

Allegories of Creation: Glassmaking, Forests, and Fertility in Webster's *The Duchess of Malfi*

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In the winter of 1612, when composing what would become his most celebrated tragedy, *The Duchess of Malfi*, Webster temporarily set the manuscript aside in order to write his only known poem, "A Monumental Column." An elegy for Henry, Prince of Wales, who had died in November of that year, it imagines the life of the young prince as an object made of glass:

He was raign'd downe to us out of heaven, and drew
Life to the spring, yet like a little dew
Quickly drawne thence; so many times miscarries
A Christall glasse, whilst that the workeman varries
The shape i' the furnace, (fix'd too much upon
The curiousnesse of the proportion)
Yet breakes it ere't be finisht, and yet then
Moulds it anew, and blows it up agen,
Exceeds his workmanship, and sends it thence
To kisse the hand and lip of some great prince;
[. . .] So to eternity he now shall stand,
New form'd and gloried by the All-working hand.¹

Here, the delicate and valuable "Christall glasse," which "breakes ere't be finisht," figures the premature death of Prince Henry, who died at the age of nineteen.

1. John Webster, *The Complete Works of John Webster*, ed. F. H. Lucas, 4 vols. (London: Chatto & Windus, 1927), 3:231–44.

Webster's conceit rehearses what was, by the early 1610s, already a commonplace across western Europe. Writing in cinquecento Italy, Vannoccio Birunguccio understood glass "as an example of the life of man and of the things of this world which, though beautiful, are transitory and frail."² Almost a century later, Sir Miles Sandys compared life to "a Glasse-house, wherein no man knowes what Glasse shall first be broken."³ Indeed, the trope was so commonplace that it had emerged in pathological form. Timothy Reiss has charted the widespread pre-modern melancholic delusion that one's body was made of glass and therefore vulnerable to the merest touch, noting that the fantasy emerged out of commonplace beliefs in "the frangibility and insecurity of human life and being": "to think one was glass was madness acting out metaphor as reality."⁴

In "A Monumental Column," however, Webster's use of the metaphor not only suggests the affinity between the glass object and the human life, but signals his interest in the glassmaker as a potent creator (and breaker) of his lifelike forms. The glass which "so many times miscarries" provides a means for thinking about the unpredictability and danger of childbirth at the same time as it associates the glassmaker's creative process with bodily generation. The glass is the child of the glassmaker, too easily broken or mangled before completion, just as the Prince is the child of God, too soon taken from the earth. Indeed, most explicit in "A Monumental Column" is Webster's conception of glassmaking as an allegory of divine creation. God, who "formed man of the dust of the ground, and breathed into his nostrils the breath of life," becomes the supreme craftsman, the glassmaker par excellence, represented metonymically as the "All-working hand" (Gen. 2:7). Following God's example on earth, the glassmaker "moulds" his glass forms and "blows" them into being.

Webster's interest in the glassmaker as a rival of God-as-creator resurfaced, and found its most subtle but developed form, in *The Duchess of Malfi*: a play whose unforgiving vision of human frailty uses the glassmaking metaphor to figure all artistic creation, human procreation, and the wonder of divine origination. For Eloisa Paganelli, the language of glass in *The Duchess of Malfi* is one element of Webster's broader concern with distortion, illusion, and mirroring. Paganelli considers "the play's obsession with the world of optics as an attempt to see beyond the instability of phenomenological appearances."⁵ Roy Booth also identifies

2. Vannoccio Biringuccio, *The Pirotechnia of Vannoccio Biringuccio*, trans. Cyril Stanley Smith and Martha Teach Gnudi (New York: American Institute of Mining and Metallurgical Engineers, 1942), 132.

3. Miles Sandys, *Prudence the First of the Foure Cardinall Vertues* (London, 1634), 246.

4. Timothy J. Reiss, *Mirages of the Self: Patterns of Personhood in Ancient and Early Modern Europe* (Stanford, CA: Stanford University Press, 2003), 29.

5. Eloisa Paganelli, "'A Miserable Knowledge of the Small Compass of our Prison': Shifting Perspectives in John Webster's *The Duchess of Malfi*," in *Counting and Recounting: Measuring Inner and*

glass with the play's philosophical design, although more specifically with its ethical standpoint, in his 1991 article "John Webster's Heart of Glass," which is to date the only concentrated study of glassmaking in Webster's plays. Booth contends that Webster associates blown glass, diamonds, and mirrors with the murdered Duchess, the young Prince, and his other "good characters" due to their capacity to materially embody his "vision of the life which is precious and exceptional." Webster's preoccupation with glassmaking, Booth suggests, complicates his reputation as the most nihilistic of the Jacobean playwrights by demonstrating his "marked concern with shaping, not destructive, processes."⁶ While this article supports Booth's reading of Webster as a moral playwright, and revisits Paganelli's context of Renaissance technological advances, it will argue that the process of glassmaking, and its metaphors of birth and life, was nonetheless contained within a larger early modern narrative of destruction. This narrative, and its gendered configurations, provided Webster with an allegory of creation, premised on destruction, which appealed to him more than any other early modern dramatist.

The impact of early modern innovations in glassmaking on the period's literature has not gone unnoticed by scholars. Rayna Kalas's *Frame, Glass, Verse* offers a sophisticated analysis of the material and conceptual slippage that emerged around the turn of the sixteenth century between the making and reading of poetry and the production and use of glass. Of importance to this article is Kalas's assertion that for early moderns the craft of poetic invention was technological, a form of *techne*: "the conjoining of manual skill and creative invention."⁷ That is, the modern division between language arts and artisan craft did not exist for Webster. As this article suggests, Webster's drama displays an interest in the capacity for writers and artisans (glassmakers, waxworkers) to share in the same source of artistic potency. In making her claims for poesy as *techne*, Kalas's work draws on a growing body of scholarship interested in the early modern function of mirrors and mirroring.⁸ Crucially, however, this scholarship does not treat three-dimensional glass objects, like those to which Webster refers in *The Monumental Column*, as distinct from mirrors.⁹ While *The Duchess of Malfi* is clearly in-

Outer Space in the Renaissance, ed. by Paola Bottalla and Michela Calderaro (Trieste: Università degli Studi di Trieste, 1995), 149–72, at 167.

6. Roy Booth, "John Webster's Heart of Glass," *English* 40, no. 167 (1991): 97–113, at 110–11, 97.

7. Rayna Kalas, *Frame, Glass, Verse* (Ithaca, NY: Cornell University Press, 2007).

8. John Garrison, *Glass* (London: Bloomsbury, 2015); Deborah Shuger, "The 'I' of the Beholder: Renaissance Mirrors and the Reflective Mind," in *Renaissance Culture and the Everyday*, ed. Patricia Fumerton and Simon Hunt (Philadelphia: Philadelphia University Press, 1999); Herbert Grabes, *The Mutable Glass: Mirror Imagery in Titles and Texts of the Middle Ages and the English Renaissance*, trans. Gordon Collier (Cambridge: Cambridge University Press, 1982).

9. While Kalas does not make explicit the material and metaphoric distinction between sheet *cristallo*, used for mirrors and windows, and the production of *cristallo* objects, she highlights the

interested in tropes of mirroring and reflection, as Paganelli has shown, it also engages with a particular set of early modern cultural practices and concerns surrounding the emerging production and use of delicate glass objects whose fragile, transparent, and three-dimensional nature made them comparable to, and not merely reflective of, human beings. The proliferation of *cristallo* glass objects—the baubles that began to fill the tables and cabinets of the gentry—not only produced a set of metaphors through which to reconceive of the human condition and of the relationship between men, women, and God; they also set into particular relief an environmental problem that was becoming especially fraught in Webster's lifetime: deforestation. While all glassmakers were accused of heedlessly uprooting and burning the nation's forests, the industry's profligacy appeared especially negligent when it produced the fragile, finite, and wholly unnecessary luxury items that were increasingly enjoyed by only a few.¹⁰ In this particular constellation of early seventeenth-century concerns, the technical process of glassmaking and its gendered cultural valencies aligned not only with commonplace descriptions of the human body as a delicate glass object, but with ongoing debates about the relationship between human and divine creative potency, and with anxious accounts of the country's depleted forests. The result was a subtle but very powerful cultural narrative that emerged precisely at the moment Webster was working.

In *The Duchess of Malfi*, first performed two years prior to James I's prohibition of wood-burning furnaces, the domination and destruction of the Duchess, whose procreative body Webster allies with England's ravaged woodlands, offers a parable for the ecological concerns that confronted the artisans of Jacobean London, and its glassmakers in particular. As Vin Nardizzi has argued, the nation's theaters were themselves embroiled in ongoing Elizabethan and early-Stuart concerns over deforestation.¹¹ This article is concerned with the possibility that Webster in particular was attracted to, and troubled by, the ways in which artistic endeavor, and specifically glassmaking, might be unthinkingly translated from an act of imitation into a force of domination through which man risks falling into the sin of pride. In his imagination, the artist and artisan not only imitate God's creative capacities but, in seeking to master the productive and destructive powers of the natural world, approximate his authority.

degree to which the fanciful *conceit* so associated with the sonnet tradition also denoted the bauble or trifle that, in the form of *cristallo*, was beginning to clutter the tables of the gentry. Kalas, *Frame, Glass, Verse*, 116.

10. A *Proclamation Touching Glasses* (London, 1615); Eleanor S. Godfrey, *The Development of English Glassmaking, 1560–1640* (Oxford: Clarendon, 1975), 47–50, 68–72.

