors act in a deeply irrational way, in total contrast to what occurs in the story on which it is based.

In the next scene, Act 1 scene 2, there is a transition from flagrantly unmotivated actions and irrational desires to an arena in which everything makes sense—if not too much sense. Middleton's madhouse contains extensive—if not comically excessive—logical argumentation, in which characters explain their motives in detail. The language is oddly philosophical. At the outset of the scene, Alibius refers (unnecessarily) to the "substance" (18-19) of his point, namely, that he is old and his wife is young, and the dialogue that follows this contains typical logic-chopping and technicalities in the conversation between Alibius and Lollio, the clever servant. The dialogue can, indeed, be strangely labored, as here, when Lollio "proves" that Alibius's wife need not speak to visitors to the madhouse: "If they come to see the fools and madmen, you and I may
serve the turn, and let my mistress alone: she's of neither sort" (58-60). The argument is clear. Alibius, however, takes the time to flesh it out:

Indeed, come they to see

Our madmen or our fools, let 'em see no more

Than what they come for. By that consequent

They must not see her; I'm sure she's no fool. (61-4)

Even here, Alibius's argument is not foolproof, so his servant helps him out: "And I'm sure she's no madman" (65). Alibius explained that anyone looking for a fool or madman could not have any desire to see Lollio's wife, since she is neither one nor the other; presumably to aid his understanding, Lollio tries to repeat the argument at greater length using more technical sounding vocabulary ("that consequent"), but forgets that in addition to not being a fool his wife is not a madman. This is not simply "wit": it is careful analysis, filling in the implied terms of an argument. It is not obvious that the painstaking attention to the steps of his servant's reasoning aids Alibius's understanding. Nevertheless, the caretakers of the madhouse show in such instances of logical analysis a respect for rationality and truth, even if they argue on the basis of unsound premises, whether to mislead (in Lollio's case) or out of ignorance (in Alibius's).

Much of the scene following Alibius's initial declaration of his jealousy concerns Lollio's elaborate logical analysis into what cause he could have for it. Having been asked "his reason," Lollio gives him the following argument: "We have but two sorts of people in the house, and both under the whip: that's fools and madmen. The one has not wit enough to be knaves, and the other not knavery enough to be fools" (44-7)—the implication being, of course, that therefore no denizen of the madhouse is capable of
engaging in adulterous behavior. This argument is followed by a series of (arguably) amusing reflections on the meaning of "fool." There is a sanity test given to recently admitted patient, in which Lollio asks a series of increasingly difficult riddles. In the final lines of the scene, Lollio observes—with ironies that only become apparent by the end of the play—that his new charge, Antonio, "shall prove a wise man, or I'll prove a fool myself" (29). The emphasis on "proof"—on what that means and how one might secure it—is a preoccupation throughout the scene from the beginning to the end. The contrast with the first scene could not be clearer.

Middleton's vision in this play is dark—or "realistic," insofar as realism entails unpleasantness. No character in the play has the moral high ground. The comic subplot contains a gull and numerous schemers competing to take advantage of him; the main plot contains adulterers and murderers. They are all "changelings," in one sense or another—usually in the sense of having fallen from grace. In the end, however, I would suggest that logic emerges as an important subject in the play, perhaps even as an instrument of salvation (in a weak sense of the term). The play ironizes the logical arguments employed by Alibius and especially by Lollio throughout. There is the sense, indeed, that the more virtuosic Lollio's arguments get the more he damns himself as a fool. His logic is, in short, that witty form of logic that resembles rhetoric. In the end, however, it is the duller Alibius—who truly uses logic in order to understand more clearly what he hears—who apparently changes for the better. At the outset of the play, he is determined to keep his young wife under guard lest she commit adultery, but by the end Alibius is promising to ease in his vigilance: "I see all apparent, wife, and will change now / Into a better husband, and never keep / Scholars that shall be wiser than
myself” (5.3.213-15). It is no coincidence, I suggest, that the one character who made efforts to understand the arguments of his interlocutors—even if they were beyond him—is the one to show evidence of having undergone an education.

It has been the main purpose of this introduction to the subject of logic in *The Changeling* to suggest that it is indeed a subject. The fact that the most conspicuous forms of logical argument occur in a madhouse is of course an irony. One can be logical without being reasonable, and perhaps the operators of the madhouse are madder than the patients they take. But it is also clear that nobody is really hurt by the arguments Alibius and Lollio make use of. It is possible that the two of them even enjoy engaging in their subtle arguments, to the extent that it is a real sacrifice for Alibius to give up on talking to scholars that are wiser than himself. If this is the case, the use of logic in *The Changeling* may be seen as relief for the characters that inhabit it as much as for the audience that observes it. It is, perhaps, the largest irony of the play. For a dramatist that takes the conventions of tragedy and comedy as seriously as Middleton does, it could be significant that it is the high-born who act in accordance with irrational desires, whereas the lower personages are almost obsessively interested in rationalizing behavior, even to the extent of mastering the rules of deductive inference. For Middleton, logic is a potential source of comedy, both in the sense of laughs, and in the sense of achieving good outcomes.

3. *The Chaste Maid: Logic as Therapy*

A theme of *The Chaste Maid of Cheapside*, as of other plays by Middleton, is the respects in which moral life is governed by the rule of reason. In tragedies like *The Changeling*, such an interest manifests itself in the morality-play-like distribution of
rewards and punishments, but one interest of Middletonian drama is the exceptional case where an individual does not get what he or she seems to deserve. It is particularly with reference to such situations that critics refer to Middleton's "realism." In *The Chaste Maid*, there is a manifestation of Middleton's ongoing more general preoccupation with the idea of the morality play, and whether or not there is logic to the rewards and punishments distributed in the course of his comedies. Like *The Changeling*, *The Chaste Maid* indicates the "logic" of its own moral outlook by making extensive use of formal logical methods, from local scenes of logic chopping to large-scale dialectics. One way the dramatist draws attention to the importance of logic in his play is by including a university-trained student among his *dramatis personae*. The point of logic in this play is more constructive than in *The Changeling*, but at the same time it is more unexpected, not to say original. Apart from any simple aid logic can provide in distinguishing truth from error in the spheres of public life or pedagogy, Middleton is perhaps most interesting in seeing a psychological, perhaps even a kind of therapeutic, value in making use of it.

The opening of the first scene, indeed, brings up large questions about the relation between language and education. As Yellowhammer says of his son Tim:

A poor plain boy, an university man,

Proceeds next Lent to a Bachelor of Art;

He will be called Sir Yellowhammer then

Over all Cambridge, and that's half a knight. (1.1.157-60)

There is, indeed, a sensitive exploration of the geographical bases for language in the play, where words and sentences derive from Oxford, Westminster, and the various parts
of London. The purpose of logic is, of course, ostensibly designed to transcend such regional differences, though at the start of the play it is as much associated with the Inns of Court or the University as are French or Latin. Logical language is, in a sense, merely another geographical variant of language, emerging from the groves of academe. This, however, is merely an initial position: throughout the remainder of the drama, there will be representation of both lay and professional logical methods, and thematic engagement with the problem of whether logic really is just a learned ornament or else (or in addition) an aid to sincere expression.

*The Chaste Maid* opens with barbed language that is strikingly physical in connotation, but rarefied themes about meaning and the possibility of communication soon emerge. Maudlin uses "the language of Westminster" to berate her daughter for her errors, and her son uses Latin in his letter to her (which she does not understand). The opening scene is filled with learned banter, though the characters lack real learning—but Middleton takes pain to suggest that even when his characters lack knowledge they do not lack reason. Indeed, even as Maudlin mistranslates the Latin it is clear that she is trying to put a "true construction" on the language that will make sense of it. Even as the Porter mistranslates the same text it is clear that his suggestion it is a "money matter" (1.1.81) is, ultimately, correct. It could serve as a Ramist "epitome" of the argument even though the translation is false.

The opening of *The Chaste Maid* can seem unsurprising in its use of punning language, though there can seem to be singleness to every *double entendre*. For example, when Yellowhammer chides his wife for persecuting their daughter over her "cracks in duty and obedience," observing generally that "as there is no woman made without a
flaw, your purest lawns have frays and cambrics bracks," Maudlin replies with a highly unpoetical rhyme: "But 'tis a husband solders up all cracks" (1.1.27-38). It is, perhaps, foolish to expect logic from such conventional theatrical fooling, but the strained logic of the exchange is nevertheless noteworthy. Maudlin chastises her daughter for not trying to take a man, and then responds to her husband by suggesting that any errors in a woman are corrected when she takes a man; her shifts in register belie the consistency of her position, namely, that Moll should court Sir Walter Whorehound. There is also a general indication of the way arguments are put together. The idea that logic consists in completing an argument or enumerating its implications became widespread in the early modern period, in large part due to the popularity of Petrus Ramus's writings. In Ramist texts, the "enthymeme" is indeed defined as an incomplete syllogism, so that virtually any proposition could be "filled in" by the logician to become a fully-fledged argument with premises leading to a conclusion. This is what Alibius does when he tries to reformulate Lollio's argument, supplying the original "consequent." The reverse was also true. One of the most notorious aspects of Ramist method was the practice of reducing complex arguments to a single axiom or statement—rather like one gives the "gist" of an argument or story if one lacks the time or inclination to do better. In *The Chaste Maid*, the sexual jesting about filling in cracks is a reflection of this orientation to argument that assumes that what is not expressed is always potentially there.\[131\]

Following the opening scene of textual analysis, a pair of trained logicians enters the stage. In his portrayal of Tim, the university-educated son of the Allwits, and the

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\[131\] See Walter Ong, *Ramus, Method, and the Decay of Dialogue* (Chicago: University of Chicago Press, 2005) for more about Ramus's concept of the enthymeme (186-7) and his conception of how a summary statement can serve as an analysis of a text's argument (191).
Tutor, Middleton reveals his casual familiarity with the politics of university training. Both of them, like many other characters in the play, are addicted to wordplay, though predictably such wordplay is predicated on at least superficial familiarity with the technicalities of logic. In his first meeting with Mrs. Allwit and "the gossips," Tim's tutor introduces himself with a mild example of wordplay that is unlikely to be understood by his interlocutors: "I am the man that brought him / In league with logic, and read the Dunces to him" (3.2.143-4). While it can seem casual, the conventional pun of "Duns Scotus" and "dunce" encapsulates the general fear that logicians merely make quick wits slower by inculcating useless rules in them. Indeed, when Tim replies he confirms the suspicion that logic is an empty practice, devoid of interest save the ability to individuate oneself from those who have not received formal education: "That did he, mother, but now I have 'em all / In my own pate, and can as well read 'em to others" (3.2.145-6). This response betrays the idea that knowledge is something to be mastered (or memorized) and disseminated: it is knowledge conceived as the contents of a granary, whose confines are limited and not subject to modification. Ironically, his tutor then observes that he can repeat these nuggets of knowledge "for they flow naturally from him" (147). A notoriously mechanical process of rote memorization has become "natural." In the lines that follow, the oscillation between natural wisdom, learning, and confusing mixtures of the two continues. Maudlin thanks the tutor for training Tim so well, but the tutor replies—as tactlessly as ever—in Latin, saying "Non ideo sane" [not for that reason], which Maudlin hears as garbled English: "True, he was an idiot indeed / When he went out of London, but now he's well mended; / Did you receive the two goose pies I sent
you?” (149-51). Again, there is the idea that logic is a way to "mend" the language—and, perhaps, the character—of an individual.

The extended disputation between Tim and his tutor in Act 4 scene 1 is the main set piece of logic in the play, and has significant ethical relevance for the whole. Throughout their dispute, most of which is carried out in Latin, Tim and the Tutor interrogate the meaning of "fool" in much the same way as Lollio does in The Changeling. The ironic implication of their carrying out this tedious debate—which Maudlin complains has lasted the day long—is that both of them are rendering themselves fools. This subtext becomes obvious when Tim tenders the final syllogism of their exchange: "Argumentum iterum probo tibi, domine: qui non participat de ratione nullo modo potest vocari rationalibus, but stultus non participat de ratione, ergo stultus nullo modo potest dicere rationali" [Thus I prove it, master: a fool is a man just as you and I are; a man is a rational animal, thus a fool is a rational animal] (4.1.11-14). Just like Lollio, in fact, Tim practically asserts that he is a fool, which renders this later suggestion ironic: "but bring forth what fool you will, mother, I'll prove him to be as reasonable a creature, as myself or my tutor here" (35-7). The more the schoolmen claim for logic, the less credit they earn for themselves. Tim, indeed, encapsulates this equation in his most grandiose statement: "'Tis the easiest thing to prove a fool by logic, / By logic I'll prove anything" (38-9). It is easy to prove [oneself] a fool by logic, since by logic one can prove anything.