11. Vin Nardizzi, *Wooden Os* (Toronto: University of Toronto Press, 2013).

I. THE EARLY MODERN GLASSHOUSE AND THE FIRES OF (PRO)CREATION

The Duchess of Malfi was first “Presented priuatly, at the Black-Friers” in 1613–14 following the publication of “A Monumental Column” in early 1613, which Webster is likely to have written at the same time as his new tragedy.¹² The second Blackfriars Theatre was an indoor playhouse constructed by James Burbage in 1596 although it was not used by his company, the King’s Men, until 1608.¹³ It was built on the site of a former priory and shared its monastic setting with another flourishing business: the Blackfriars Glasshouse. Established the same year as Burbage’s theater, the glass furnace was owned by Sir Jerome Bowes, an Elizabethan courtier and soldier.¹⁴ However, due to complex legal battles with the owners of the Crutched Friars furnace, who disputed the legality of Bowes’s 1592 patent, the production of glass at Blackfriars was hindered—if not suspended entirely—for almost a decade. Yet, by 1601, with the effective suppression of their competitors, Bowes’s patent had ensured the company a legal monopoly over the production of crystal glass, and the furnace was in full operation. Otherwise known as Venetian *cristallo*, crystal glass was perhaps the most expensive type of luxury glass available on the European market at the time, and was in high demand in elite circles.¹⁵ Bowes, who knew little about this lucrative industry, placed his furnace under the entrepreneurial direction of William Robson, and it was Robson who furiously and successfully defended Bowes’s patent from infringement over the course of the next thirteen years.¹⁶ When Webster sat down to write *The White Devil* and later *The Duchess of Malfi* early in the 1610s, the flames of the Blackfriars furnace were burning stronger than ever.

F. L. Lucas, who first noted Webster’s fascination with glassmaking, maintains that the “glass factory with its undying fire which so kindled Webster’s imagination was doubtless the one which stood near the Blackfriars Theatre,” and Mary-Floyd Wilson suggests that theatergoers might even have stopped by the glasshouse after a performance to see a public glass-blowing display.¹⁷ The dark, hot, and frenzied environment of the Blackfriars glasshouse, where the *maestros*

12. *Complete Works of John Webster*, 2:29. Further references to this edition are given after quotations in the text.

13. Andrew Gurr, *The Shakespeare Company, 1594–1642* (Cambridge: Cambridge University Press, 2004), 4–10.

14. Godfrey, *Development of English Glassmaking*, 40–41.

15. *Ibid.*, 3, 31.

16. In 1614, James I approved a patent that forbade the owners of all wood-burning furnaces from making any further glass. By October of that year, the fire in Robson’s glasshouse had been extinguished and all production discontinued. *Ibid.*, 68–72.

17. *Complete Works of John Webster*, 1:209; Mary Floyd-Wilson, *Occult Knowledge, Science, and Gender on the Shakespearean Stage* (Cambridge: Cambridge University Press, 2013), 117.

di cristallo and their assistants labored to perfect their glassy forms in an atmosphere of intense concentration and physical exertion, clearly became a site that attracted substantial public interest: "You must to the pawne to buy Lawne: to Saint Martins for Lace; to the Garden: to the Glasse-house; to your Gossips," advises Justiniano, an Italian merchant, in Webster and Dekker's city comedy *Westward Ho*.¹⁸ Like the theater, the Blackfriars furnace offered spectators an impressive show, and one in which unparalleled technical ability was coupled with great physical strength and physical danger. Unlike the production of green vessel glass, a material common in England throughout the early modern period, the creation of *cristallo*, a clear and colorless glass, was an artistic and highly specialized endeavor.¹⁹ No other artisanship offered quite the same paradoxical relationship between the delicacy and intricacy of its product, the danger of its process, and the spectacular, and spectacularly masculine, conditions of its production. The appeal of these conditions was further enhanced by the foreign exoticism of the Venetian glass and its makers, most of whom had emigrated—often via Antwerp—from the island of Murano in Venice.²⁰ The ever-burning fires of the glasshouse already easily figured the dangers of sin and the tortures of hell, but the attraction of the barely clothed, hard-at-labor, and Italianate workforce can only have enhanced the possibilities for associating the glasshouse with the fires of dissolute desire. In Giovanni Maria Butteri's 1570 depiction of a Florentine glass furnace, some glassblowers are shown naked, and their faces and bodies take on devilish contortions (fig. 1).

"Let's go to the Glass-house," says Lady Wild in Thomas Killigrew's *The Parson's Wedding*. If "Lady Wild" can be taken as an indication of this "rich (and somewhat youthful)" widow's disposition, then her attraction to the fires of the furnace comes as no surprise. Mistress Pleasant responds with saucy self-assurance: "I'll go to a Play with my Servant, and so shall you; hang Opinion, and wee'll go to the Glass-house afterwards; it is too hot to Sup early."²¹ Mistress Pleasant's agenda, which evidently has little to do with keeping cool, implicitly draws a parallel between the potentially erotic atmosphere of the glasshouse and the bawdy bustle of the early modern theater. A visit to the glasshouse is seen as the natural progression from the crowded intimacy of the playhouse—another public space where, as Philip Stubbes proclaimed, "euery mate sorts to his mate" and "euery one bringes another homeward of their way verye fréendly."²² Booth's sugges-

18. Thomas Dekker, *The Dramatic Works of Thomas Dekker*, ed. by Fredson Bowers, 4 vols. (Cambridge: Cambridge University Press, 1955), 2:1.2.214–16.

19. W. Patrick McCray, *Glassmaking in Renaissance Venice: The Fragile Craft* (Aldershot: Ashgate, 1999), 114.

20. Godfrey, *Development of English Glassmaking*, 28–33, 46.

21. Thomas Killigrew, *Comedies and Tragedies* (London, 1664), 108, 70.

22. Philip Stubbes, *The Anatomie of Abuses* (London, 1583), 91.



A



B

Figure 1. Giovanni Maria Butteri, *The Medici Glass Workshop* (detail), 1570. Florence, Palazzo Vecchio, Studiolo of Francesco I. A color version of this figure is available online.

tion that the glasshouse in *The Parson's Wedding* represents “a pretext, an excuse to facilitate an assignation” is certainly true, but perhaps his analysis might be extended: in the shared imagination of seventeenth-century Londoners, the glasshouse was not only a space in which desire might be inflamed, but became a met-

aphor of desire itself.²³ Geta's exclamation in Beaumont and Fletcher's *The Prothetess*, for example, makes explicit the connection between the glasshouse fires and the heat of sexual arousal: "I have a kind of glass-house in my cod-piece!"²⁴

The success of the glasshouse at Blackfriars was not only responsible for the revival of the British glassmaking industry, but the profound impression it made on the local population also introduced a new set of metaphors into early modern English. Playwrights and preachers alike drew on the unceasing fires of the glasshouse to express the heat of desire and the perpetuity of the procreative urge. In a sermon, first published in 1643, Nicholas Lockyer writes: "Passion, 'tis the devils glasse-house, black fire workemen are at it in this soule day and night: tis the devils sinne-moul'd, to make many sins quickly; many great sins on a sudden."²⁵ In *The Alchemist*, which it is likely Ben Jonson wrote for performance at the Blackfriars Theatre, Tribulation's etiological reworking of the metaphor insists that it is the glassworker's proximity to "the fire, and fume of metals" that makes him "prone to passion."²⁶ In a slightly different vein, William Hodson writes in his elegy for James I that:

So deere our Nurse was to him, that's Desire,
Like to a glasse-house, kept continuall Fire
Of loue to her, that neuer age could show.²⁷

Like Beaumont, Fletcher, and Jonson, Webster also drew on the glasshouse for hellish bawdry in *The White Devil*. Mocking Camillo's inability to persuade his wife Vittoria to bed, Flamineo tells us the old man "hath an itch in's hams, which like the fier at the glasse house hath not gone out this seaven yeares."²⁸

In his later tragedy, *The Duchess of Malfi*, Webster expands the mythology of the glasshouse into new semantic territories: the fires are not only a metaphor for sexual desire but the glassmaker himself becomes the ultimate (pro)creative force, and the rival of female generative powers:

BOSOLA: There was a young wayting-woman, had a monstrous desire to see
the Glasse-house.

23. Booth, "John Webster's Heart of Glass," 99.

24. John Fletcher and Francis Beaumont, *The Dramatic Works in the Beaumont and Fletcher Canon*, ed. Fredson Bowers, 10 vols. (Cambridge: Cambridge University Press, 1994), 9:3.2.119.

25. Nicholas Lockyer, *Baulme for Bleeding England and Ireland, or, Seasonable Instructions for Persecuted Christians Delivered in Severall Sermons* (London, 1643), 164.

26. Elizabeth Cook, introduction to *The Alchemist* by Ben Jonson, ed. Elizabeth Cook, 2nd ed. (London: A & C Black, 1991), ix–xxvii, at xii; Jonson, *The Alchemist*, 3.1.17–22.

27. William Hodson, *The Plurisie of Sorrow, Let Blood in the Eye-Veine* (London, 1625), Br.

28. *Complete Works of John Webster*, 1:1.2.131.

OLD LADY: Nay, pray let me goe:

BOSOLA: And it was onely to know what strange instrument it was, should swell up a glasse to the fashion of a womans belly.