In the logical demonstrations that follow, Middleton gradually zeros in on his central subject in the play, namely, sexual politics, and there is a certain kind of explanatory success. Subsequently in the scene, Tim tries to illustrate how "by logic one
can prove anything" by asserting "a whore to be an honest woman" (41). Maudlin, again, asserts the value of truth gained \textit{a posteriori}: "Nay, by my faith, she must prove that herself, / Or logic will never do't" (42-3). She goes on thereafter to assert the commercial value of such expertise in logic: "Some in this street would give a thousand pounds / That you could prove their wives so" (45-6). In part, this exchange conveys the conventional humor about logic merely serving the rhetorical purposes of the speaker, which includes persuading his interlocutors of a particular idea or plan of action and—more importantly—earning profits. The logician is figured here—again, as is typical—as a Sophist. There is, however, a deeper irony in that Tim's conversation about women, whoredom, and cuckoldry is related to his current anxieties about meeting the woman his parents intend him to marry. His boast that he can render any woman—even one that "had three bastards" (47)—is a kind of mockery of his real disposition to "mar'l what this gentlewoman should be / That I should have in marriage" (83-4). His logic can prove anything, but not "what my parents mean, i'faith, / To match me with a stranger so" (85-6). Similarly, the quibbling between Tim and his Tutor about grammar is indicative of his anxieties about marrying a woman from Wales who speaks a different language. The playful jesting masks deep anxieties.

There is an important moral here that is easy to miss. Tim and his Tutor play fast and loose with logic and Latin, making casual mistakes with their grammar while making a spectacle of their learning. Tim, as a braggart pedant, would have appealed both to audience members that looked upon formal education with suspicion and those who exceeded him in accomplishment. Scholarly editors have generally assumed that he is fatuous. He is—but that is not the end of the matter. For Middleton, it is moreover
important that this learned fool is able to distract himself from the abyss of his marital difficulties with the logical instrument. In this play—and commonly in Middleton—it is the characters who persuade themselves of the rightness of their conduct through argument that tend to have the happiest lives and even the best outcomes, despite the general appearance of "poetic justice" that prevails at the end of most of his plays. When Tim spars with his Tutor at logic, and lords it over the relatively uneducated (but still perceptive) people around him, he should be seen as pursuing a form of mental exercise or even therapy, by which he is able to reconcile himself to what are in certain respects untenable circumstances. Logic is Lawrence Sterne's idea of a hobby-horse.

In the context of Tim's reasoning about cuckoldry, the life and career of Allwit makes greater sense. Critics have generally seen the final triumph of this character as indication of Middleton's realism, insofar as this bespeaks his unwillingness "to distribute rewards and punishments in an unrealistic way." Allwit's final triumph, however, is merely a result of his first success in triumphing over what for many contemporaries would have been intolerable: convincing himself that the openness of his marriage is to his benefit. He has calculated that it is to his advantage for Sir Walter Whorehound to supplant his bed in exchange for money, and his belief that this is the case is enough. The dramatists seem to be quite onside with him in this, depicting the benefits accruing from Tim's ability to show any woman with bastards to be as pure as driven snow. For Middleton, perhaps, the most important function of morality is to justify one's own actions to oneself, so long as they are not wantonly destructive, even if they contravene the dictates of a literary system of poetic justice.

Coda

Middleton's reputation for critical realism has been seen to extend to the ways in which he employs language at a local level. According to Jonathan Hope, for example, "Middleton's speeches are powered by their relation to the external world, rather than internal linguistic logic (as Shakespeare's are)." What has thus far been missing from such an account is the central role that technical grammar and logic occupies in several of Middleton's plays, particularly in a work like *The Chaste Maid of Cheapside*, where at least two characters have university training in Latin and logic, and everybody demonstrates their wit through clever analysis and argumentation. I have argued that Middleton—who say himself as a scholar—took scholarship as he took it seriously. There are benefits—sometimes tangible, but at the least psychological—of taking an interest in the coherence and validity of an argument, and indeed of argument in general. Reasoning about one's motivations, actions, and character is, in a general sense, its own reward.

In my chapters on Marlowe, Shakespeare, and Middleton, I have been mindful of the highly visible satire of logic both in these authors' plays and within the period as a whole. However, I have tried to suggest that in these authors' works there are nevertheless limits beyond which it is impossible to doubt logic, even the problematic rhetorical logics produced in early modern universities. For Marlowe, I suggested that this limit for doubting logic was a persistent and important theme, especially in *Doctor Faustus* and *The Massacre at Paris*. In plays like *Hamlet*, *The Changeling*, and *The

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Chaste Maid of Cheapside, Shakespeare and Middleton present more complex social environments where logic is subtly molded in diverse circumstances. In Hamlet, in particular, there is intense investigation of the consequences of using (and subverting) logic in company: whether with a friend, a lover, a superior, or an enemy. The difficulty is finding a middle space between the utter rejection of logic that results in madness and the incessant argument that endlessly forestalls action. In Middleton, there is something like this middle space: an orientation to logic that reconciles oneself to a situation one may not remedy.

In the remainder of this dissertation, I will turn to the life and writings of John Milton, which present very different problems for understanding the relationship between logic and literature. In a sense, the largest problem is the reverse of what was encountered in with respect to the dramatic authors studied so far. For, whereas in approaching early modern drama it can be difficult to establish that individuals who engaged in superficial ridicule of logic nevertheless took it seriously, in the case of Milton one could say that there is too little doubt of his interest in the subject matter. Milton himself composed a textbook of logic and employed its methods in public debate from the time he was a university student to the end of his public career. The very obviousness of his attraction to logic has led critics, when they investigate poems like Paradise Lost and Samson Agonistes, to make simple one-to-one connections between his logical and poetic methods. One of my general purposes, however, will be to show that Milton was ambivalent in his poetry about the very logical methods he espoused in his prose pamphlets. The reasons for his ambivalence are in part political and religious, but in the end are better seen as literary, resulting from the kind of moral (as opposed to
ideological) critiques of logic to be found in authors like Marlowe, Shakespeare, Middleton, and their fellow Elizabethan and Jacobean dramatists.
Milton and the Life of the Logician

In the course of his career, especially as it approached its end with *Paradise Lost*, Milton developed a monist philosophy that reconciled a single-substance cosmology with the ideal of freedom. In this chapter and the one that follows, I will suggest that the strange conjunction of ideas about physical substance and moral freedom was in part inspired by his interest in logic, an analytical tool that in effect had metaphysical and volitional uncertainties built into it. The fact that Peter Ramus uses Aristotle's "four causes," the bedrock of his physical theory, as a description of logical definitions effectively imports thoughts about matter into a system of thought. Milton's complex sense of how syllogistic reasoning is "necessary" had a deep influence on his conception of free will. It is therefore valuable to step back and view Milton's early efforts to master logic—both in a textbook devoted to the subject, and an early political text in which he engages in logical argument against the "prelatical" adversaries—to see the seeds of his later thought, and the latent contradictions within it.

John Milton was unique among the major poets of the seventeenth century in taking a lifelong interest in the nature, uses, and limitations of logic. This can be discerned in his early tuition by the rationalist theologian Alexander Gill, in the intensive training in logic he received at Cambridge, in the composition of his own manual of logic—both in a textbook devoted to the subject, and an early political text in which he engages in logical argument against the "prelatical" adversaries—to see the seeds of his later thought, and the latent contradictions within it.

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135 For a complex investigation of Milton's monism, including the ways it is reflected in Milton's logic handbook, see N. K. Sugimura, "Matter of Glorious Trial": *Spiritual and Material Substance in Paradise Lost* (New Haven: Yale University Press, 2009).
Ramist logic, in his frequent comments on logical method in his polemical prose works, and finally in his ambitious attempt to justify the ways of God to men.\(^{136}\) As Milton continued to use logic in a variety of contexts, he subtly changed the quality of his instrument. As Giorgio Agamben observes, “contrary to common opinion, method shares with logic its inability to separate itself completely from its context,” and “there is no method that would be valid for every domain, just as there is no logic that can set aside its objects.”\(^{137}\) It is indeed a special feature of logic that in theorizing it one often exemplifies how it should work in practice; in talking about logic, that is, one uses it. In this chapter, I consider the respects in which Milton's conception of reason is inflected by his use of logic, and in turn how his conception of logic was influenced by his political activism. In particular, I will show how Milton, thinking through the practical and theoretical implications of his Ramist method, worked out sophisticated analogies between logical form, self-constitution, and the institutions of church government.

This chapter contains two parts, each of which examines the Ramist logic underlying the representation of decision-making in Milton’s works. The first section reexamines the ethical content of Milton’s Ramism, with particular emphasis on the complex analogy of logical form and individual temperament, situating his textbook, *A Fuller Course in the Art of Logic, arranged after the method of Peter Ramus*, in a wide cultural debate about the usefulness of studying logic in a Christian society. In this section, I will present an argument that Milton’s theory of logic functions primarily as a

\(^{136}\) There has been a recent resurgence of interest in Milton’s career-long investment in logic. For a general introduction and bibliography, see Phillip J. Donnelly’s essay, "Logic," in *Milton in Context*, ed. Stephen B. Dobranski (Cambridge: Cambridge University Press, 2010).

critique of the kind of narrow, utilitarian logical suppositions that scholars generally attribute to Milton himself. In the second part, I turn to the first anti-prelatical tract that Milton published under his own name. *The Reason of Church Government* offers, in its first book, a reconsideration of the meaning of logical and rhetorical methods, before presenting, in the second book, an autobiography of the author. Critics have not explored how Milton’s arguments concerning the disposition of the English Church reflect the ordering of his own life, too often referring to his autobiographical narrative as a “digression.” By considering Milton’s complex attempt to render logic useful to ethical living, we may better appreciate how his autobiography is integral to the structure of the work as a whole.

1. Milton, Ramist Logic, and the Godly Life

Recently, philosophers of ethics have begun to examine how Aristotle’s conception of form can aid in the explanation of a person’s action. This transition in action theory—a mark of the so-called “Aristotelian turn” in moral philosophy—bears a striking resemblance to shifts in ethical thinking in early modernity, and can help to illuminate Milton’s theory and representation of moral reasoning. Christine Korsgaard, in particular, has been instrumental in turning ethicists’ attention to Aristotle’s discussions of form, particularly in the *Nicomachean Ethics* and *Metaphysics*, in order better to understand the complex kinds of thinking that precede the performance of any action. In *Self-Constitution: Agency, Identity, and Integrity*, Korsgaard attempts to resolve the “paradox of self-constitution,” which she formulates, briefly, as a question: “How can
you constitute yourself, create yourself, unless you are already there?" Korsgaard’s solution to the problem relies on Aristotle’s supposition that a person, like a physical artifact, is a thing with a given form. One of her favorite analogies involves building or maintaining a house. In order to repair a house, one pursues a teleological idea or plan for its construction, which is already implicit in its present material existence, and the function one intends for it. One must, that is, achieve the “internal teleological organization” of the house, which is present in one’s mind before one begins building. Korsgaard thinks that we create ourselves by living up to or realizing our innate characters and moral suppositions just as carpenters fabricate houses. To be a person, Korsgaard claims, is to be constantly making oneself into a person. In other words, to be is to act—an action being, necessarily, the product of an integrated whole.

Milton’s ethical theory is also indebted to Aristotle’s discussions of form. Milton’s conception of self-building or self-constitution parallels Korsgaard’s, even on the level of metaphor—though, as we will see in the next section, Milton imagines a temple in place of a house. A formalist theory of selfhood is evident in many of the works Milton wrote over the course of his career, including his treatise concerning Ramist method, *The Art of Logic*. The logical handbook is a useful place to begin, since it provides insight into Milton’s fundamental attitudes about the method and structure of

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139 Ibid. 37-38.
140 Milton had an intimate familiarity with Aristotle’s theory of form, providing detailed, analytical treatments of it in his fourth and fifth Cambridge orations, and in his treatment of form in *Art of Logic*. For a detailed consideration of Milton’s philosophy of form, see Michael Lieb’s “Milton and the Metaphysics of Form,” *Studies in Philology* 71.2 (1974), 206-224. In what follows, I will suggest some ethical and political implications of what Lieb describes as Milton’s attempt to reconcile Platonic and Aristotelian perspectives on form.
thinking (or, as he puts it, “the art of reasoning well”), with comparatively little in the way of extra, ideological baggage. I will examine two aspects of this theory: first, the role that Milton and his contemporaries thought that logic should play in one’s life as a whole, and secondly how a biographer could use Milton’s logical method to analyze a life. In doing so, I will argue that Milton’s Ramist handbook possesses a more complex moral provenance than is generally acknowledged. First, however, it is useful to consider the wider implications of logical method, which figured in complex ways within early modern pedagogy and the fraught debates about the role of reason in religion.

Logic has an equivocal place in Milton's culture, and his own discussions of the discipline sometimes reflect his own uncertainty. In Of Education, the word “logic” has what are in effect two different meanings. First of all, it stands for “the most intellective abstractions” that young students were exposed to in the antiquated school curricula that Milton hoped to reform.141 On the other hand, Milton, like many of his contemporaries, also thought of it as a simple—if, potentially, violent—instrument, and a necessary precondition for humanistic study. “Therefore,” Milton states, adapting a famous metaphor from Cicero, “so much [logic] as is usefull, is to be referr'd to this due place withall her well coucht heads and Topics, untill it be time to open her contracted palm into a gracefull and ornate Rhetorick taught out of the rule of Plato, Aristotle, Phalereus, Cicero, Hermogenes, Longinus.”142 Milton’s most important ideas about logic, like his beliefs concerning language acquisition, are resolutely pragmatic: logic is an aid to composition and interpretation, not an end in itself.

142 Ibid. 636-637.
It should also be understood that there is, in fact, no end of learning logic in one’s life. As Milton observes in *The Art of Logic*, “the art of logic is the first of all the arts and spreads its territories widely” (7). The militaristic connotation of this image is in keeping with Milton’s representations of rational debate in *The Reason of Church Government*, *Areopagitica*, and other works, but for present purposes it is sufficient to recognize that, for Milton, logic both begins and pervades a lifetime of studious enquiry. Milton’s reflections on the “due place” of logic at the beginning of a humanistic curriculum follow ancient precedent, and the majority of his contemporaries. For instance, in the preface to his massive *Mikrokosmographia*, Helkiah Crooke presents the conventional view, which was not uncommonly related to mythology:

So in ... the Orbe or Circle of the Arts, *Logicke* is worthily esteemed the first in order, because the object thereof is *Reason*; whereby (as by *Ariadnes* clew) wee are directed through all the intricate Labyrinths and Mazes of Nature; and *Diuinity* the last and most excellent, as beeing the end and consummation of all the rest, teaching vs how to liue blessedly both heere and for euer...  

Logic is a “guide” and “companion,” maturing along with its pupil as they mutually confront increasingly difficult tasks, culminating in the investigation of Christian doctrine.  

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144 Accordingly, I share Emma Wilson’s belief that “it is equally valid and indeed important for readers to use Ramist logical principles as a means of analysing Milton’s poetic works from later in his career as it would be to use these in examining his juvenalia from his days at school and university.” See Emma Annette Wilson, “The Art of Reasoning Well: Ramist Logic at Work in *Paradise Lost*," *Review of English Studies* (2010) 61 (248): 63.
Such a view, while hardly uncommon, was frequently contested, especially during the civil wars and interregnum governments. The acumen that many radical Protestants demonstrated for “precision logic” caused a growing number of conservative commentators to see logic as a threat to, rather than a precondition of, conformity in religious doctrine. Thomas Edwards and other important seventeenth-century heresiographers regularly attacked the belief that one could discuss religion within the limits of reason alone. In particular, it was the success of the likes of Thomas Biddle and Paul Best in demonstrating the fallaciousness of received accounts of the Trinity on logical grounds that caused some, including the English Catholic Thomas White, to reveal the existence of a new “controversy-logick” that had become widespread by mid-century. White, attacking the “axiome” that logic “ought to be possessed before one setteth himself to the gaining of science,” proposes that religion ought always to come before it:

...since no action ought to be exempt from the direction of Religion; not, euen the very first, It can not be doubted but that Religion ought to take possession of our hearts, euen before Reason. Neither do I speake this as a thing that should haue

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145 In *Gangraena* (London, 1646), Edwards is concerned with the heretical notion “that right Reason is the rule of Faith, and that we are to believe the Scriptures, and the Doctrine of the Trinity, Incarnation, Resurrection, so far as we see them agreeable to reason, and no farther” (16).

bin onely in the state of Paradise, but as what is connaturall to vs here, and is practised by many pious Mothers, who teach their children their prayers, and stampe in their mindes a deepe conceit of God and of heauen, before they are capable of judging in matters concerning temporall commodities.\textsuperscript{147}

Such a critique, which one finds scattered in the writings of both Protestants and Catholics who worried about the (often superior) rhetorical prowess of their radical opponents, reflects longstanding Christian perspectives on the cultivation of habit and the acquisition of virtue through training. Logic, according to many heresiarchs, from Thomas Edwards to Thomas White, has a limited role within this ethical framework.

Milton’s own education in logic was, in fact, concurrent with his introduction to divinity. This reflects the conventions of seventeenth-century grammar school education, though his instruction in logic must have been unusual, owing to the idiosyncratic character of the headmaster of St. Pauls, Alexander Gill. Milton scholars generally depict Gill as an unusually broad-minded teacher, open to the virtues of both vernacular and ancient literatures, and knowledgeable about the main line and heterodox byways of ecclesiastical history, though his defenses of the English Church are undoubtedly conservative. Arthur Barker describes Gill as a rationalist theologian, constituting a sort of missing link between Herbert of Cherbury and William Chillingworth. Two aspects of Gill’s method, however, should be particularly remarked: first, his tendency to rephrase the arguments of his opponents, and his own, in clear syllogisms; and secondly his omnipresent belief in the total reasonableness of the Christian religion. Milton’s lifelong

\textsuperscript{147} Thomas White, \textit{Controversy-logicke, or, The methode to come to truth in debates of religion} (London, 1659), 25.
advocacy of the power of “right reason” may be, as Barker suggests, a legacy of Gill’s instruction.148

The Art of Logic needs to be read against the background of religious controversy and Milton’s early education. Logic can seem like a specialized field of knowledge, of interest only to career academics and writers. Even the simplified form of logic that Milton presents in his own logic textbook can seem forbidding to the uninitiated. Nevertheless, what can seem like a mere tool for constructing arguments was a source of controversy about fundamental matters: in an environment were the status of reason itself was contested in the course of religious debate, the ethical provenance of a system geared solely to the structure of reason takes on a special urgency. For those attempting to protect religion from the radical ideas of rationalist interpreters of the Bible, logic becomes a dangerous method: a "controversy-logic" that is opposed not only to religion but to reason itself. For Milton, by contrast, I will suggest that Ramist method aids one not only to make good choices but also to live well; the same method that allows one to map the spatial contours of an argument can be used to perceive the coherence of an entire life.

Even in The Art of Logic itself, there is evidence of Milton's conception of the ethical value of logic beyond its ability to aid in the criticism of arguments. It is particularly important that the logical method Milton espouses is "arranged after the method of Peter Ramus." Ramus himself has an unusually large presence in the handbook, not just as a result of Milton's quibbling with facets of Ramus's theory or with the criticisms devoted to them (usually following John Downname, parts of whose Ramist

commentary are copied into *The Art of Logic*), but also as a result of the biography of Ramus appended to the end of the textbook, which Milton took from an early acolyte of Ramus's named Thomas Freigius. Critics have not, by and large, taken much interest in the life of Ramus that appears at the end of the text. Those who *have* interested themselves in the text speak slightly of it. Leo Miller, in what is still the only detailed examination of Milton’s excisions from the text of Freigius, indicates that “this biographical sketch was strictly utilitarian, with no literary or artistic intention.”\(^{149}\) The most recent editor of the handbook is similarly indifferent to the biography. In his introduction to the Yale edition, Walter Ong laconically opines that “the life of Ramus that Milton published with his *Logic* is pretty much what Milton indicates in his title, that is, Freigius’s life of Ramus with the ‘digressions’ omitted.”\(^{150}\) The inclusion of the biography, however, is unusual. Most Ramist textbooks consist of bare text, sometimes without any mention of the original author of its contents at all. Milton's biography of Peter Ramus at the conclusion of the volume provides a valuable context for considering the technical descriptions that precede it.

It is typical of Milton that even the biography of someone else composed by someone else should give the impression of a self-portrait. Indeed, Leo Miller persuasively dates *The Art of Logic* on the basis of the details from Ramus's life that Milton finds irrelevant in the course of his abridgment. Miller favors an early date for Milton’s biography because he removed a sentence from Freigius about Ramus’ weak

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eyesight, which Miller believes would have been retained if Milton had been working on
the text any time after 1648, by which point his own eyes were seriously troubling him.
Miller may have been surprised by such an omission because there are so many notable
similarities between Milton’s narrations of his own life, as it is presented in works like
*Apology for a Pamphlet* and *The Reason of Church Government*, and that of the French
Protestant martyr. The retention of Freigius’s line about weak eyes would only have
strengthened what is already a clear connection between the lives of Ramus and Milton,
or at least how Milton preferred to see himself.

Milton’s abridgement of Freigius’s biography divides roughly in half, reflecting
the Ramist penchant for dichotomous division. The first part is concerned with Ramus’
tribulations and trials in French universities, and the second follows his course through a
series of European cultural centers. The emphasis on Ramus’ travels helps to confirm the
link between Ramus and Milton, who in the 1640s frequently contrasts the harsh
reception of his ideas at home with the respect accorded him in Europe. In addition to this
large-scale division, there is some evidence that Freigius’ life of Ramus makes detailed,
self-referential use of the terms of its subject’s logical system. According to Milton in
*Areopagitica*, "reason is choice." By extension, a life is a series of choices between rival

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151 One of the most salient features of Ramist method is the division of arguments into
branching diagrams, in which each step in the argumentation is divided into a simple
opposition. As Walter Ong amusingly notes, "the Ramist branching dichotomy (a scion
of the Porphyrian tree) as well as, in another way, for Ramus himself, the Branch [Ramus
in Latin means "branch"], soon became celebrated all over Europe as the new golden
bough (208). Even when there is no pictorial diagram of the branching trajectory of the
argument, a relentlessly binary pattern of organization is a hallmark of Ramist writing.

152 It should not be surprising that Freigius’ life of Ramus breaks down into a series of
binary divisions. As Ong notes, Freigius’ life of Cicero produces “what is probably the
first geometrically schematized biography in the history of belles lettres” (30). It is only
reasonable that Freigius’ “Life of Ramus” should be susceptible of the kind of complex
spatial diagram he applied to his life of Cicero.
alternatives. In the end, a whole life becomes a pattern of such binary choices. In the technical part of *The Art of Logic*, there is a rough division between rules governing small-scale arguments (maxims and syllogisms) and concatenations of such small-scale arguments descending from the most general to the most particular (method). The most distinctive feature of Ramus's syllogistic is his emphasis on compound propositions of the form "X and X" ("connex" propositions) and "X or X" ("disjunctive" propositions). These compound propositions are notorious for creating problems when used as the basis for syllogistic arguments, as many of Ramus's early (and late) critics pointed out.¹⁵³ Ramus's binary perspective on language, in any case, serves as a basis for a connection between local and connected arguments, and, by analogy, between individual choices and the longer course of a life.

According to Ong, “Ramus’ life is meaningful in terms of the philosophy, expressed or implied, which unfolds out of it and which it in turn helps to explain.”¹⁵⁴ The perceived connection (by Ramists) between Ramus's life and work is reflected in the pattern of "The Life of Ramus" included within *The Art of Logic*. This is especially the case in the first half of the biography, in which there is a description of Ramus’s court trial in Paris, presided over by Francis I, for undermining the authority of Aristotle and (thereby) corrupting the youths in his charge. Freigius’s representation of Ramus’s trial,

and eventual condemnation by Francis I, which is quoted in full by Milton, is terse, but there is clearly some intended irony in its construction:

> On the first day the three Aristotelian judges, contrary to all the laws of a well presented art, judged that for the perfection of the art of logic there was no need for a definition. The two judges chosen by Ramus were of the contrary opinion. On the next day the Aristotelian judges, much upset, agreed with the matter of division, and adjourned the case to another day. But for fear that Ramus might fail to be condemned, they devised a new plan to renew the whole debate from the beginning and to void what had been decided the day before. Ramus appealed this inconstancy of the judges, but in vain, for a judgment without appeal was given by the three judges, and that sentence of the three condemned not only the *Remarks on Aristotle* but also the *Training in Dialectic*. The author was forbidden in the future to touch upon any part of philosophy either by teaching or by writing. (401)

Despite Miller’s claim that the narrative lacks “literary or artistic intention,” it is possible to treat Ramus’ trial as an allegory of the Ramist-Aristotelian debate about the organization of the traditional rhetorical topics. It could, of course, be happenstance that, in keeping with Ramus’ binary redistribution of the ancient topics, the trial separated into discussions of “definitions” (the object of invention) and “division” (the method of judgment or disposition) in successive days. Nevertheless, it seems convenient that the agreement among the hostile, conservative judges and the Ramists about “the matter of division” reflects their short-lived agreement about the structure of the trial, unless “division” refers merely to the soon to be concluded adjournment. It is also ironic, though
perhaps not deliberately, that the devious adjournment to a third day to open the trial anew bespeaks a failure of “memory,” the single topic that is not retained in the Ramist redaction of Aristotle’s *organon*. Milton’s *Artis Logicae*, in addition to providing an introduction to logical form, concludes with reflections on how reasonable speech can be undermined by judicial institutions and political authority. In many of Milton’s works we may discern a similar pattern, in which considerations about logical form are showed to be relevant to more complex institutional and societal structures.