OLD LADY: I will heare no more of the Glasse-house—you are still abusing woemen.²

BOSOLA: Who—I? no, onely (by the way now and then) mention your fraileties.

(2.2.4–11)

In Bosola's lewd joke, blown glass becomes a figure for the pregnant body, and the glassmaker's blowpipe, or "strange instrument," provides the phallic symbol. While his pun on "fraileties," the delicate products of the glasshouse, refers to the fragility of all human life (a sentiment expressed more fully in *A Monumental Column*), it also suggests women's apparent moral weakness and inconsistency. Bosola's use of the glasshouse as an image for both female perfidy and the vulnerability of human life more generally is, perhaps, unsurprising. In a culture in which the correct identification of paternity was crucial to the preservation of patrilineal descent, the suspected infidelity of women, combined with the opacity of the pregnant body, represented a significant source of anxiety. As Mary Floyd-Wilson notes, "the glass-house story functions as a fantasy in which proto-scientific practice would make women's secrets transparent."²⁹ The metaphoric conversion of the pregnant female body into glass not only grants the transparency that nature denies, but imagines that female participation in the procreative act might be eliminated. Much like Webster's character of "A vertuous Widdow" who "never receives but one mans impression," were the female body formed of vitreous glass (which will "with small force of the breath receive any fashion or figure"³⁰) it would be the passive recipient of its creator's input.³¹ Bosola's metaphor indulges a fantasy of asexual reproduction whereby the male glassmaker is the sole participant in the creation (and inflation) of his glass vessel; women are no longer, to borrow Posthumus's words, "half workers."³²

Indeed, the early modern glasshouse, fueled by the technological advances made in the Italian cinquecento that transformed glassmaking "from a purely

29. Floyd-Wilson, *Occult Knowledge, Science, and Gender*, 119.

30. Antonio Neri, *The Art of Glass*, trans. Christopher Merret (London: 1666), 84.

31. *Complete Works of John Webster*, 4:38.

32. "Is there no way for men to be, but women / Must be half workers?" asks Posthumus, convinced of his wife's infidelity. William Shakespeare, *Cymbeline*, ed. Martin Butler (Cambridge: Cambridge University Press, 1995), 2.5.1–2.

craft-based activity to one based on more 'scientific' forms of knowledge,"³³ was a hub of male innovation, experimentation, and discovery. "Why, half your house looks like a Glasse-house" chides the imperious Lady Francis Cressingham in Webster and Middleton's *Anything for a Quiet Life*.³⁴ Ill at ease in her new husband's home (which is overrun with the industry, panoply, and toxins of his proto-scientific experimentation), her discomfort is, perhaps, provoked also by the knowledge that a "Glasse-house" is a house in which the dominance of men is absolute. In *The Duchess of Malfi*, images of glass and glassmaking are repeatedly associated with male invention and female subjection. The Cardinal says to Julia:

Sooth generally for woemen,
A man might strive to make glasse male-able
Ere he should make them fixed.
(2.2.20–22)

According to the Cardinal, the possibility of ensuring female fidelity is less likely, even, than finding a method to return solid glass to its vitreous state. His analogy marries the language of glassmaking with cultural anxieties about female constancy: their union presents scientific experimentation and technological advance as specifically male endeavors that "strive" not only to intervene in nature but also to master the female form that embodies nature's generative force. "We had need goe borrow that fantastique glasse / Invented by *Galileo* the Florentine," the Cardinal continues, "To view another spacious world i'th' Moone, / And looke to find a constant woman there" (2.2.24–27). Here, Galileo's telescope, or "glasse," enables both a literal view of the moon and, via its augmentation of scientific knowledge, symbolically discovers and conquers "feminine" vicissitude. Yet the Cardinal's description of the glass as "fantastique" concedes his deep-rooted mistrust of both women's procreative power and the attempts by men to master it. The glass remains an instrument of illusion.

This is, of course, a central concern of the play: it is precisely Ferdinand and the Cardinal's shared anxiety over the Duchess's fertility (and their failed efforts to contain it) that propels the revenge plot toward its bloody resolution. The image of the glasshouse returns in act 4 when the imprisoned Duchess is presented with a masque of madmen:

33. McCray, *Glassmaking in Renaissance Venice*, 3.

34. *Complete Works of John Webster*, 4:1.1.323. In his study of authorship in Thomas Middleton's plays, David Lake attributes act 1 of *Anything for a Quiet Life*, from which this line is taken, to Webster. See David J. Lake, *The Canon of Thomas Middleton's Plays* (Cambridge: Cambridge University Press, 1975), 177–84.

1. MAD-MAN [ASTROLOGER]: Doomes-day not come yet? I'll draw it neerer by a perspective, or make a glasse, that shall set all the world on fire upon an instant: I cannot sleepe, my pillow is stuff't with a littour of Porcupines.
2. MAD-MAN [LAWYER]: Hell is a meere glasse-house, where the divells are continually blowing up womens soules, on hollow yrons, and the fire never goes out. [. . .]
4. MAD-MAN [DOCTOR]: If I had my glasse here, I would shew a sight should make all the women here call me mad Doctor.

(4.2.77-100)

For the first and fourth madmen, "glasse" is a tool of distortion and revelation. As with the Cardinal's description of Galileo's telescope, the madmen's glasses allow them to entertain a fantasy of exposure and control. The fourth madman's "glasse" might show, as Leah Marcus suggests, a pornographic image.³⁵ The second madman's description of hell as "a meere glasse-house," however, is allied to Bosola's earlier evocation of the glasshouse. Here, the "hollow yrons" are blowpipes but, as with the "strange instrument," they also function as a phallic symbol. Where Bosola's figurative use of the blowpipe (that swells glass up like a woman's belly) granted the glassmaker a fuller share in the procreative act than could normally be claimed by men, the second madman's image is both more cautious and more damning. Drawing more fully on commonplace comparisons between the glasshouse and hell, the second madman depicts the glassmakers as devils whose pipes produce women's souls. An inverted depiction of the breath of God, devils here create the souls of women. Men appear not to be in hell at all, except perhaps as witnesses to the diabolical creative act through which the devil is granted potency and women become merely his damned progeny. In Bosola's earlier use of the figure, the threat of female sexuality was suppressed through the male artisan's co-option of female biological potency. Here, however, the second madman's image makes no claims for male generative power, but it exaggerates the threat of female sexuality by making women's very souls the created product of a devil's breath blown continually amid the ever-burning fires of the glasshouse. In this way, the madman's image nonetheless depicts the very conditions that might justify the male assimilation of female procreative power, given it would eradicate women's devilish souls from the process of generation altogether.

More than the Renaissance theater of anatomy or the alchemist's laboratory, the glasshouse was, for Webster, an arena in which man wrestled with, and hoped to outrival, the generative powers of nature. Perhaps the figure of the ever-industrious glassmaker, whose "fire never goes out," also offered some comfort

35. Leah S. Marcus, ed., *The Duchess of Malfi* (London: Arden Shakespeare, 2009), 275.

for the playwright's own limited literary output. "To those who report I was a long time in finishing this tragedy, I confess I do not write with a goose quill, winged with two feathers" declares Webster in his preface to *The White Devil*. In comparison to "the copious industry of M. Shakes-peare," Webster attempts to defend his own low productivity.³⁶ David Gunby suggests that Webster's involvement in the family business of making and hiring coaches on Cow Lane helps account for his slowness of composition.³⁷ Dubbed the "*Play-wright, Cart-wright*" by the Jacobean satirist Henry Fitzgeffrey, Webster might have felt an affinity with the glass-maker who, like himself, was immersed in the world of commerce, guild practices, and artisan labor.³⁸ Fitzgeffrey mocks the "crabbed *Websterio*" in a string of caustic couplets:

Was euer man so mangl'd with a Poem?
 See how he drawes his mouth awry of late,
 How he scrubs: wrings his wrests: scratches his Pate.
 A Midwife! helpe! By his Braines coitus,
 Some Centaure strange: some huge Bucephalus,
 Or Pallas (sure) ingendred in his Braine,
 Strike Vulcan with thy hammer once againe.³⁹

Fitzgeffrey's jibe employs the common metaphor of writing as reproduction.⁴⁰ Like the shy sonneteer of Sidney's "Sonnet I" in *Astrophil and Stella*, Webster is also "greate with child to speake, and helplesse in [his] throes."⁴¹ According to Fitzgeffrey, Webster's act of creation is disproportionately deleterious in its effect on him; tormented by his labor pains, his textual progeny are figured as monstrous creations resisting their own delivery.

In a number of places throughout "A Monumental Column," Webster makes allusions to his reputation as a tortured writer who overworked his material. In

36. Webster, "To the Reader," in *Complete Works of John Webster*, 1:25–40.

37. David Gunby, *Oxford Dictionary of National Biography*, <http://www.oxforddnb.com/view/article/28943?docPos=1> (accessed November 14, 2015).

38. Henry Fitzgeffrey, *Satires and Satirical Epigrams* (London, 1617), 46.

39. *Ibid.*, 46–47.

40. On the ways early modern writers imagine "literary creativity as a form of sexual potency" from Plato through Milton, see Katherine Eisaman Maus, *Inwardness and Theater in the English Renaissance* (Chicago: University of Chicago Press, 1995), 182–209. On the "prefatorial disclosure" as the moment the "textual child" is publicly birthed, see Wendy Wall, *The Imprint of Gender: Authorship and Publication in the English Renaissance* (New York: Cornell University Press, 1993), 169–226.