The life of Ramus at the end of Milton’s textbook is indicative of Milton’s compositional methods in works written over the course of his career. Beginning with *The Reason of Church Government*, Milton develops a complex analogy between logical disposition and one’s natural disposition, or what Montaigne calls the “forme maitresse”; Ramist method, indeed, is a powerful tool for exploring the vexed relation between external forms and the inner spirit in ecclesiastical politics. *The Art of Logic* was written at the same time as he entered into public controversy about ecclesiastical governance.155 This in itself is perhaps reason to consider the text in relation to works like *Of Reformation* or *The Reason of Church Government*, the latter of which was the first major prose composition to which Milton appended his name. In the next section of this chapter, I will argue that Milton employs more complex and idiosyncratic methods of adjusting logical forms to the content of his prose. *The Reason of Church Government* represents Milton’s most thoughtful exploration of the implications of logical method until *Paradise Lost*.

155 Walter Ong, in his Yale introduction, affirms the majority position that the handbook was composed in the early 1640s.
2. Ramism in *The Reason of Church Government*

Milton’s fourth anti-prelatical tract, *The Reason of Church Government*, was published in 1642, in immediate opposition to *Certain Briefe Treatises, Written by Diverse Learned Men, Concerning the Ancient and Moderne Government of the Church*. *The Reason of Church Government* is, however, a notable departure from his previous controversial works. In it, Milton distances himself from Presbyterianism, and broaches a generous perspective on religious toleration. In the end, he will extend tolerance to everything short of intolerance (i.e. prelacy) and atheism.\(^{156}\) This tendency toward confessional pluralism is concomitant with a powerfully original approach to prose composition. In this section, I argue that this stylistic breakthrough was made possible by Milton’s simultaneous immersion in the nature and implications of logical method. In other works—such as *Animadversions* (1641) or *Tetrachordon* (1645)—Milton makes more conspicuous use of the technicalities of Ramist method, attacking the arguments of his adversaries (apparently) with *The Art of Logic* at his side; but a reading of *The Reason of Church Government* gives profound insight into the conception of logical form that continues to influence his thought over the course of his career as both a writer of prose and poetry.

*The Reason of Church Government*, like *The Art of Logic*, is distinctive for its inclusion of a life, though this time it is Milton’s own. What is perhaps not sufficiently remarked is that Milton makes a complex, structural analogy between a human life and the life of the Christian church—in an ingenious solution to Biblical texts, including 1

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Corinthians 6:19, that the human body is the temple of the holy spirit. The key to this analogy is his original conception of form, which he develops against the background of Ramist logic and the polemical arguments contained in *Certain Brief Treatises* and other defenses of the ecclesiastical status quo. Milton seems to have had two thinkers particularly in mind as he composed *The Reason of Church Government*. Richard Hooker, the famous author of *The Laws of Ecclesiastical Polity* and the author of a portion of *Certain Brief Treatises*, is a compositional and doctrinal foil. In particular, Milton critiques Hooker’s presentation, in the fifth book of his *Laws*, of a model Christian temple, “without any blemish or stain of heresy.” Against this, Milton provides a new conception of a Christian temple, which he achieves through an adjustment of Ramist logic to the Baconian method.\(^{157}\) In what follows, I will explain the affinities between Milton’s logical representation of building of a Christian church, and the unique structural development of *The Reason of Church Government* itself.

An under-appreciated facet of Ramist logic is that its practitioners sometimes attempted to disguise it. This is evident in the work of William Chappell, the Ramist logician, theologian, and a tutor of Milton’s at Cambridge. Chappell's *Methodus Concionandi* appeared in 1648 (and was translated and published posthumously in 1656

\(^{157}\) Milton’s Baconianism is well attested in numerous studies. My thinking is most indebted to Joanna Picciotto’s discussion of Milton and Bacon as complimentary kinds of “experimentalist authors” in *Labor of Innocence in Early Modern England* (Cambridge, MA: Harvard University Press, 2010). Catherine Gimelli Martin goes so far as to call him “the most Baconian poet of the seventeenth century” in “‘What If the Sun Be Centre to the World?’: Milton’s Epistemology, Cosmology, and Paradise of Fools Reconsidered,’ *Modern Philology* 99.2 (2001): 231-265.
as *The Preacher, or the Art and Method of Preaching*). The very first chapter of *The Preacher* concerns “the Crypticks, or Occultations of this Method in General.” In typical Ramist fashion, Chappell divides the method of “occultation” into two kinds. First, there are ideas that are “hidden in show.” This means that the author preserves “a clew or line by which he is led from the beginning to the end of his speech,” but that it lacks a spatial diagram or chapter headings to guide the reader or hearer from one part of the composition to another. An example of this would be Milton’s *De Doctrina Christiana* which, though lacking various heads and connections, still approximates the Ramist dichotomizing method. Secondly, Chappell discusses a method that is “concealed really,” in which the author omits one or two of the principal parts, or else by intermixing and inverting the order of argument. Such techniques for concealment are done, according to Chappell, according to “the dictates of [one’s] own wisdom.” It is in keeping with such a program that Milton hides the "clue or line" of his argument in the sprawling, though superficially ridged, length of *The Reason of Church Government.*

In *The Reason of Church Government*, Milton expands the role of logical method, showing its provenance in not only an individual life, but within an institutional structure. By thinking through the implications of his and his opponents' discursive habits in the context of an argument about the proper organization of the church, Milton's conception of logic takes on political and religious valences that would continue to surface over the

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159 *The Preacher*, p.2.  
161 *The Preacher*, p.3.
course of his career. Milton seeks throughout the tract to distance himself—both ideologically and stylistically—from his opponents. In showing the reason of church government, Milton thought it necessary to prove his opponents were correspondingly unreasonable. His method of doing so is, in effect, to suggest that his opponents are unreasonable in their style, having failed to progress beyond the simple mechanical rules that Milton equates with logic in *Of Education*.

Throughout *The Reason of Church Government*, Milton analyses the style of language in addition to the arguments of his opponents. Milton raises the issue of style at the very beginning of his tract, where he defends the idea that writing well is defensible even when the subject being discussed is a serious issue like church-reform. Having contemned “the publishing of human laws,” “without reason or preface, like a physical prescript,” Milton invokes the support of Plato for supplementing laws “of principal moment” with “an induction” or “well-tempered discourse,” making use of “those native colors and graces of speech, to charme the multitude into the love of that which is really good, as to imbrace it ever after, not of custome and awe, which most men do, but of choice and purpose, with true and constant delight”\(^\text{162}\) (640). Milton is, of course, providing a defense of rhetoric in the communication of religious doctrine, which had been impugned near the beginning of *Certaine Brief Treatises*.\(^\text{163}\) It is, less obviously, a reference to Bacon’s wildly popular *Advancement of Learning*, which includes a


\(^{163}\) Scholars have devoted considerable attention to Milton’s criticisms of the authors whose writings were collected in *Certaine Briefe Treatises*, but there has been no investigation, to my knowledge, of Milton’s extensive, and frequently clever, comments on the style and rhetoric of his antagonists. A comprehensive analysis of Milton’s style, and theory of rhetoric, requires an analysis of his complex modes of ironic imitation.
discussion of the same passage from Plato’s *Laws* (IV 720a) in its second book.\(^{164}\) A consideration of Milton’s Baconian source-text reveals the new scientific method and the critique of scholastic logic as crucial contexts for Milton’s program for ecclesiastical improvement.

Milton’s invocation of "induction," considered in relation to *The Advancement of Learning*, has important logical implications. Bacon’s reference to Plato comes in the midst of his argument that “invention is of two kinds much differing; the one of arts and sciences, the other of speech and arguments.”\(^{165}\) (129). He attacks “the Induction which the *Logitians* speake of and which seemeth familiar with *Plato*, whereby the *Principles of Sciences* may be pretended to be inuented, and so the middle propositions by deriuation from the Principles,” as “utterly vitious and incompetent,” which has “wronged, abused, and traduced Nature” (132). Invoking the authority of Virgil, Bacon argues that “the mind of her selfe by Nature doth mannage, and Acte an Induction, much better than they [the logicians] describe it” (132). Finally, Bacon states that “to conclude upon an enumeration of particulars, without instance contradictorie: is no conclusion: but a coniecture; for who can assure (in many subiects) uppon those particulars, which appeare of a side, that there are not other on the contrarie side, which appeare not?” (132). While scholars debate the extent to which Bacon adhered to the Ramist reformation of logic, it is important to recognize that this is not inconsistent with Ramist theory. Indeed, Milton’s

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\(^{164}\) It is worth noting that Milton had read Plato and Aristotle through the writings of Bacon previously in his career. For example, in his third Cambridge oration (or “prolusion”), Milton builds his attack on Aristotle using ideas and images derived from *The Advancement of Learning* and *De sapientia veterum*.

\(^{165}\) Francis Bacon, *The works of Francis Bacon*, vol. 1, ed. James Spedding, Robert Leslie Ellis, and Douglas Denon Heath (Cambridge: Riverside Press, 1863), 129. Subsequent quotes from Bacon are from this edition, and cited parenthetically in the text.
The Art of Logic, following Aristotle, affirms that “Reason or logic ... attaches to itself ... four helpers: sense, observation, induction, and experience” (11). Milton's introduction to The Reason of Church Government, ostensibly a simple defense of rhetoric, has deep logical implications.

Implicit in Milton's "induction" is a defense of rhetoric, but it is not thereby an attack on logic: only of a kind of bare logic without the least ornament. It is, perhaps, ironic that what seems like a justification of "charming" his readers and giving them "delight" will soon align with the Baconian and Ramistic ideal of progression by contraries. In the course of this apparently "freer" investigation, one will nonetheless have created a form that makes sense of the diverse elements. An induction is not a precept: it is an initial position from which one will become aware of alternatives, which in the Ramist picture would involve the tracing of a tree diagram of binary oppositions from the most general to the most particular; in Bacon, one would have a "table" listing contrary qualities on opposite sides. For Milton, as for Bacon, the "advancement" of learning is essential: one does not begin with a table of rules but arrives at it gradually by a series of free choices between alternatives. A form is the product of human freedom and conscious decision.

Milton employs a complex vocabulary in The Reason of Church Government in order to allegorize his theory of developing form. His punning use of "induction" was only the beginning. Throughout the work, he is particularly interested to explore the moral and semantic resonances of “invention” and “disposition,” the ancient rhetorical topics that comprise the two parts of Ramist dialectic. In The Art of Logic “invention” refers to the discovery of arguments, and “disposition” (or judgment) denotes their
arrangement. In the handbook, however, Milton observes that “invention” is “too broad a term,” as it easily collapses into a multiplicity of meanings (219), and “disposition” is perhaps too narrow, being one of Milton’s significant terminological idiosyncrasies.\textsuperscript{166} While Milton expresses concern about the efficacy of such terms in \textit{The Art of Logic}, in contemporary polemical works he exploits them.

The use of loaded Ramist vocabulary is in the service of a sophisticated analogy between logical and ecclesiastical form. Instituting a church government for Milton is an art, in Bacon’s sense of the term, as we see in his images progressing from governing a house to building a temple. The comparison of church-government to managing a household appears within a rhetorical question in the first chapter of the work: “If then it appear so hard and so little knowne, how to governe a house well, which is thought of so easie discharge, and for every mans undertaking, what skill of man, what wisdome, what parts, can be sufficient to give lawes & ordinances to the elect houshold of God?” (643). The solution to this puzzle will only come late in the work, as Milton develops a new metaphor that incorporates the dissentions and conflicts between all the men participating in the building and government of the Christian church.