41. Philip Sidney, "Sonnet I," in *Defence of Poesie, Astrophil and Stella and Other Writings*, ed. Elizabeth Porges Watson (London: Everyman, 1997), 23.

doing so, he associates the creations of the glassmaker with his own poetic and dramatic products. Presented in a parenthetical aside, his criticism of the “workman” who becomes “fix’d too much upon / The curiousnesse of the proportion” and breaks his glass vessel is, perhaps, a covert excuse for the uncharacteristic speed with which he produced “A Monumental Column” and the instances where, like the “Christall glasse,” it lacks “proportion.” The correspondence between this “Christall glasse” and Webster’s verse is made more apparent by Webster’s vision in “A Monumental Column” of the glass sent to “kisse the hand and lip of some great prince,” which reworks a standard formulation found in the dedications of two of his plays, as well as in the work of his contemporaries. “I present this humbly to *kisse* your hands,” writes Webster to Sir Thomas Finch in *The Devil’s Law-Case*. In the dedicatory epistle to *The Duchess of Malfi* he declares that “by such Poems as this, Poets have *kist* the hands of Great Princes.”⁴² In “A Monumental Column,” Webster suggests a kinship between the glassmaker’s goblet and the playwright’s published text, both offered for approbation to the noble hand or lip. The same poem, however, also explores the comparison between the glassmaker and God. While all early modern craftsmen could draw upon the association between their work and that of other trades, and between themselves and God as the First Creator, the unique conditions of glassmaking offered Webster a set of images that appear to have animated his conception of the dramatist and the dramatist’s responsibility to interrogate the violence and frailty of the human condition.

II. THE GLASSMAKER AS “ANOTHER NATURE”

The last decade has seen a growing scholarly interest in the early modern debate over the meaning and implications of human creativity or “ingenuity.”⁴³ Humanist thinkers and writers across all disciplines, from exploration and proto-scientific observation to music and sculpture, were beginning to describe a controversial new image of the artist or artisan as possessing an independent capacity for invention *ex nihilo*.⁴⁴ Conceiving of man-as-creator also demanded careful

42. *Complete Works of John Webster*, 2:235, 2:33 (emphases added). Shirley’s play “comes from the press to kiss your [Sir Robert Boyle’s] hand” (James Shirley, “Dedication,” in *The Imposture* [London, 1652], Br). “I presumed at last to send this Comedy, to *kisse* your [Sir Edward Bushell’s] hand” (James Shirley, “Dedication,” in *The Wittie Fair One* [London, 1633], Ar).

43. Larry Shiner, *The Invention of Art: A Cultural History* (Chicago: University of Chicago Press, 2001); John Hope Mason, *The Value of Creativity: The Origins and Emergence of a Modern Belief* (Aldershot: Ashgate, 2003); Rob Pope, *Creativity: Theory, History, Practice* (London: Routledge, 2005); Rebecca Herissone and Alan Howard, eds., *Concepts of Creativity in Seventeenth-Century England* (Suffolk: Boydell & Brewer, 2013).

44. Rebecca Herissone, *Musical Creativity in Restoration England* (Cambridge: Cambridge University Press, 2013), 7–11.

reassessment of man's relationship with the natural world, his obligations toward it or assumed authority over it, as well as with his own divine creator, "the Lord that maketh all things" (King James Bible, Isa. 44:24). In this sense, early modern discussions of human ingenuity were bound up with the period's attempts to distinguish nature from art, gendering both in the process.⁴⁵ These disputes were further shaped by the economic structures of patronage and the professional status and working conditions of artists, artisans, musicians, and playwrights who were employed as part of an ensemble or in a workshop.⁴⁶ In relation to the early modern English theater, the conceptualization of the artist as an individual with unique creative capacities has attracted critical attention in connection with the changing perception of Shakespeare after the production of the First Folio, and the editorial autonomy and self-promotion of Ben Jonson in his 1616 *Works*.⁴⁷ However, first among London's "genius" artisans were glassmakers. The "rapid innovations in glassmaking in this period, combined with the secrecy and relative autonomy of individual glassmakers, meant that glassmaking privileged imaginative technical inventions—inventions, not in the classical sense of refashioning or finding anew, but in the more modern sense of unique and novel ingenuity."⁴⁸

If we are to view Webster as a playwright troubled by the limits of his literary potency and accused of creative sterility by his contemporaries, it is in the figure of the glassmaker—every day breathing life into fresh glassy forms—that Webster discovered a symbol of profound artistic virility. When John Ford writes in his prefatory dedication to *The Duchess of Malfi* that from Webster's "clear pen / They [his characters] all took life," he draws on the metaphor of writing as reproduction and anticipates Webster's figuring of glassmaking as a fantasy of parthenogenesis (35). For Webster, the glassmaker's "strange instrument" was, like the poet's pen, a phallic symbol of male productivity. Indeed, Renaissance glassmakers were famed for their remarkable generative abilities. Marcantonio Coccio Sabbellico, the fifteenth-century Italian scholar and historian, describes how the Muranese glassmakers can turn glass "into various colours and *numberless* forms. Hence come cups, beakers, ewers, tankards, cauldrons, candlesticks, animals of

45. Susan Gubar, "The Blank Page' and the Issues of Female Creativity," in *Writing and Sexual Difference*, ed. Elizabeth Abel (Chicago: University of Chicago Press, 1982), 73–93; Ian Maclean, *The Renaissance Notion of Woman* (Cambridge: Cambridge University Press, 1980); Louis Adrian Montrose, "'Shaping Fantasies': Figurations of Gender and Power in Elizabethan England," *Representations* 1 (1983): 61–94.

46. Bruce Cole, *The Renaissance Artist at Work* (New York: Harper & Row, 1983); Evelyn Welch, *Art and Society in Italy, 1350–1500* (Oxford: Oxford University Press, 1997).

47. Paulina Kewes, *Authorship and Appropriation* (Oxford: Oxford University Press, 1998); Bart Van Es, *Shakespeare in Company* (Oxford: Oxford University Press, 2013); Bruce Thomas Boehrer, "The Poet of Labour: Authorship and Property in the Work of Ben Jonson," *Philological Quarterly* 17 (1993): 289–312.

48. Kalas, *Frame, Glass, Verse*, 119.

every sort, horns, beads, necklaces, hence *all things* that can delight mankind, hence whatever can attract the eye, and what we could hardly dare to hope for.”⁴⁹ And in his glassmaking manual first published in 1612, Antonio Neri writes that glassmakers can produce “vessels, as Bodies, Heads, Receivers, Pelicans, Lutes, Retorts, Athenors, Serpentes, Vials, Cruces, square and round Vessels, Philosophical Eggs, Globes, and *infinite* other sorts of Vessels.”⁵⁰ Such swollen taxonomies are animated by their writers’ paradoxical attempts to index apparently endless items: the author seeks to account for each article of the glassmaker’s manufacture while, at the same time, affirming that his creations are “numberless,” “infinite,” and without limit. The resulting lists are promiscuous and characterized by a totalizing rhetoric that—while seemingly hyperbolic—testifies to the real feeling of awe with which the cinquecento European public greeted developments in glassmaking.

The Renaissance glassmaker, situated at the crossroads of proto-scientific methods of experimentation and artistic bravura, could aspire to reproduce his world in glass. Sabellico, writing in 1495, describes glassmaking in his native Venice: “There is no kind of precious stone which cannot be imitated by the industry of the glassworkers, a sweet contest of nature and of man. . . . But, consider to whom did it first occur to include in a little ball all the sorts of flowers which clothe the meadows in spring.”⁵¹ Like the poet who, as Philip Sidney tells us, “doth grow, in effect, into another nature, in making things either better than nature brings forth, or, quite anew,” the Renaissance glassmaker’s skills are analogous with those of the divine.⁵² Sabellico’s sentiment returns, just over a century later, in Antonio Neri’s *The Art of Glass*: “Although it is said and may be made to appear true, that Art cannot attain to Nature, yet experience in many things shews, and in particular in this art of the colours in glass, that art doth not onely attain to and equal nature, but very fair surpasses and excels it.”⁵³ Just as Renaissance literary theorists present “the brazen natural world” as “awaiting its transformation into gold at the poet’s touch,” so too is nature remodeled and enhanced by the glassmaker’s blowpipe in early modern glassmaking literature.⁵⁴ In *The Art of Glass*,

49. Marco Coccio Sabellico, as quoted in Julia de Wolf Addison, *The Boston Museum of Fine Arts* (Boston: L. C. Page & Company, 1910), 143 (emphasis added). See similar descriptions in Agricola’s 1556 *De Re Metallica*, 592.

50. Neri, *The Art of Glass*, 2.

51. Lawrence H. Selman, *The Art of the Paperweight* (Santa Cruz, CA: Paperweight Press, 1988), 5.

52. Philip Sidney, “A Defence of Poesy,” in Sidney’s *The Defence of Poesy and Selected Renaissance Literary Criticism*, ed. Gavin Alexander (London: Penguin, 2004), 2–54, at 8–9.

53. Neri, *The Art of Glass*, 61.

54. Frances E. Dolan, “Taking the Pencil out of God’s Hand: Art, Nature, and the Face-Painting Debate in Early Modern England,” *PMLA* 28 (1993): 224–39, at 225.