The topic of invention is invidious in Milton's text. It is notable that Milton implies the inferiority of invention, as he does in \textit{The Art of Logic}, when he observes that stand-alone aphorisms are less persuasive than syllogisms, or the strings of syllogisms that characterize the Ramist method (324). In the first chapter, this invidious comparison has a deep, ethical significance. This is in keeping with Milton’s unusual, and almost aggressive, statements throughout \textit{The Art of Logic} that logic is the art of reasoning or

\textsuperscript{166} Milton substitutes “disposition” for “judgment,” which is the preferred term for arrangement in Ramus and most of his commentators.
thinking well, rather than the art of discoursing well. “Invention” and “disposition”
connote different patterns of cognition, or of seeing the world:

If we could imagine that he had left it at randome without his provident and
gracious ordering, who is he so arrogant so presumptuous that durst dispose and
guide the living arke of the holy Ghost; though he should finde it wandring in the
field of Bethshemesh, without the conscious warrant of some high calling. But no
profane insolence can paralell that which our Prelates dare avouch, to drive
outragiously, and shatter the holy arke of the Church, not born upon their
shoulders with pains and labour in the word, but drawne with rude oxen their
officials, and their owne brute inventions. (644)

The critique rests on the prelates’ attempt to “dispose” what has already been ordered by
God, and to shatter “the living ark of the holy Ghost” with their “brute inventions.”

“Invention” here lacks its meaning, in The Art of Logic of “discovery”; it is, rather,
connotative of novelty, basically the opposite of what it should mean in Milton’s logical
system.

Milton contrasts the “prelaticall cart,” the unsteady conveyance for ecclesiastical
governance, with his famous image of the democratic construction of a Christian temple.
The two images effectively bookend the entire first part of The Reason of Church
Government, occurring in the first and last chapters respectively. The promise of
Baconian method, through the deft allusion to the scientific theorist in a passage
ostensibly about Plato, is fulfilled here. The Baconian connection is particularly clear in

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167 According to Ong, this situates Milton “farther out than Ramus had been along the
trajectory moving logic from an art of communication to an art of presumably solipsistic
thought” (155).
Milton’s observation that, “if we look but on the nature of elementall and mixt things, we know they cannot suffer any change of one kind of quality into another without the struggle of contrarieties,” and, furthermore, that “in thing artificiall, seldom any elegance is wrought without a superfluous wast and refuse in the transaction” (662). Bacon’s criticism of Plato was precisely on the basis of the ancient philosopher’s avoidance of contraries in his investigative method, which is unavoidable if one is to confront the material elements of nature. Milton’s conflation of Bacon’s art of science with the art of carpentry or construction is the culmination of his expansion of the signification of logical terms taken from his opponents. If, in The Art of Logic, Milton is careful to distinguish the “invention of arguments” from “invention” in a more general sense of the term, in The Reason of Church Government he performs a sophisticated conflation of discursive and mechanical or scientific conceptions of the term. For rhetorical purposes, Milton is willing to experiment with puns on Ramist terminology.

Milton similarly expands the meaning of “disposition,” which in his adversaries’ Certaine Brief Treatises already had dual connotations associated with logical method and ecclesiastical form. Milton, in addition, makes the term personal. In keeping with Milton’s insistence, throughout his tract, on the priority of internal thoughts or the spirit over external rules and the threat of punishment, Milton concludes the first part of his tract with a concept of “natural disposition.” Milton’s final suggestion that people are already inclined to act in accordance with a just conception of church-government, rather than the speciously grounded external forms imposed by ecclesiastical authorities, parallels Bacon’s insistence, in the passage previously cited, that the mind itself, by nature, performs induction in a way that is superior to the logicians. I believe,
accordingly, that the transition, at the beginning of the second part of *The Reason of Church Government*, to Milton’s brief autobiography, is much less abrupt or merely convenient than critics generally imply. Milton’s self-representation is not a new beginning, but rather the culmination of a sophisticated exploration of how an individual’s use of logic is replicated in an institutional form. In *The Reason of Church Government*, Milton worked out a method of logical analysis that could be applied to both individual lives and institutional structures.

It is, then, possible to arrive at a new understanding of the provenance of *The Reason of Church Government* by reading it alongside *The Art of Logic*. Milton’s anti-prelatical tract possesses an idiosyncratic formal structure, arrived at through a rethinking of the semantic and epistemological implications of logical method. In keeping with the methodological perspective of critics like Stanley Fish and Lana Cable, one should interpret the structures in *The Reason of Church Government* from the vantage point of someone engaged in a first reading of the text. However, whereas these critics emphasize the deconstructive or “self-consuming” characteristics of Milton’s prose, I would emphasize its self-constituting character. It may be true that Milton wishes to inculcate skeptical attitudes in his readers through the initial positing and subsequent undermining of authorities such as Plato or Moses—especially at the beginning of the text, which is all that Fish concentrates on. However, to read Milton’s text this way is to underestimate the

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force of the reparative metaphors—such as the gradual construction of Solomon’s temple—that pervade it.

The ethical force of *The Reason of Church Government* is not to define oneself negatively or in opposition to authority, but to develop oneself in a dialectical relationship with it. The large-scale organization of the work reflects a process of individual self-constitution in tandem with institutional change. The tract, in good Ramist fashion, divides into two books. Milton traces a development in both of these books from the characteristics of an exemplary Christian to a description of how individuals should participate in a collective organization. In the first book, Milton presents Moses as a model, and juxtaposes him with the rickety cart of prelacy, only to combine personal and structural concepts in his complex representation, in the last chapter of the book, of laborers at work on a vast Christian temple. Similarly, the second book begins with an autobiography of Milton himself, and concludes with a chapter concerning the mechanics of state-formation. It is significant that in both halves of Milton’s work, individuals seem to put themselves together the same way like they manufacture devices or buildings—much like Christine Korsgaard, following Aristotle, says they do.

The connecting idea in Milton’s twin movements from personal to institutional development is his concept of form. This should sound counterintuitive, since *The Reason of Church Government* is ostensibly an anti-formalist work. In the title of the first chapter of the second book, Milton explicitly states that “prelacy opposeth the reason and end of the Gospel in three ways, and first in her outward form.” Milton, of course, opposes this outward form to the inner spirit; as in *Paradise Lost*, Milton places the “upright heart” above “all temples.” However, I have suggested that Milton addresses this
conceptual binary through his subtle version of logical method, including his complex
definition of “disposition” as that which both characterizes the attitudes and temperament
of an individual human being, and the rules and laws that structure society. It is through
this ideational union that Milton is able to arrive at a conception of the English Church as
a living, developing form. The tensions inherent in his conception of the freedom of
individual choice and the endurance of the social structure will manifest itself in a variety
of ways in his later work, from the defense of a nation exercising its reason by
contradictory choice in *Areopagitica* to the monistic vision of *Paradise Lost*. Even within
his "justification of the ways of God to men," Milton will similarly subject the rules of
logic to rational inquiry, emphasizing the possibilities rather than the answers afforded by
mastery of logical method.
MILTON AND THE LOGIC OF ACCOMMODATION

At the outset of his groundbreaking *Principles of Logic*, the philosopher F.H. Bradley admits that his project of describing logic is necessarily incomplete, "since I confess that I am not sure where logic begins or ends." Since the nineteenth century, logicians have been used to dealing not so much with logic as with logics, whose amorphous borders are variously set by conventions of ordinary conversation, software design, and other discourses. By comparison, early modern logic can seem like a blunt and rudimentary technology. In his famous introduction to John Milton's textbook of logical analysis, *The Art of Logic, Arranged after the Method of Peter Ramus*, Walter Ong discusses its remarkably, indeed almost paradoxically self-contained character:

Technological or methodical knowledge is knowledge in a closed field, for, as has been seen, each Ramist art is complete in itself and separated, like a plot of real estate, from other knowledge. For a Ramist, in fact, the closed noetic field is doubly closed. Applied to any art, method establishes the art in a closed field. Among the arts that method so closes is logic. But method, as already noted, is itself part of logic! The recipe for establishing closed fields is found in a closed field, indeed in the most closed of all closed fields, logic itself. It is a tribute to the

intensity, if not the truth, of Ramus's vision here that two centuries later Kant still believed that that is what logic is.\textsuperscript{171}

Ong here reminds us that for early modern logicians logic is a finite set of operations that describe all knowledge and indeed logic itself. This logic is practically an automated system in which one acquires a predetermined solution to a question that emerges as one follows the step-by-step rules for reasoning that constitute the method. The resultant argument is rational because it is ordered according to the system's un-argued definition of rationality.

In this chapter, however, I will describe the ways that the logic of Ramus—and, more particularly, of Milton, which is not, though to many it seems to be, the same thing—is not a closed field resembling the circuitry of a calculator or chess program. I will do this by examining some of the ways in which logic functions within Milton's epic poem, \textit{Paradise Lost}, about which Ong is surprisingly silent in his introduction. That the method of logic Milton espoused, in his occupation as a teacher and eventually in print, is used in \textit{Paradise Lost} has not, of course, gone unremarked by other scholars. Indeed, the nature and extent of that influence is subject to a variety of interpretations. The value of the \textit{Art of Logic} as a guide to formal analysis of \textit{Paradise Lost} is evident in many studies, where critics use the treatise as a diagnostic tool to identify the fallacies that mar the speeches of Satan and the rest of the devils, and the soliloquies of Adam and Eve

\textsuperscript{171} See \textit{Art of Logic} in \textit{The Complete Prose Works of John Milton}, 8 vols, ed. Don M. Wolfe et al. (New Haven, 1953-82), 8:178. Ong's introduction provides a clear introduction to Ramist logic and a powerful, if contentious, overview of its place in Milton's career and in intellectual history. Throughout this paper, however, I quote from the text provided in \textit{The Works of John Milton}, vol.11 (New York: Columbia University Press, 1935), since it includes Milton's Latin text in addition to facing translation. All quotations from the \textit{Art of Logic} are from this edition and are cited parenthetically in the text.
immediately prior to their falls. More positively, the *Art of Logic* is also an inventory of stylistic possibilities—including dichotomous structure, reasoning from generals to particulars, and *sorites* argument—that influence the compositional principles of the poem's design.¹⁷² What critics have not discussed, however, is the fact that Milton not only uses logic in *Paradise Lost* but also reflects on its nature and limitations. Milton, indeed, embeds something like Ong's critique within the fabric of his narrative. Throughout *Paradise Lost*, we not only see how different characters reason, but also learn gradually what reason itself *is*. Reason is, in effect, what can be inferred from the reading of Milton's poem—and it changes as we read it.

In an influential study of narrative in fiction, Peter Brooks states that “reading for the plot” is fundamentally different from reading to understand an argument: “unlike philosophical syllogisms, narratives ... are temporal syllogisms, concerning the connective processes of time.”¹⁷³ This is a plausible presupposition for modern narrative theory, but I believe that we need to let go of this distinction if we are to understand the nature of many seventeenth century fictions, including, crucially, *Paradise Lost*. Ramus himself hypothesized that poems are ordered in accordance with his system, a notion he

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attempted to prove by using examples from Virgil and Ovid to elucidate his logical principles. Insofar as Milton's epic poem differs from Virgil's or Ovid's in its logic, it is in that it is self-reflective about its Ramist organizational principles, and that it tests the validity of these principles over the course of its narrative. It is significant that the first part of logic comprises invention, or the finding of the so-called topica or "places" of arguments; and that in the first sentence of Paradise Lost the narrator enumerates different origins for his muse, including the secret tops of Horeb and Sinai, Sion Hill, and Siloa's brook. It is similarly significant that the second part of logic comprises disposition, or the formal organization of found arguments into axioms and proofs, since the narrator claims in his second sentence that having been instructed in secret wisdom he will "assert" eternal providence and "justify" the ways of God to men. The broad contours of Ramist logic correspond to the finding, asserting, and justification of arguments in the poem. It is a mistake, however, to take such one-to-one correspondences between logical methods and poetic figurations as sufficient for understanding Milton's creative process. We also need to use logical method on these interrelationships to diagnose logic's successes and limitations within Milton's fictional world.\textsuperscript{174}

In saying that he will assert and justify his arguments, then, Milton appeals to a twofold formal structure of reasoning approximating to assertoric and extended reasoning as they are summarized in the Art of Logic. It is a clue to his formalism, which, as I have remarked, has been the main concern of critics' investigations of the relationships between Milton's logic and poetry. In this chapter, I will elaborate one facet of Milton's formalism that has not been understood in relationship to his logical method, namely, his

\textsuperscript{174} To my knowledge, no critic has commented on the tripartite pattern of argument Milton adumbrates in the first paragraph of Paradise Lost.
uses of small- and large-scale circular patterns of repetition. I will relate such formal
circularities to the conceptual circularities inherent in a logical art that discovers its own
principles in objects of knowledge that it asserts must be there, and in a poem that
justifies a logic that manifests itself in the course of its use in the poem. The most abstract
questions Milton has about his own logical method determine formal vehicles for their
expression. I will also take it as important that the narrator says he will assert and justify
his arguments. This is the first instantiation, I suggest, of a general conjunction of human
will and argumentative form in Paradise Lost. Such a conjunction should be familiar to
Miltonists from the ample body of work on Milton's single-substance cosmology (called
his "monism"), beginning with John Rumrich's Matter of Glory, which argues in
particular that Milton's monism justifies his theory of freedom.175 It will be part of my
purpose to show that Milton's theory of monism varies in accordance with context, and
that the artistic consequence of this variation is that different poetic forms presuppose
different theories of the will.176 More particularly, I will suggest that the reason for the
strange ligature between freedom and form in Milton's works has to do with a
longstanding crux from the history of logic, namely, in what respect the logical
arrangement of propositions makes them necessary—or, indeed, whether we are free or
constrained to follow inferences from premises to valid conclusions.

I take up the formal, epistemological, and ethical implications of Milton's logic by
engaging in a gradually unfolding analysis of the council in heaven in book 3 of Paradise

176 See N.K. Sugimura's "Matter of glorious trial": Spiritual and material substance in Paradise Lost (New Haven: Yale University Press, 2009) for a similar emphasis on the tactical inconsistencies of Milton's representations of monism in his poetry.
Lost. To restrict the field of observation in this way is necessarily to give a partial description of Milton's logical methods and their purposes. Indeed, it is a purpose of my larger project to demonstrate that Milton elucidates different facets and liabilities of his logical system in different books of his poem. Paradise Lost consists, I believe, in a sequence of book-length "experiments." I nevertheless focus on this book in particular because it is the most self-consciously argumentative portion of Milton's theodicy; it is, at least, traditional in the history of Milton criticism to contrast God's logic in this book with the rhetorical sophistries Satan and his cohort engage in in the previous books. The resources of logic are put under great pressure in the heavenly conversation, owing to the fact that it involves an omniscient and omnipotent—and, more arguably, omnibenevolent—deity discoursing in time with his chief but categorical subordinate. A philosophical orientation to logic will enable us to reexamine how a supreme being can be said to be rational in accordance with human conceptions of logic, and how one decides to do something that the supreme being communicates to one as a necessary act. In order to answer such questions, I will proceed sequentially through the book, touching on speeches—including the invocation, God's first speech in defense of his justice, and the Son's offer of self-sacrifice—that illuminate the defining characteristics of Milton's poetic representation of logical reasoning. Although the following analysis will be unable to solve such persistent theological-philosophical issues (which persist throughout the history of theological speculation), I will nonetheless try to prove Milton's awareness of

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177 I follow Joanna Picciotto's use of this term in Labors of Innocence in Early Modern England (Cambridge: Harvard University Press, 2010), where she uses concepts of experimentalism to describe Milton's representation of Paradise in Paradise Lost. I am particularly indebted to her elisions of early modern experimentalisms derived from religious and scientific discourses.
the problems and circularities inherent in his solutions. In the end, I will argue that Milton's theodicy comprises not only arguments, but also a complex meta-argument about how to interpret them—and, perhaps, when to abandon them.

1. Invocation

The first paragraph of book 3 can serve as an introductory tutorial for appreciating the philosophical content and argumentative style of the book as a whole. The questions it raises about divine and human agency—from the ultimate source of the poet-narrator's inspiration, to the particular issue of whether a blind person is capable of living a moral life—resonate with many passages in the dialogue in heaven. Such issues will be more fully explored when I turn to the speeches of God and the Son. For the present, I will be principally concerned with the difficulty of appreciating the plain sense of the language of the invocation. One of the main goals of Ramist logic was to reduce complex arguments to simple propositions, or even a branching tree diagram depicting the progress of the argument from its most general ideas to its minutest details. Nevertheless, in book 3 this is often easier said than done.

In book 1, the Miltonic narrator enumerates four possible sources for his Muse—Horeb, Sinai, Sion Hill, and Siloa's brook—but critics have identified many more for the "holy light" that appears in the first sentence of book 3, including Augustine, Tertullian, Ficino, Dante, Vida, Tasso, Bacon, and many others. These different sources have been

used to attribute different meanings to "light" in the first paragraph, with physical light and the second and third persons of the trinity being favorite contenders. This is, at least, fewer meanings than are contained in such biblical primers as Thomas Wilson's *A Christian dictionarie Opening the signification of the chiefe words dispersed generally through Holy Scriptures of the Old and New Testament, tending to increase Christian knowledge*, which adduces 14 definitions of "light," but it can still seem like too many to provide a satisfying gloss for the sentence. That being said, the problem of the polyvalence of "light" may not require an immediate solution. I believe, indeed, that the logical structure of the sentence suggests that the reader is *meant* to notice many potential meanings rather than settle on one.

Despite beginning with the word "Hail," indicating that what follows is a hymn rather than an argument, there is warrant for subjecting the first sentence of book 3 to logical analysis:

Hail, holy light, offspring of heaven first-born,

Or of the eternal co-eternal beam

May I express thee unblame'd? since God is light,

And never but in unapproachèd light


Dwelt from eternity, dwelt then in thee,
Bright effluence of bright essence increate.\(^{180}\)

The sentence, if it is not a proper syllogism, does at least have a syllogistic feel, owing to the presence of the logical—and, potentially confusingly, temporal—connective “since.” Within this complex sentence lies an easy syllogism like the following: if God is light, one may not express light without blame; God is light; therefore, one may not express light without blame. Whether or not one actually formalizes Milton's meaning in quite this way, however, one should feel the provocation to formalize it in some way. This would be especially true if one had read Milton's insistence in the *Art of Logic* that theologians recognize the fact that things that differ in number also differ in essence, the provocative implication being that God as light, the Son as light, and the Holy Spirit as light are three different entities.\(^{181}\) It is also significant, if we are tempted to treat the rest of the paragraph as a logical argument, that the first explicated syllogism in the *Art of Logic* (i.e. the first example of a syllogism that is recognizably a syllogism) concerns whether a blind man may be wise.\(^{182}\) Nevertheless, as I have suggested, one should probably not be satisfied with this or any formal transformation of Milton's invocation into syllogisms. As numerous authors of logical and rhetorical handbooks pointed out, one of the greatest causes of fallacious arguments is the use of "doubtful words," those


\(^{181}\) See Chapter VII, "Of Form," especially p. 59.

\(^{182}\) The syllogism is taken from Cicero's *Tusculan Disputations* 3: "And when the eye is troubled, it is not honestly affected to the fulfilling of its duty, and the rest of the parts, and also the whole body when it is moved from its state, wanteth its office and function; so a troubled mind is not honestly affected to fulfil his duty. But the duty of the mind is to use reason, and a wise man is always so affected that he useth reason most excellently; he is therefore never troubled" (*Art of Logic* 407).
terms (such as "light") that possess more than one meaning. It is, of course, possible to
treat the rhetorical question "May I express thee unblamed?" as merely rhetorical, but if
we take it simply as a question we should be more resistant than many editors are to
define "holy light." The first sentence of Milton's invocation seems to approximate a
logical form, but the words within it are not constrained by it.

Milton's arrangement of his first tentative statements concerning the nature of the
relationship between the Father and the Son in a quasi syllogism about light resonates
with a long and prominent tradition, in which theologians and exegetes who wanted to
establish the truth of Trinitarian theology put biblical texts like “God is light” (I John 1.5)
into syllogistic form. For example, in a popular biblical primer, Roger Hutchinson
explains the logical principles underlying “harde textes, and suche as have bene abused
for evill purposes” with the following syllogism: “God is light ... Christ is the true lyght
... Ergo Christ is the true God.” Milton was almost certainly familiar with the works of
his former schoolmaster Alexander Gill, who attempted to express Christian mysteries
with rational clarity. In the Treatise Concerning the Trinity, Gill's arguments are
generally more ingenious than those of Hutchinson, but the following do not seem
beyond the popular audience he had in mind for his work: "Whatsoeuer is without
beginning, is also without ending; because it hath no Superiour which might bring it to

183 Indeed, one should even be reluctant to pronounce the word "thee," which has synaloepha with the next vowel.
184 Roger Hutchinson, The Image of God, or, Laie Mans Booke (London, 1560), 19, 158.
nothing: therefore \textit{God is eternall}. Againe, whatsoever comes to nothing, is corrupted by his contrary; but nothing can be opposite to \textit{God}, therefore hee is Eternall.\textsuperscript{186} Indeed, one need only read the following comments to appreciate the difficulty of Milton's metaphors in book 3: "If you take in a myrrour, the light of the Sunne, and reflect it directly thereon againe, in the Sunne it is one, in the glasse another, and yet the reflection of the beames, is also a third, but for all this, there is but one nature and worde of light, which comprehends al three: so is it in this \textit{Tri-Unitie} of which I speake."\textsuperscript{187} Such arguments and analogies are the stuff of countless theological commentaries since late antiquity, many of which provide necessary background to the Miltonic narrator's "groping for a beam of light," as Samuel Butler called it.\textsuperscript{188} Of course, Milton must have known that he, in contrast to Gill or Hutchinson, was making a “hard text” even harder than usual, and in the context of his antagonism to orthodox Trinitarianism we might take the first sentence of book 3 as a kind of serious joke.

The history of critics attempting to gloss the first sentence of the book—and, according to their successors, failing—is perhaps sufficient indication that the sentence is \textit{meant} to be an interpretive problem. Of course, the next sentence, which is also six lines long and begins with "the Miltonic 'Or,'" sets up an alternative name and description of the muse, thus making room for complexly layered interpretive choice and incertitude.\textsuperscript{189}

\textsuperscript{186} Alexander Gill, \textit{A Treatise Concerning the Trinity} (London, 1601), 14.
\textsuperscript{187} Ibid., 22.
\textsuperscript{188} Samuel Butler [Attr. Richard Leigh], \textit{The Transproser Rehears'd} (London, 1673), 41.
\textsuperscript{189} In "\textit{Paradise Lost}, the Miltonic 'Or,'" and the Poetics of Incertitude" (SEL 43.1: 181-211), Peter C. Hermann uses this phrase in an argument proclaiming Milton's postmodernity, or his radical skepticism concerning truth, which is always irremediably contingent. My emphasis is different insofar as it is my purpose to demonstrate how Milton uses a kind of controlled confusion to prompt specific \textit{kinds} of skepticism in the reader.
Reading through the rest of the paragraph, moreover, we may discover that the interpretive difficulties that issue from Milton's different identifications of light is reflected in the form of the whole paragraph, which is partly predicated on repetitions of the word "light" in key positions. As Lee Johnson writes, "not only does the rhyme [of "celestial light" (51) and "mortal sight" (55)] enclose the final five lines, but it circles back to the beginning of the invocation, linking up with 'holy Light' and 'since God is light,'" and so "the invocation is ... ringed with a circle of rhyme based on the key word 'light,' a circle which thereby encompasses the scale of creation in its extraterrestrial aspects in the first twenty-five lines and its terrestrial images in the next twenty-five." This analysis highlights Milton's attempt to compass his matter with a technique of ring composition, but it should be recognized that here, too, there is room for interpretive choice. In a provocative essay, Thomas Festa suggests that Milton's God's use of line and compasses to create a cyclically structured universe reflects the ungrounded quality of the first principles he enunciates in book 3 and elsewhere, affirming in consequence that "we may justly turn Milton's logic back on his God and observe the circularity of his reasoning, how his explanations are classic ... examples of begging the question." On the one hand, the reader might be illuminated by a celestial light that "Shine[s] inward, and the mind through all her powers / Irradiate[s]" (52-3), but there is also the darker possibility that one will merely "roll [one's eyes] in vain" (23). The suspicion that

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Milton's conceptual circularities are vicious will linger throughout the rest of my analysis of book 3, beginning with God's first, notorious speech in defense of his punishment of human beings.

2. God

As Stuart Curran writes, "God is a logician, not a rhetorician."192 This is especially evident when one considers God's first speech in the poem, which makes pervasive and complex use of logical forms in order to defend his position that human beings deserve the punishment he has given them. If the opening sentence of the book evokes analysis with its inconclusive conclusion that God is light, God's string of axioms demands it, especially when he closes his arguments with the word "therefore" (111; 131), which has inescapable pretensions to logical finality. The speech as a whole is carefully disposed. It has three main sections: the first 20 lines describe how human beings will allow Satan to tempt them to fall, though God created them free to resist; the next 20 lines elaborate the nature of free will, which is not affected by God's comprehension of the future; and in the final 15 lines God affirms the justice of his punishment of the humans and angels who freely fell. The tripartite organization of the speech reinforces the tripartite nature of syllogistic reasoning, though the argumentation that is internal to these sections is intricate. Having asserted that man "will fall" (95), God begins the argument proper by asking "who's fault?" (96), and immediately, rhetorically answering, "Whose but his own?" (97), before explaining that Adam and Eve were just and good but free to fall before they fell (98-9), then universalizing the principle (100-2),

after which he argues the consequences of the alternative (103-11), before reaffirming his own justice throughout the remainder of the speech, culminating in the rather surprising statements about the contrasting fates of human beings and devils in the concluding lines. The argument seems cumulative, with God providing increasingly technical discussion of the terms of his argument: the nature of man (as opposed to the fallen angels), of free will (as opposed to fate or necessity), of foreknowledge (as opposed to causation). Over the course of his speech, God argues his case by defining not just the causes of man's punishment, but also the hypothetical facts that would negate the justice of it.