Neri's language persistently attests to the heavenly properties of glass and, by implication, the exalted powers of its male creator. When the glass frit is "purified" of its earthly properties, and cleansed of "imperfection" and "foulness," it "becomes as white as snow from heaven."⁵⁵ Early modern discussions situate prized *cristallo* glass within a dazzling network of approbatory adjectives: "fair," "clear," "very perfect," "fully perfect," "noble."⁵⁶ The well-prepared glass frit is dissociated from the earthly and impure; transcendent and uncorrupted, it becomes the pure matter of the imagination, the raw stuff of creation.

An early modern poster advertising a demonstration of the "art and ingenuity" of glassmaking in Oxford (fig. 2) presents the event as a performance: perhaps the kind of spectacle looked for by Webster and Dekker's Justiniano or Killigrew's Mistress Wild. Endowed with apparently extraordinary powers of creation, this "curious Artist" offers to reveal the hidden processes behind objects of great beauty. In addition to making objects that imitate the natural world, the glassmaker plays with scale, framing human and animal forms within a world of his own making: "He also shows a glass wherein are small figures, which performs to admiration."⁵⁷ The poster depicts the artist in a central position, articulating his role as originator and ruler, while a swan, doll, and ship number among the objects in his orbit. With his left hand he singles out a human figure, referred to in the poster's text as a "Lady." The composition affirms the glassmaker's godlike dominion over the microcosmic glass world he has created, but more specifically, it suggests a gendered configuration; his gesture toward the glass doll reworks early modern commonplaces about male artistic ability as an appropriation of female reproductive capacities. But belying this confident message is a more problematic permutation of the same commonplace that, perhaps, signals the growing popular awareness of the glassmaker's art as a dangerous form of pride.

Potentially, the image given by *The Duchess of Malfi's* fourth madman (in which the glassmakers/devils continually create the souls of women) hints at the capacity for human artistic ambition to edge dangerously close to a sinful approximation of divine creation. Behind the image's mistrust of female souls lurks the suggestion that glassmakers are themselves the devils who seek to create human life. At the particular historical moment in which Webster was working, this more troubling vision also drew on fears that the artisan's creative process was not just an appropriation of female reproductive capacities, but that the glassmaker's finite object was born out of the destruction of an essential natural resource that, in the polemical tracts of the period, was characterized as female and fertile. It

55. Neri, *The Art of Glass*, 4.

56. Neri, *The Art of Glass*; Biringuccio, *The Pirotechnia*, 126–33.

57. Anon., *This is to Give Notice to All Lovers of Art and Ingenuity* [. . .] (c. 1650).



This is to give Notice to all Lovers of Art and Ingenuity, that there is come to this place, and is now to be seen over-against the Red Lyon in OXFORD.

That curious Artift, who in the prefence of all Spectators blows feveral Curiofities in Glafs, As Swans, Ducks, Birds, Knives, Forks, Swords, and Scabbards, Decanters, Cruets, Bottles and Ladies, with Pipes to fmoke Tobacco, and Grenadoes to Stick by the Snuff of a Candle that gives a Report like a Gun; blows Tea-pots, and other Fancies imitating China. He alfo fhowes a Glafs wherein are 2 fmall Figures, which performs to admiration. He fpins Glafs finer than the Hair of the Head, of feveral Colours, with a Wheel that's turn'd by humane Power, which fpins ten thoufand Yards of Glafs in lefs than half an hour.

And for the Diversion of the Company, he fhowes the Italian Water-works, with Fountains playing & Swans swimming all in Glafs; and feveral other fuprizing Arts, never performed by any Perfon but himfelf. To be feen at any time of the Day, to a fet Company, if defir'd; and every Night at 7 a-Clock. Note, Gentlemen may be furnifhed with Glafs Tubes, and other Curiofities in Glafs, &c.

Figure 2. Anon., *This is to Give Notice to All Lovers of Art and Ingenuity* [...] (c. 1650). The British Library, London.

could be said that in this way, the image in the Oxford poster—however unwittingly—hints at the major ecological concern troubling the professional life of glassmakers in early modern England: in order to produce their fragile and elite objects, glassmakers needed to consume vast quantities of England's woodland, understood as generative and female, on which the entire population depended for its livelihood.

III. NATURE'S UNMAKING AND *THE DUCHESS OF MALFI*

At the time Webster was writing, English glassmaking was seen as one of the major contributors to the country's escalating energy crisis and the rapid disappearance of its forests. Before the widespread use of sea-coal in the latter half of the seventeenth century, wood was the primary source of fuel, and timber was relied upon for construction. However, over the course of the sixteenth century, England's growing urban population, expanding industrial sector, burgeoning maritime economy, and its demand for naval reinforcement in the interests of national security put an unsustainable strain on the nation's timber resources.⁵⁸ By the time of James I's accession in 1603, the price of timber had tripled and was continuing to rise.⁵⁹ The high price of timber reflected not just its short supply but its widespread use across a range of industries. "After agrarian production, the woods were early modern England's most precious resource."⁶⁰ This would have been a daily concern for Webster and his family who required a steady supply of English ash for their coach-making business.⁶¹ While the rapid rate of deforestation threatened his family's livelihood, Webster watched as the country's remaining wood was in vast quantities consigned to the glasshouse fires and, most visibly, to the furnace at Blackfriars. In 1614, the king addressed the problem by prohibiting the use of wood for fuel in all English glassmaking. James I's proclamation stipulates that "of late yeeres the wast of Wood and Timber, hath been exceeding great and intollerable by the Glass-houses and Glass-workes, of late in Divers parts erected." Working on the premise that England's plentiful forests are a gift from God, the proclamation recites the monarch's duty to care for them: "it being our princely office and care, to cherish and second the blessings of GOD upon our people and Countries, and not to indure a wasteful Destruction and consumption of them, and specialle to provide that matters of

58. Bruce Boehrer, *Environmental Degradation in Jacobean Drama* (Cambridge: Cambridge University Press, 2013), 16–18.

59. Todd Andrew Borlik, *Ecocriticism and Early Modern English Literature* (London: Routledge, 2011), 83–89.

60. Jeffrye Theis, *Writing the Forest in Early Modern England* (Pittsburgh: Duquesne University Press, 2009), 11.

61. Rooke Church, *An Olde Thrift Newly Revived* (London, 1612), 7.

superfluite do not devoure matters of necessity and defence.”⁶² The glasshouses of Jacobean England were voraciously consuming God’s creation, in order to produce a “superfluite” that vaunted man’s skills as creator. James’s assertion that “this great mischiefe”—a word which has since lost its pejorative force—be “restrained and avoyded” attests to the growing perception of the country’s glasshouses as sites of indulgence and moral depravity. The unrelenting fires of the glasshouse, in which Webster, Dekker, and others found a likeness to sin and hell, fed on the “wasteful Destruction” of England’s forests.⁶³

Robert Pogue Harrison’s magisterial study of the forest has demonstrated the crucial and highly contested role that forests have played in European literature since antiquity. Both Harrison and, more recently, Jeffrye Theis have charted the transformation that occurred in European landscapes in the centuries leading up to the early modern period. By the turn of the sixteenth century, wildwood (dense wood untouched by human hand) had been largely replaced by managed and privately owned woodlands, and these more managed spaces were increasingly entangled in a form of national romance that Theis calls a “sylvan pastoral.” Timber has always been a ready source of economic revenue, and this threat to its existence has consistently galvanized the romance attached to the role forests played as wilderness, covert, and escape. In Elizabethan and early-Stuart England, the particular conditions determining this romance have been traced to the enclosure acts,⁶⁴ the rise of “fiscal forestry,”⁶⁵ the “georgic revolution,”⁶⁶ and the plenty discovered in the new world,⁶⁷ all of which helped produce the period’s great romantic epics of the English landscape: Sidney’s *Arcadia*, Spenser’s *The Fairie Queene*, and Drayton’s *Poly-Olbion*. However, it remains to be emphasized that subtending the various entanglements of the period’s romance with the forest was a distinct tendency to gender these spaces feminine.

Drayton’s 1612/1621 *Poly-Olbion* is explicit in its gendering of the forests and woodlands of England. Throughout *Poly-Olbion*, and Drayton’s other historical and chorographical works, forests are consistently described as “she” and are de-

62. A Proclamation Touching Glasses.

63. Dekker describes hell as a glasshouse “for like the Glasse-house Furnace in Blacke-friers, the bonifiers that are kept there, neuer goe out.” Thomas Dekker, *News from Hell Brought by the Devill’s Carrier* (London, 1606). Br. James Mumford describes the fires of hell as like the “mercilesse flames of a glasse-furnace.” James Mumford, *A Remembrance for the Living to Pray for the Dead* (London, 1641), 38. Bosola’s assertion that “hell is a meere Glasse-house” in *The Duchess of Malfi* is quoted above.

64. See Richard Burt and John Michael Archer, eds., *Enclosure Acts: Sexuality, Property, and Culture in Early Modern England* (Ithaca, NY: Cornell University Press, 1994); and Borlik, *Ecocriticism*, 165–88.

65. Borlik, *Ecocriticism*, 75–104.

66. Anthony Low, *The Georgic Revolution* (Princeton, NJ: Princeton University Press, 1985).

67. Borlik, *Ecocriticism*, 75–104. See also Nuala Zahedieh, *The Capital and the Colonies: London and the Atlantic Economy, 1660–1700* (Cambridge: Cambridge University Press, 2010).

picted as such in *Poly-Olbion's* maps (fig. 3). For Drayton, forests are also repeatedly described as “fruitful” and “fertile”—a bountiful state very much under threat. Drayton was not alone in his use of the image. Aided by the shared vocabulary of female reproduction and forestry, both of which describe their subject via the “body” that “beares” or is “barren,” early modern husbandry manuals—be it to confirm male superiority or warn against exploitation—also called on popular images of a female forest.⁶⁸ Of course, these depictions are an extension of the feminine gendering of nature more generally.⁶⁹ But, as we hope to show, the convergence of this more conventional depiction of nature with the period's increased legal concern over land enclosure produced a particular understanding of forests as environments that were contained, exploited, owned, policed, and overly managed (at once ravaged and cultivated out of their natural forms) in ways comparable to the nation's women. These depictions were in turn entangled with concerns over the role of London's industry in the devastation of English forests. In the seventh song of *Poly-Olbion*, Drayton describes the district of Wyre:

When soone the goodlie Wyre, that wonted was so hie
 Her statelie top to reare, ashamed to behold
 Her straight and goodlie Woods unto the Fornace sold
 (And looking on her selfe, by her decay doth see
 The miserie wherein her sister Forrests bee)

Drayton figures the felling of trees as an act of violence against a feminized forest. Now “naked left of woods,” the land has been stripped of foliage, and her trees delivered into the fires of industry and the glassmaker's “fornace.”⁷⁰

Jacobean defenses of English woodland developed this concern more fully by warning that the abuse of forests was a betrayal of God's created world and a failure of Christian charity. The same year Drayton published *Poly-Olbion*, Rooke

68. Gervase Markham, *The Second Booke of the English Husbandmen* (London, 1614), 59–60; Conrad Heresbach, *Four Bookes of Husbandry* (London, 1577), 42; John Carpenter, *The Plain Ma[n's] Spirituall Plough Containing the Godly and Spirituall Husbandrie* (London, 1607), 47; Arthur Standish, *The Commons Complaint* (London, 1611); Church, *An Olde Thrift*.

69. Ecocritical and ecofeminist studies have demonstrated how Renaissance literature routinely figured the natural world as a maternal body, and have shown that in the early modern imagination “the earth was alive and considered to be a beneficent, receptive, nurturing female.” Carolyn Merchant, “Nature as Female,” in *Ecocriticism: The Essential Reader*, ed. Ken Hiltner (London: Routledge, 2014), 10–34, at 23. See also Annette Kolodny, “Unearthing Herstory,” in *The Ecocriticism Reader: Landmarks in Literary Ecology*, ed. Cheryll Glotfelty and Harold Fromm (Athens: University of Georgia Press, 1996), 170–81, at 176; Jennifer Munroe and Rebecca Laroche, eds., *Ecofeminist Approaches to Early Modernity* (New York: Palgrave Macmillan, 2011).

70. Michael Drayton, *The Works of Michael Drayton*, ed. J. William Hebel, 5 vols. (Oxford: Blackwell, 1933), 4:7.256–67.

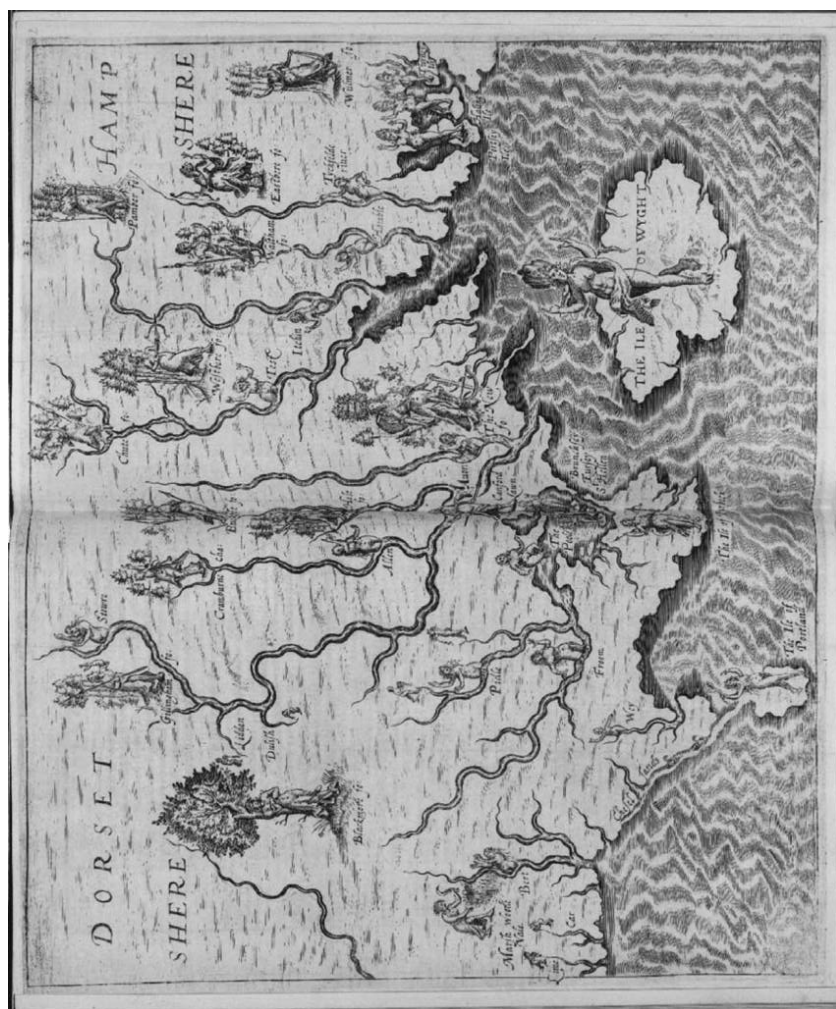


Figure 3. Michael Drayton, *Poly-Olbion* (1612). A color version of this figure is available online.

Churche, who with Arthur Standish was one of the main defenders of the nation's forests, decried the "exceeding abuses" of woodland across the realm: "Our Woods, which hath come by the vnnaturalnesse of the times, that hath bred men void of charitie; Epicures, onely prouiding for the supply of their pleasures: without that naturall leue, care, and respect, that by the Lawes of God, Nature, and Nations they should haue of their posteritie and succeeding ages."⁷¹ Given man's dependence on this precious resource, in which early modern civilization had invested its hopes of continuation and development, forests had to be cared for and protected. For Churche, their neglect was an indulgence of "selfe-loue" or pride.⁷² Early seventeenth-century defenses of English woodland, then, advanced two lines of argument: the destruction of the nation's forests was represented both as an abuse of a female natural bounty and an irreligious consumption of God's gifts to man.

In the background of the illustration from Agricola's 1561 *De Re Metallica* (fig. 4) is a depleted forest, a lone tree stump, some coppiced trunks (cultivated for the maximum production of young timber), and bald hills. The illustration leaves little doubt about where the felled and overmanaged timber has gone: the roof and walls of the glasshouse are made of wood, and a pile of timber is heaped on the floor. And, while we cannot see it, the glasshouse's furnace fire—well known for its consumption of prodigious amounts of fuel—is being fed entirely with wood.⁷³ Agricola worked in the mining and glassmaking industries in Bohemia and Saxony, and the many woodcuts in his extensive guidebook depict a professional tradition that preceded the movement of glasshouses into urban settings. Throughout sixteenth-century Europe, furnaces were usually located within the woodland from which they drew their timber source and could be attached to villages and hamlets.⁷⁴ Agricola's woodcuts certainly evoke this more domesticated setting: behind the furnace, villagers and workers are eating and drinking, and in the foreground a woman is carrying an infant. Throughout *De Re Metallica*'s woodcuts, children are depicted working on less dangerous tasks alongside the furnace fires and other industrial machinery. By contract, the Medici mural (fig. 1) depicts its glassblowers and furnace in an indoor setting, its near-naked male workforce being observed by courtiers. The devilish contours of the workers and the courtly setting suggest this image more closely approximates

71. Churche, "Preface," in *An Olde Thrift*, 70.

72. Churche, *An Olde Thrift*, 71.

73. Holinshed records that when the Crutched Friars Furnace, which "had consumed great quantitie of wood by making of fine drinking glasses," burned down in 1575 it "had within it neere fortie thousand billets of wood." Godfrey, *Development of English Glassmaking*, 30, 193. See also Randall Martin, *Shakespeare and Ecology* (Oxford: Oxford University Press, 2015), 37–40.

74. Theis, *Writing the Forest*, 13–14.

*Fistula A. Fenestella B. Marmor C. Forceps D.
Instrumenta quibus forma sunt data E.*



Figure 4. Gorgii Agricola, *De Re Metallica* (Basil, 1561). The Wren Library, Trinity College, Cambridge. A color version of this figure is available online.

the setting of the Blackfriars furnace, with its well-heeled audience, urban location, explicit performativity, and associations of sexuality, dissolution, and high artistry.

While the Medici mural tells the story of the glasshouse as a microcosm of hell, the more domesticated and rural image from *De Re Metallica*, with its juxtaposition of a denuded exterior landscape and a busy and industrious workshop space, tells the story of glasswork's role in deforestation. While the rural image is less gendered in its depiction of glasswork, the Medici mural is explicit: the *maestros di cristallo* are a masculine force of strength, and their proximity to the furnace's ever-burning fires have ensured the stamp of hell is on their bodily form. But we could say that a gendered reading of glasswork's social and professional history can be gleaned from the comparison of these two images: the older, more rural, and more domesticated form of industry, with its visual incorporation of a woman, babe in arms, represents a homely vision of glasswork as part of the woodland that it at once inhabits and consumes. It was, perhaps, when the furnace moved into the urban setting of the court or the South Bank that it took on greater associations of masculine and devilish artistry. This was certainly the setting in which the luxurious and fragile *cristallo* glass was made; older, rural furnaces would have produced the more utilitarian green glass. In this way, the furnace's late sixteenth-century move out of the forest and away from the location and source of the feminized timber it devoured potentially enabled a greater juxtaposition between the two forces at odds in the practice and perception of *cristallo* glassblowing: male ingenuity and female natural resource.