Once one descends from its general organization to the specificities of diction, however, the logic of the argument can seem to break down. J. B. Broadbent suggested that God's "intricate schemes of logical rhetoric" lead "us into a corridor of verbal mirrors in which unbodied concepts are defined by their antitheses so all we can do is mark time with our lips." It should be admitted that God's repetitious axioms do not easily resolve themselves into an interlocking chain of syllogistic arguments. Indeed, there is probably good warrant for following Ramus's example of reducing a complex speech to a single argument or axiom, and then making use of the concept of "method" to do one's sloppy best with the rest. This is, in fact, pretty much exactly what Milton does in the

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194 In *Ramus, Method, and the Decay of Dialogue* (Chicago: University of Chicago Press, 2004), Walter Ong, with customary hostility, describes the method: "The procedure in interpretation is simple and invariable: faced with the text, one asks, What is the question? and, the question determined, what is the argument? and so on from start to finish of the discourse in hand. In doing so, one discovers the great vice of all discourse is
Argument for the book, where he concisely reports that God "clears his own justice and wisdom from all imputation, having created man free and able enough to have withstood his tempter." God's long speech, with all its qualifications, distinctions, and hypotheticals, amounts to the simple statement that God is blameless because man is free. This is quite similar to the moment in book 2 when the narrator, following Belial's highly ornate and rhetorically insidious speech during the council in hell, provides the following gloss, which in the context is comically brief: "Thus Belial with words clothed in reason's garb / Counselled ignoble ease, and peaceful sloth, / Not peace" (226-28). One would probably want to contrast Belial's rhetorical art and God's logical art, since Belial is Belial and God is God; but we may worry that both speeches are merely "garbed" in reason and do not embody it. The appearance if not the fact of God's logicality may appear a forbidding shield, protecting what Empson called his "uneasy conscience."¹⁹⁵

Stanley Fish took such a response for granted, famously arguing that Milton deliberately created a just and logical God that would fail to engage the sympathy of fallen readers, but the deeper concern is that God's language does not make sense.¹⁹⁶ As God observes, reason is choice. This principle is reflected in God's pervasive, Ramist use of dichotomous structure, and indeed his whole argument turns on the alternative implications of human freedom and non-freedom. It is, however, tempting to follow Fish ambiguity. One also discovers the real value of the syllogism; in protracted discourse, the thread on which the arguments are strung gets tangled, and the syllogism serves the excellent purpose of enabling one to disentangle or 'unweave' (retexere) the thread. ... Properly unwound, any discourse is delightfully simple. Cicero's oration For Milo is found to amount to no more than one 'dialectical raciocination': 'It is permissible to kill a criminal.' We might say today that this is the 'meaning' of the oration For Milo, for everything beyond such summary statement, according to Ramus, is ornament" (191).

in considering a more general kind of interpretive choice for the reader. Even if we treat God's speech—as Fish does—as containing a formally correct chain of syllogisms, we are still free to reject his argument—as Empson does. It is useful here to recall Robert Brandom's distinction between implication and inference. Drawing on an idea of Gilbert Harman's, Brandom argues that implication is a logical relation that holds among a set of propositions, while inference is an activity that we perform. After recognizing that a conclusion is logically entailed by a set of premises, we are confronted with the challenge to figure out whether to reject the conclusion or the premises. One man's *modus ponens* is another man's *modus tollens*.197

Arguments pertaining to the logical coherence of God's speech among critics may, in the end, be irresolvable; but questions about implication and inference become more philosophically difficult and thematically serious when we adopt the vantage point of God's immediate audience *within the poem*, namely the Son. It can seem troubling that God's words, indeed the entire dialogue in heaven, do not constitute dialogue in the deep sense of arising in the mutual give and take of interlocutors who are willing to alter their ideas in response to new information, because God is a perfect being with an omniscient knowledge of how it will all turn out. This is, in one way of looking at it, the metaphysical limit case of more mundane criticisms of syllogistic logic. As Lee Jacobus observes: "The greatest complaint against the traditional forms of Aristotelian logic was that it was useless. All it was good for was proving foregone conclusions. Even the syllogistic method itself was often used in inverted order: the conclusion would be

197 See, for example, Brandom's *Tales of the Mighty Dead* (Cambridge, MA: Harvard University Press, 2002), especially 45-66; 191-94.
postulated and then premises conceived which could explain or 'prove' the conclusion"¹⁹⁸
Kathleen Swaim notes the same problem with respect to Ramist logic (which was, of course, modeled on Aristotle's): "If the units of the argument are plugged into the required format, all difference is reduced, and preexistent truth is served."¹⁹⁹ Keeping such criticisms in mind, one could imagine God as a participant in an undergraduate debate at Christ's College, delivering a prepared oration in response to an interlocutor as they "debate" a set question using traditional arguments.²⁰⁰ But the situation in book 3 has infinitely higher moral stakes, since in this case we have an omnipotent being, not a senior undergraduate, telling someone else what to do. In the next section of this chapter, I will consider the implications of the Son's offer to sacrifice himself in accordance with God's plan for him, an action that has bearing on Milton's conception of the will and indeed of logic itself.

3. The Son

Book 3 deserves its designation; it is not merely a chapter or a section of Paradise Lost, but a book in its own right. Noting the structural importance of the concept of light in book 3, Kathleen Swaim discusses the book as an incremental process whereby the reader is accommodated to beings and doctrines that are beyond human understanding, largely by way of repetitions and clarifications of the meaning of "light."²⁰¹ As noted above, Lee Johnson sees the word "light" as establishing circular patterns in the poem's

¹⁹⁸ Lee Jacobus, Sudden Apprehension, 128.
¹⁹⁹ Kathleen Swaim, Before and After the Fall, 148.
²⁰⁰ See, for example, Ramus, Method, and the Decay of Dialogue, 194.
invocation. David Quint, moreover, notices a similar pattern replicated on the largest scale, encompassing the "holy light" of line 1 and the moment in which Satan "lights" on the earth in the final line of the book.²⁰² I suggest that it is similarly significant that the depiction of the conversation in heaven—which begins in line 56 (immediately after the invocation) and ends at line 415 (when the angels their heavenly praise "disjoin," immediately before the scene shifts to Satan's perspective)—is exactly 360 lines, the number of degrees in a circle. This numerological fact about the dialogue effectively answers Satan's confusion, as he views heaven from the cusp of hell, about whether heaven is "square or round" (2.1048); and there is irony in the way Satan can only see physical, planetary circles after the dialogue concludes, while heavenly beings are caught in a conceptual circle beyond vision—in the words of Francis Bacon, he makes "as it were a small Globe of the Intellectual World."²⁰³ It is not certain, however, whether we are meant to think—when we notice the circularity of heaven—only of traditional Christian icons that affirm analogies between the perfection of the circle and of heaven or if, as I have been suggesting, we are also meant to think of the deep, argumentative circularities involved in Milton's theodicy. In what follows, I argue that the question takes on the greatest urgency when the Son makes his offer of self-sacrifice—"Behold me then, me for him, life for life / I offer" (236-37)—at the precise center of the 360-line circle.

²⁰³ See The Advancement of Learning, in Francis Bacon: The Major Works, ed. Brian Vickers (New York: Oxford University Press), 299. Following the heavenly council, Satan's vision can only compass the "starry Sphear" (416), "the firm opaqueous Globe / Of this round World, whose first convex divides / The luminous inferior orbs" (418-20 ), and "a Globe farr off" (422).
In the first paragraph, Milton presents the narrator's loss of external vision as a problem for his will, which is arguably transcended through the mediation of the conscience that illuminates him from within. In his first speech, God reinterprets the problem within a wider frame, asking how humans can continue to exercise their will despite having forfeited it in eating of the apple, and then extends grace to human beings by way of solution. After the Father states that "man therefore shall find grace" (131), however, he adds the qualification that there must be satisfaction for human sin which humans are not capable of expiating themselves. Man shall find grace, but grace must find "means" (228). In book 2, Beelzebub asked if any of the devils was willing to travel to earth to corrupt the newly made human beings, but of course it was not really a question: he and Satan had decided that Satan would perform this mission in advance of the gathering in Pandemonium. There is not this kind of collusion behind God's analogous question to the host of angels, but there is a similar problem regarding the premeditated nature of its result:

    Say heavenly powers, where shall we find such love,
    Which of ye will be mortal to redeem
    Man's mortal crime, and just the unjust to save,
    Dwells in all heaven charity so dear? (213-16)

The drama of this moment seems almost staged. The problem, as Dennis Burden writes, is that "God promises that Man will find grace ... before he has apparently found the volunteer upon whom the provision of grace depends." Possessing absolute foreknowledge of the future, God knows that the Son will accept his offer. One could

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therefore ask, if the Son were not willing to make himself mortal, just how long God was willing to wait for an answer. Could this have been the end of the poem? Could the Son have chosen otherwise?

At the opening of the dialogue, God affirmed that his foreknowledge of Adam and Eve's fall had no influence on their decisions to fall. However, the structure of the dialogue in heaven raises the question of whether the Son of God is free to act in the same way that humans purportedly are. Dennis Danielson registers this possibility when he writes, “God’s purpose, given the foreseen Fall, involved Christ’s sacrifice from the beginning.” Danielson believes that there are serious philosophical implications of this (so-called) choice: “In short, Milton accepts a compatibilist model of divine choice even though he rejects compatibilism as a view of human choice.” To be a compatibilist is to believe that one may have free will even though one's actions are causally determined. Milton’s theory of free will, as he defines it in God's first speech, does not extend to the Son, who is effectively forced—by the logic of his position—to sacrifice himself, even though he experiences his choice as a free action (he says his glory is “freely put off” (230)). This is, at least, one interpretation of the Son’s acknowledgment that the word of his Father—an omnipotent being whose predictions and dictums cannot be wrong—is past, which is to say that only the means of instantiating his will are lacking. Making use again of Brandom's distinction, one could say that if the argument that the Father presents to the Son literally forces the Son to consent to the conclusion, there would in effect be no gap between implication and inference. The Son's discursive predicament,

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206 Ibid, 150.
accordingly, is very different from that of any other interpreter, who is perfectly capable of challenging the soundness of God's arguments, and indeed the theological creed on which it is based.\textsuperscript{207} The Son, then, could be said almost to be trapped in a syllogism: the "mediator" (10.60) is also "the middle term."\textsuperscript{208}

I have so far highlighted the interpretive difficulties set up by patterns of argumentation in book 3, but it should be noticed that at this moment the poem presents us with a speech that is comparatively easy to analyze. The Son's speech in which he offers to sacrifice himself has a clear syllogistic organization: "Thy word is past, man shall find grace; / And shall grace not find means...? ... Behold me then, me for him, life for life / I offer." Expressed formally as the kind of connected, compound syllogism discussed in the 13th chapter of the \textit{Art of Logic}, the Son states: man shall have grace; if man shall have grace, then he shall have the means of achieving it; therefore man shall have means. The easiness of the Son's syllogism contrasts with the difficulties of the arguments we have previously considered, but this superficial simplicity belies more knotty philosophical problems concerning agency. Indeed, the connection between the Son's speech and the \textit{Art of Logic} is more than formal; the Son actually alludes to a passage of poetry that is contained in it. Without noticing its presence in the \textit{Art of Logic},

\textsuperscript{207} William Empson's anti-Christian argument in \textit{Milton's God} is familiar. In a powerful, passionate essay, Debora Shuger describes how God's extension of salvation to human beings and election of some for peculiar grace prior to any mention of the Son's role "decouples God's plan of deliverance from Christ's sacrifice and therefore also separates salvation from Christianity," thus opening the possibility of salvation to non-Christians. See "Milton Über Alles: The School Divinity of \textit{Paradise Lost} 3.183–202," \textit{Studies in Philology} 107.3 (2010), 413.