In *The Duchess of Malfi*, which Webster began writing in 1612 amid the flurry of literary activity surrounding England's disappearing forests, Ferdinand figures his revenge against the Duchess as the violation of a "territory" rich in "goodly forrests":⁷⁵

Would I could be one,
That I might tosse her pallace 'bout her eares,
Roote up her goodly forrests, blast her meades,
And lay her generall territory as wast
As she hath done her honors.

(2.5.25–30)

After discovering that the Duchess has mothered a child against his express command, Ferdinand projects his fantasy of revenge onto a feminized landscape.

75. As dated in Margaret Drabble and Jenny Stringer, eds., *The Concise Oxford Companion to English Literature* (Oxford: Oxford University Press, 1987), 167.

The “goodly forests,” which Drayton and James I considered to be a blessing in need of man’s protection, are, for Ferdinand, a threat to his imagined sovereignty over his sister’s fertility. Tearing up trees and blighting meadows, his punishment explicitly targets the Duchess’s (and the landscape’s) fecundity. Ferdinand’s use of “wast” both echoes early modern concerns over the wasteful consumption of trees and animates his fantasies of violent retribution: the unruly fertility of the landscape licenses mankind to dominate and destroy it in the same way as the Duchess’s ungovernable sexuality is seen to invite Ferdinand’s destruction of her. Yet the factual impossibility of containing nature’s creative power, as with the Duchess’s fertile body, is predicated on the wishful mood of “Would I could.” In this way, Ferdinand voices a concern about nature’s unruliness that was also felt offstage: while early modern England experienced nature’s powers as bountiful and often beneficent, she was also an unpredictable, ungovernable, and dangerous force. In the context of discussions over woodland, early modern anxieties over nature were sometimes expressed in terms of her resistance to controlled propagation, which threatened to usurp man’s dominion.⁷⁶ Drayton himself at times expresses a similar anxiety, though more implicitly, in *Poly-Olbion*. Even while he romanticizes the Forest of Wyre, Drayton describes Malvern (the “King of hills”) as the “king” who “doth command” the territory that surrounds him. But “behold[ing]” the forest below, he notes that “his goodlie site” is “Abounding in excesse.”⁷⁷

The Duchess’s “goodly forrests” provide a metaphor for the unpredictable generation that occurs within the female body as in the nation’s woodlands, and which exceeds both sight and control. “Where are your Cubbs?” Ferdinand asks the Duchess. He adds:

Call them your children;
For though our nationall law distinguish Bastards
From true legitimate issue: compassionate nature
Makes them all equall.

(4.1.40–44)

To dispute their place within society, Ferdinand likens the Duchess’s children to beasts of the forest, an association confirmed by his later claim that “the death / Of

76. In colonial territories, where forests were overly abundant rather than threatened, the excesses of a feminized body resisting English supremacy could be figured as wanton. Commenting on Francis Bacon’s assertion that in the new colonial territories “Wood commonly aboundeth too much,” Todd Andrew Borlik notes the subtle deprecation of a “too” fertile earth. Borlik, *Ecocriticism*, 83.

77. Drayton, *Works*, 256–67.

young Wolfes, is never to be pittied" (4.2.274). Implicitly, his personification of a maternal and "compassionate nature" partners the Duchess's procreative body, which has nurtured her "Cubbs," with a natural landscape capable of protecting and concealing wild creatures. The affinity between the Duchess and a feminized landscape is suggested earlier in the play, and with a more hopeful image, by the Duchess herself:

The Birds, that live i'th' field,
 On the wilde benefit of Nature, live
 Happier than we; for they may choose their Mates,
 And carroll their sweet pleasures to the Spring.
 (3.5.25–28)

The Duchess sees the "wilde benefit of Nature" as the indiscriminate generosity of the field, in which she had hoped her own body could participate—a source of sexuality and fertility largely unregulated by legal or social restraints. Her idealized image of the caroling "Birds" expresses the "sweet pleasures" of her own partnership. But those birds, she now recognizes, are "happier than we." The Duchess contrasts the birds' uninhibited pleasure-taking with the patriarchal laws that determine her own experience of sexual love and reproduction, but she also projects her fantasies of sexual license onto a natural world, "th' field," which she perceives to be in greater sympathy with her maternal and bodily impulses.

Crucially, the Duchess's recognition that her "goodly forests" are in fact managed by her brothers expresses the reality that very little wilderness remained in Webster's England. The figurative fertility of the English forests, on which both Ferdinand and the Duchess draw in the above speeches, was bound up with legal definitions that described that fertility in very precise terms. And it is in this context that the play's interest in wolves and cubs emerges as particularly significant. The Elizabethan gamekeeper of Waltham Forest, John Manwood, wrote a book of forestry law in which he cited ancient laws that he believed were being too often ignored by those who pillaged England's woods. Throughout his 1598 tract, Manwood asserts repeatedly the legal definition of a forest: "a territory of woody grounds and fruitful pastures, priviledged for wild beastes and foules," that is subject to "particular laws and priviledges" and managed by "certen meet officers" who can ensure that the forest is "preserved and kept" as "a place of recreation and pastime, meete for the royal dignities of a Prince."⁷⁸ In his reading of Manwood, Robert Pogue Harrison emphasizes that "the forest is no longer a forest the

78. John Manwood, *A treatise and discourse of the lawes of the forrest* (London, 1598), 2.

moment it loses the wildlife it is meant to protect. If the forest ceases to be a *sanctuary* for wildlife, it is no longer a forest.”⁷⁹ But this wildlife is, Harrison notes, made up only of beasts “of pleasure,” since, in Manwood’s words: “wolves . . . and such ravenous beasts” were long ago destroyed by Edgar, a Saxon king. Manwood’s descriptions of a forest’s bounty—its capacity to nurture and protect animals and endlessly produce the fruit and fowl on which they can survive—is determined entirely by the forest’s role as a managed space of royal pleasure, free from “ravenous beasts.” For Manwood, a forest is by definition a space of perpetual bounty, but bounty in the total service of a prince. “In the royal forests there is now only one ravenous beast left: the king himself. All the other wolves are gone.”⁸⁰ In his analysis of the court’s steady assimilation of the wilderness through enclosure and the symbolic assertions of the hunting ritual, Harrison argues that “an essential dimension of the king’s personhood belonged to the forest . . . the king embodies and represents in his person the civilizing force of history, but by the same token he harbours in his sovereignty a savagery that is greater and more powerful than the wilderness itself.”⁸¹ Of relevance to *The Duchess of Malfi* is the fact that legal attempts to protect forests against culling did so by describing them as rightfully bountiful, but a bounty that was specifically limited to the power of the court—a court that, in its use of the nation’s forests, had absorbed and embodied the threatening specter of the wolf.

Webster gives his arch-villain a very specific illness: lycanthropy. While the inclusion of this fact works to mitigate and explain Ferdinand’s violent behavior, it also registers yet one more image from the cluster of concerns surrounding the period’s industrialized consumption of timber. We could say that (as diseased “wolf”) Ferdinand comes to embody the “ravenous beast,” now a resident of the court itself: his illness manifesting as the shadow of a civility built on the practice of confining the landscape through the enclosure and management of those “wild” forest spaces in which the Duchess had hoped her own bodily freedom could flourish. The “lupine monarch”⁸² is now both in the court and in his forest; in both spaces he polices the territory through laws (like those outlined by Manwood) that subject all natural phenomena, all vert, verdure, venison (and all women), to his sovereignty and “pleasure.”

The Duchess cannot enjoy the “wilde benefit of Nature” without consequences, and her resistance to social law (brutally enforced by Ferdinand) necessitates the punishment of her “goodly” body and its “cubbs.” “Damne her, that

79. Robert Pogue Harrison, *Forests: The Shadow of Civilization* (Chicago: University of Chicago Press, 1992).

80. *Ibid.*, 75.

81. *Ibid.*, 74.

82. *Ibid.*, 75.

body of hers,” says Ferdinand to Bosola (4.1.146). In Ferdinand’s lycanthropic delusion, the Duchess’s body is a territory that rightly belongs to his management and pleasure, but his claim over it is being questioned by both the Duchess herself and her husband and children. Ferdinand’s deranged response is to destroy “his” territory himself, through a revenge act built from a violent degree of creative ingenuity. That is, when the more ancient form of ownership over his “goodly forests” breaks down, Ferdinand responds by embodying a more modern form of control, destruction, and consumption: the more economically voracious and more highly masculine force of industrial artisanship. In the scene that earned Webster the title of “Tussaud Laureate,” the Duchess is presented with the waxwork figures of her husband and their two children. The models are “*discover’d, (behind a Travers)*” and presented to the despairing heroine, who believes they are the murdered bodies of her family (4.1.67).⁸³ Ferdinand soon explains:

Excellent! As I would wish: she’s plagued in art.
 These presentations are but framed in wax
 By the curious master in that quality,
 Vincentio Lauriola, and she takes them
 For true substantial bodies.