\textsuperscript{208} Such an analogy is appropriate to Milton's cultural context. In \textit{Trinity}, Gill provides a much more complicated discussion of how God the Father, God the Son, and discourse can function as "three Terme, as I will a while call them: the Terme from whence: the Terme whereto, or wherein: and the middle Terme betweene them" (21-24).
critics have described parallels between the Son's speech and Nisus's offer to accept all of the blame for his and Euryalus' slaughter of the Ritulians in book 9 of the *Aeneid*:

Me, me: adsum, qui feci, in me convertite ferrum

O Rutuli, mea fraus omnis: nihil iste nec ausus,

nec potuit.²⁰⁹

["On me—on me—here am I who did the deed—one me turn your steel,

Ritulians! Mine is all the guilt; he neither dared nor could have done it."]²¹⁰

There are parallels in diction, particularly the use of the intensive pronoun, that cement the connection between these two archetypal scenes of self-sacrifice. As many have argued, the *Aeneid* furnishes complex means for apprehending the significance of Milton's use of the Nisus and Euryalus episode here and in other places in *Paradise Lost*, but I believe that we can only appreciate its provenance for the Son's speech if we examine its presence in the handbook.²¹¹

In the *Art of Logic*, the diction of Nisus's speech takes on significance it probably does not have in the *Aeneid*. It is perhaps merely fortuitous that the Virgilian speech contains the word "convertite," which may be used to refer to an iron sword being thrust into the chest of a victim, and to describe the reversal of terms in a logical proposition; but it seems deliberately ironic that one of the four speeches transformed into syllogisms

²⁰⁹ The Latin text is from *Art of Logic*, 491.
in the “Analytic Praxis” contains a technical term that appears frequently in the handbook. Of course, as Molly Murray reminds us, "conversion" never meant simply the reordering of the parts of a proposition; it was, moreover, a literally defining characteristic of Christian peoples, who had undergone conversion from Judaism as part of the Christian teleological view of history. This signification is seldom far from the surface even in technical manuals concerning logic from the early modern period. For example, Zachary Coke frequently makes use of examples pertaining to religious conversion or Christian belief in discussions of how to transform modal propositions in his logic textbook, as here: "All that are ordained to life do beleeeve; therefore they that beleeeve not, are not ordained to life." Similarly, Thomas Wilson concludes his discussion of "Conversione, or the Turning of Propositions" with the following example, in which Christ reasons "against the Jewes in the viij. Chapter of John: Qui ex Deo est, verba Dei audit, vos igitur cum non audiatis, ex Deo non estis. He that is of God, heareth the woordes of God, You therefore because you heare not, be not of God." Milton's "conversion" of Virgil, in the Art of Logic and Paradise Lost, has both a simple, logical basis, and overt religious resonances.

212 For examples of how to convert the parts of a proposition, see the "Appendix of the enthymeme, dilemma, and sorites" (460-69).
213 Molly Murray, The Poetics of Conversion in Early Modern English Literature (New York: Cambridge University Press, 2009). In "Petrus Ramus and the Puritans: The 'Logic' of Preparationist Conversion Doctrine," Early American Literature 8.2 (1973), 140-162, David L. Parker discusses the influence of Ramist logic on the conversion theories of the New England puritans Thomas Hooker and Thomas Shepard. It may, therefore, be reasonable to speak of both the influence of conversion theory on early modern logics and vice versa.
214 Zachary Coke [attr. Henry Ainsworth], The art of logick or The entire body of logick in English (London, 1653), 114.
215 Thomas Wilson, The rule of reason, conteinyng the arte of logique (London, 1551), 46.
Milton considers Virgil's speech twice in the *Art of Logic*. In the "Analytic Praxis" at the end of the work, Milton demonstrates how Nisus's enthymeme may be converted into a formal syllogism. In chapter 4 of the first book, "Of the efficient cause singly and with others," he considers the same speech with regard to the more fundamental problem of causation. This chapter provides, in addition to what its title suggests, a framework for thinking about the causal and volitional aspects of the kind of conversions discussed by Coke and Wilson (among others). The encasing of Nisus’s speech within a chapter on efficient causation—which debates problems concerning whether various events are caused by human choice, natural force, or divine promptings—provides further reason for seeing the agential status of the Son as a problem. In this chapter, Milton observes that "the one having greatest force is often called the sole cause," and that Nisus acts "as though he were the single author, since he was the chief one" (35). In book 3 of *Paradise Lost*, the Son takes on all the blame for the sin of humankind even though he was blameless in himself, thus elevating a tactical (and, in Nisus's case, unsuccessful) rhetorical gambit onto a metaphysical plane.\(^{216}\)

In the succeeding paragraph in the *Art of Logic*, Milton observes that a cause is either "impulsive, in some way impelling and moving the principle, or it is instrumental" (35). The question is, in making the Son his "instrument and subordinate worker of his gracious will," does God rob him of his free will?\(^{217}\) In an analogous case, Zachary Coke writes that "the Creatures, though they be instruments in respect of God, yet have they

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\(^{216}\) It is worth noting that Milton draws on the same argument from efficient causation in chapter 4 of *Christian Doctrine*, "Of Predestination." See The Complete Prose Works of John Milton, 8 vols, ed. Don M. Wolfe et al. (New Haven, 1953-82), 7.188.

their action distinct from Gods," and that "Unto such instruments often is given the efficacie of the principall Agent, as Preachers are said to convert and save souls when the Lord doth these by them." It should not be surprising then that Milton endorses a similar, if rather convenient, point of view. He explains the inner (proegumenic) and outer (procataetarctic) causes of Christ's death as follows:

Long ago the proegumenic cause of the death of Christ was the ignorant zeal of the Jews; the procataetarctic cause was the violation of the sabbath and the seditious assemblies with which he was charged. It should be noted, however, that where a proegumenic or internal cause is lacking, there the procataetarctic or external cause has no power. (37)

Without one's inner conviction, outward force is ineffective: for human beings, the proegumenic and procataetarctic causes form a reciprocal relation, with the proegumenic cause possessing primary importance. If we may interpret God's promise of grace and request that someone enable it to take effect as the procataetarctic cause, we must observe that it has no power without the son's inner experience of zeal on behalf of humankind. Milton adds further corroboration to such a view when, in the same chapter of the handbook, he discusses causation with specific reference to God's prior will for an action subsequently carried out by another agent. While it is true that even when God is the first cause "absolutely," and that "others, called secondary and so forth, depend on the first or the prior causes, and each is a kind of effect," Milton advises that "these divisions of causes in logic need not be zealously followed out, for the whole force of arguing is contained in the proximate cause" (39). In short, in the Art of Logic Milton effectively

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218 Zachary Coke, The art of logick, 52
forestalls inquiry into the chain of causes anterior to actions like the Son's self-sacrifice; on Milton's theory, the Son's inner desire is enough—and that's that.

At the moment in the council where the Son makes his offer of self-sacrifice, Milton achieves a remarkable synthesis of logical and narrative form. In triangulating the Son's action with two analyses within the *Art of Logic* concerning efficient causation and formal conversion, Milton unites the concepts of cause and form that present difficulties for reading the arguments that precede his offer of self-sacrifice. The representation of the Son in book 3 demonstrates, that is, that the spatial forms of logic are related to the temporal dimension of causation. In his final speech in the heavenly dialogue, God affirms that the Son's action impinges on all space—hell, heaven, and earth (319-20)—and all time—until "the world shall burn" (334), at which point the Son's identity will finally dissolve completely, as "God shall be all in all" (341). The conventionality of God's language should not obscure the complex significance of the Son's self-sacrifice in *Paradise Lost*. The Son both sets a standard for good conduct, and for reasoning about how to perform a good action; he is, that is, both a pattern for action and for planning it. Put yet another way, he is an "argument" in two senses of the word.

**Conclusion**

It is useful to think of the *Art of Logic* as a literary work in its own right, with an intricate structure and complex semantic purposes. It is an irremediably self-reflexive text. Because Ramist logic was seen as a tool for apprehending all language, Ramist logic could in principle be an object of Ramist analysis; it could be known by its own light. Despite the self-evidence theorists liked to attribute to the meaning of logic, however, its
basic definition was a matter for debate. At the outset of the *Art of Logic*, Milton famously changes Ramus's definition, "the art of discoursing well" (*ars bene disserendi*), into "the art of reasoning well" (*ars bene ratiocinandi*). Some critics, beginning with Walter Ong, have found extensive significance in Milton's small revision of Ramus's definition of logic, arguing that it displaces logic from the social world into the mind of the solitary thinker.\(^{219}\) A more significant difference than Milton's revision of the definition of logic, however, is the inclusion of a biography of Ramus at the end of the textbook. The biography of Ramus tells the story of a man who espoused his intellectual principles despite the opposition of powerful antagonists, and made a contribution to learning about which "all Europe talked from side to side" despite being dishonored in his native country. Of greatest importance from Milton's perspective, of course, would have been Ramus's death during the St Bartholomew's Day Massacre, which had caused him to be seen as a martyr to the cause of Protestantism.\(^{220}\) Indeed, Ramus's contentious theory of logical conversion should be seen in relation to this religious conversion: there is an implication, perhaps, that if one adopts Ramus's methods one will also adopt his theological principles. Milton's inclusion of a biography of Ramus at the end of his textbook is, *pace* Ong, calculated to highlight the social, rather than the introspective, implications of his method. It was clearly possible to infer from Milton's treatise that Ramist logic was not only the art of reasoning well, but also the art of living and dying.


well in the service of one's religious commitments. The representation of God and the Son in *Paradise Lost* reinforces such a view.

Milton’s method of logic is, I think, woven into the shape and thematic fabric of *Paradise Lost* in ways that we are only beginning to understand. In this chapter, I have attempted to demonstrate as clearly as possible how the *Art of Logic* affects the content and verse-form of book 3 of *Paradise Lost*. The logic text is most basically a sourcebook for Milton’s allusions: it provides texts from Ovid, Cicero, Virgil, the Bible, and others that appear in transmuted form in Milton’s late poems. I have, moreover, suggested that the commentary surrounding examples in the textbook can provide new perspectives on the philosophical meanings of such allusions. In making use of chapters in the *Art of Logic* concerning efficient causation and syllogistic, Milton provides kaleidoscopic lenses for analyzing such opaque issues as the freedom of the Son's sacrifice. More generally, Milton provides aid for considering such fundamental problems as the relative creativity or necessity inherent in logical deliberation, and the strength of the mind-forged manacles people make for themselves when they reason about what they ought to do. As such, Milton's method of logic should not be conceived of simply as a pedagogical tool, let alone an instrument for dissecting the arguments of polemical adversaries. Like Plato, Diogenes Laertius, or their seventeenth century English interpreter Thomas Stanley, Milton believed that one's method of reasoning had a direct effect on one's behavior, and that logic is a key component of moral philosophy. Much has been written about the anti-humanist, logic-chopping aspects of Ramist method; but a sympathetic engagement with Milton’s logic, including its role in representing divine beings in *Paradise Lost*, suggests that it was a vital resource, aiding one to understand the complex ideas one encountered.
in biblical and secular texts, and to turn one’s learning to account in spheres of social and political action.
CONCLUSION

Throughout *Irrational Actors*, I have tried to suggest new ways of looking at early modern logic and literature by looking at logic *through* literature. I have emphasized the shaping influence that Peter Ramus had on representations of logic in literature and early modern culture generally. Ramus was so influential—by comparison with other noted logicians like his mentor Rudolf Agricola or the Englishman John Case—as a result of his aggressive and public attempts to make logic useful. Indeed, he seemed to contemporary observers to live accordance with his art: to his fellow Protestants, his religious conversion seemed to follow naturally form his logical innovations. Ramus's charisma and his dramatic end made him and his logical methods particularly interesting to literary authors.

The most influential theorist of Ramism, Walter Ong, popularized the idea that early modern logical methods hastened the "spatialization of knowledge," creating rigid frameworks for communication. Later scholars of Ramism also tend to emphasize how it influenced the rise of objective styles of communication, efficient strategies for learning and remembering complex arguments, and formulaic—even mechanical—methods of reasoning. In *Irrational Actors*, however, I have provided an account of how literary authors were inspired by characteristics of Ramist logic that made it useful for representing plausible human beings making significant decisions within the irremediably temporal domain of the theater. Paradoxically, Ramism at once expedited the formalization of knowledge in the wider culture and the humanization of logic in poems and plays.
In the works of Marlowe, Shakespeare, Middleton, and Milton, then, we can see how literary authors took a form of logical method designed for practice and showed how it worked in specific and highly charged situations. In the process, however, they took Ramistic ideas and pushed them to the breaking point. Inspired by Ramus's iconoclasm, Marlowe constructed a thought experiment in *Doctor Faustus* in which he explored whether one could reject Aristotle's "sweet Analytics" *tout court*. In both *Hamlet* and *The Changeling*, Shakespeare and Middleton show how excessive reliance on logic might push one toward madness. Even Milton, an avowed Ramist but also a theologian who believed that God's nature and ways were beyond human comprehension, worried that the analytical power of logic might incline one to the sin of pride. The early modern period has often been seen as a dead zone in the development of logic. However, in the works studied in *Irrational Actors*, we may see searching and adventurous minds pushing logic to the fringes of what it might accomplish.
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