(4.1.109–13)

Ferdinand aligns himself with “Vincentio Lauriola,” a figure who—like the glass-maker—can “master” nature with “art.” The diabolical artistry of his performance makes spiritual destruction the antecedent to physical destruction. His objective being “To bring her to despair,” Ferdinand’s revenge targets not only the Duchess but everything she has created (4.1.140). Moments before her death, the Duchess is shown the real corpses of her two youngest children when Bosola “*draws the traverse and shows the children strangled*” (4.2.244). Framed within the darkness of the discovery space, a curtained alcove at the back of the stage, the waxwork bodies, first seen in act 4, are replaced with their corporeal counterparts.⁸⁴ The visual metaphor exalts the artist’s command over life and transforms

83. Bernard Shaw, as quoted in Charles R. Forker, *Skull Beneath the Skin: The Achievement of John Webster* (Carbondale: Southern Illinois University Press, 1986), 480.

84. Andrew Gurr, *The Shakespearean Stage, 1574–1642* (Cambridge: Cambridge University Press, 1992), 146, 150–51. Richard Hosley differentiates between two possible types of discovery-space: the first existing behind an opening in the tiring-house façade, and the second being a type of inner-stage. However, he notes that any argument in favor of the existence of an “inner-stage” is based only on internal evidence, and the phrase itself is not used in any Elizabethan texts. Richard Hosley, “The Discovery-Space in Shakespeare’s Globe,” *Shakespeare Survey* 12 (1959): 35–46.

the Duchess's bodily creations, her natural offspring, into props participant in Ferdinand's devilish display.

Ferdinand works in wax, not glass, but both mediums used similar techniques of distillation, melting, shaping, and setting. Both were at once "malleable and fragile, ephemeral and enduring . . . adaptable in form and allegedly unchanging in [their] aesthetics"⁸⁵ and both "with small force . . . receive any fashion or figure."⁸⁶ Both mediums stood in relation to the human form in ways that animated early modern anxieties about gender and, unlike the older technologies of sculpture in stone and wood, aggravated emerging early modern concerns about the artist's relationship to God as creator.⁸⁷ Both carried the strong Italianate associations of Webster's source material, and both exhausted vast amounts of natural resources in the production of elite luxury items. However, it is the figure of the glassmaker—masculine, dangerous, and creatively potent—that throughout *The Duchess of Malfi* informs Ferdinand's violent and possessive instincts toward his sister. Most importantly, the elaborate degree of artistry that Ferdinand's revenge boasts (and its explicit targeting of the Duchess, her children, and her body's unregulated fertility) recalls the concerns expressed in the early modern pamphlets that condemned the wasting of "goodly" forests in the production of artistic superfluities. In this way, having failed to achieve the power of a "lupine monarch," Ferdinand comes instead to embody the popular image of the glassmaker in his assumption of godlike power and the devilish artistry of his creations.

Ferdinand's destruction of his sister and her children and his targeting of her fertility is, of course, an attack upon his own bloodline. His efforts to cancel her fertility are widely acknowledged as expressing an incestuous desire to contain the economic and sexual fruits of the Duchess's body within his own control. But it is worth noting that Ferdinand's destruction of his own family is an attack on a relational structure commonly figured as a tree. Indeed, trees feature prominently in *The Duchess of Malfi*, more than in any of Webster's other plays. And while they are not directly depicted as resources to be culled, coppiced, and burned in the fires of industry, they nonetheless appear within images that express the play's broader concern with wasted fertility and economic corruption. The Duchess and Antonio build their "marriage" vows around the image of twinned palms, the "Best Embleme of a peacefull marriage," which "nev'r bore fruite devided" (1.1.555–58). The image was popular throughout early modern Europe and comes

85. Roberta Panzanelli, *Ephemeral Bodies: Wax Sculpture and the Human Figure* (Los Angeles: Getty, 2008), 3.

86. Christopher Merret, "Introduction," in Neri, *The Art of Glass*, 84.

87. Lucia Dacome, "Women, Wax and Anatomy in the 'Century of Things,'" in *Spaces, Objects and Identities in Early Modern Italian Medicine*, ed. Sandro Cavallo and David Gentilcore (Oxford: Wiley-Blackwell, 2008), 50–78.

from Pliny's description of palm trees that will only produce fruit where a male and female species are planted together. When the male is cut down, the female tree becomes barren. However, this joyful image follows closely upon Bosola's description of the two brothers as a corrupt partnership. Like "Plum-trees (that grow crooked over standing-pools) they are rich, and ore-laden with Fruite, but none but Crowses, Pyes, and Catter-pillers feede on them" (1.150–54). Unlike the Duchess and Antonio, the partnership here is avaricious, rotten in its fertility, the moral distortion of the pair signaled not only by their "crooked" form but in the standing pools (a common signifier, like lees, of filth, rubbish, and corrupted matter⁸⁸) and the wasteful feeding that occurs: only birds and insects consume their riches. Bosola's remarkable image is in fact an image of incest: of fertility turned to corrupt or unchaste ends, of a union that is inward-looking and bent, its fruit spoiled. Shortly afterward, and immediately following his depiction of the "strange instrument" swelling women's bodies, Bosola describes woman as an orange tree that "bears ripe and greene fruit, and blossoms altogether." It is an image of hypocrisy: the orange tree, Bosola clarifies, is like women, who sometimes "give entertainment for pure love: but more, for more precious reward" (2.2.12).

Elsewhere, Bosola and Ferdinand deploy the cedar tree (a commonplace figure for the state) to political ends. Impatient with Bosola's desire for advancement, Ferdinand tells him to "give great men leave to take their times . . . You see, the oft shaking of the Cedar-Tree / Fastens it more at roote" (1.1.256–58). Unable to "shake" Ferdinand, Bosola later uses the cedar tree image to accuse the Duchess of not displaying the generosity befitting a prince: "You know an honest states-man to a Prince, / Is like a Cedar, planted by a Spring, / The Spring bathes the trees roote, the gratefull tree / Rewards it with his shadow: you have not done so" (3.2.303–6). In Jacobean London, the image of the tree stood at the intersection of the concerns we have been detailing here: it was the coveted and contested object/image at the heart of controversies over the moral and economic dissolution of the glasshouse and the wasting of England's landscape. It is fitting, then, that in *The Duchess of Malfi*, Webster deploys tree images to explore the play's concern with the destructive force of sexual and economic consumption.

We have been tracing the possibility that those environmental and industrial issues with which Webster was directly concerned emerged in the subtle narrative underlining *The Duchess of Malfi*'s figurative language and visual registers. But these concerns also provide the play's more explicit subject matter: the relative freedom of the female reproductive body from masculine and familial control; the aggressive and dissolute conditions of court politics in which a basically

88. Bonnie Lander Johnson, *Chastity in Early Stuart Literature and Culture* (Cambridge: Cambridge University Press, 2015), 21.

good courtier like Bosola can become “crooked”; and the corruptive force of economic and political avarice on men like Ferdinand and the Cardinal. The language and practices of glassmaking found their way into Webster’s work not only through explicit references to the art form but, in *The Duchess of Malfi*, through the narrative of Ferdinand’s revenge and his need to control and, finally, to destroy the Duchess’s fertile body. For Webster, the brilliance and brute strength of glassmaking potentially exalted man’s creative powers over those of the natural world, but they also suggested to him a dangerous degree of human pride. While the image of the prodigiously “fertile” glassmaker may have appealed to the notoriously slow-working Webster, it also provided a means for thinking about the destructive impulses of the artisan, who devours his materials—the gifts of God’s own creation—in the service of his art.

The unique conditions of the early modern glasshouse provided Webster with an allegory of creation variable enough that it could signal human procreation, artistic endeavor, and divine origination. Crucially, however, the pliability of the glasshouse metaphor meant that it could express each of these modes of creation in both their goodly and their violent, concupiscent forms. It may be that Webster’s own conscience was troubled by the artisan’s (and playwright’s) abuse of his materials and his prideful imitation of the divine. The spectacle Ferdinand enacts in act 4 of *The Duchess of Malfi* invites consideration as a parallel of the dissolute spectacles (and spectators) found in the early modern glasshouse and playhouse. The “vaine Citizens, that must goe see” the “ever burning furnaces, wherein” the “brittle glasses of estate are blowne” look idly at the performance before them, rarely considering the possibility that their spectatorship makes them complicit in the destruction of England’s woodland.⁸⁹ When at the theater, the same viewers were confronted with Ferdinand’s masterpiece: a vicious revenge upon the Duchess, which made her life, and her children’s lives, the raw materials of a diabolical spectacle. Promoting his own artistry as a kind of creative genius, Ferdinand not only mocks the Duchess’s procreative life but seeks to possess and destroy her “goodly” body and its hopes for future happiness and bounty. The same narrative of destruction was emerging around the glasshouses of London, which, in James I’s words, were “wast[ing]” and “devour[ing]” the woodlands on which those same men and women who sought entertainment at the Blackfriars glasshouse depended for their lives and livelihoods. Seen through the lens of this Jacobean controversy, the Duchess’s much quoted assertion that she did not intend “to create / Any new world” becomes an implicit criticism of Ferdinand, who, by the end of the play, has come to embody all the terrifying potential of an artistic genius unleashed against God’s bounty (3.2.128–29).

89. George Chapman, *The Tragedie of Chabot, Admirall of France* (London, 1639), 3.1.29–31.