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American Puritanism and the Cognitive Style of Grace

By

Rachel Trocchio

A dissertation submitted in partial satisfaction of the

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Rachel Trocchio

Abstract

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The present monograph initiates the lapsed possibility that Puritanism in the New World was an endpoint, rather than an origin, by contextualizing Puritan cognitive and literary styles within a history of the “craft of thought” that stretched from antiquity to the Renaissance. New England divines Thomas Hooker, Cotton Mather, and Jonathan Edwards, I argue, applied imagistic, linguistic, and mathematical models for thought in an effort to meet the vexed imperative of moving closer to God in a predestinarian theology that held one’s grace had already been determined. Why acts of *thinking* should serve to navigate this explicitly Puritan ordeal, I also contend, proceeds from the fact – largely unrecognized by either Puritan studies or cognitive literary studies – that many of the fields we today designate as cognitive sciences were first understood as cognitive arts. Plotting a correspondence between acts of creative thinking and a distinctly Puritan concept of grace, I show that the Puritans were radially more creative than we may have realized, precisely because they forged out of a long and diverse intellectual heritage an art – what I term a ‘cognitive style’ – that mediated between intellection, representation, and belief.

Memorial, copious, and infinitary ‘styles of thinking,’ I contend, discern American Puritanism at the juncture of British intellectual history, Anglo-American lived experience, and Calvinist doctrine. When first-generation New England divine Thomas Hooker uses both imagistic and dialectic models for the memory to explain the spiritual potency of recollection, he composes what was known as the doctrine of preparation as a memorial art. To read preparation as this cognitive style is to grasp how the program joined intellection and grace. When Cotton Mather collates ecclesiastical and personal confessions with the conclusions of a 1662 Massachusetts synod, he models *copia* to insist that the synod’s expansion of church membership was not dangerous innovation but a recombination of orthodox policy. Mather’s use of this style reconceives the Halfway Covenant as a literary rather than socio-political event. And Jonathan Edwards, trying to staunch social ills flowing from revivals in the Connecticut Valley that had become ungovernable, appealed to contradictory accounts of the infinitesimal to reconcile the Calvinist tenets of predestination and conversion. Grounding his responses to the revivals in this mathematical epistemology, Edwards evinces a knowledge of God that was both Enlightened and Awakened, because it took the form of a leap between mystery and sense. Tracing these intellectual movements and the corollary literary modes they imparted across Hooker’s sermon literature, Mather’s ecclesiastical history, and Edwards’ philosophical theology, I show that a Puritan theology of grace comes into view when we attend to the style Puritanism engendered, both of rhetoric, and through rhetoric, of thought.

*for Peter,
who made it other ways with me*

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Acknowledgments

Though I am not by nature a betting woman, I would wage that the world is very far from seeing an end to writings on grace, both human and divine. This is a study about the second. The long process of thinking and writing it has been an education in the great gifts of the first.

The earliest origin of this project lies in the graduate seminar I took with Kathleen Donegan in 2008, an experience that gave me my field. A 2011 seminar with Elisa Tamarkin on American Revolution and Enlightenment both deepened and textured my relationship with it, and the courses I have been fortunate to teach at Berkeley have sustained it in ways my students could not imagine. At Berkeley I met Ella Mershon, whose hand is always in mine; Shannon Chamberlain, whose wit is second only to her steadfastness; and Jonathan Shelley, whose friendship is fine as his tap dancing – finer, truly. My committee is as brilliant a committee as ever was: Elisa, thank you for the precision of your guidance and insight; David, for helping to keeping this project as near the early modern world as it needed and wanted to be; and Massimo, for your generous perspective. Above all, thank you Kathleen for your inexhaustible mentorship and dear friendship.

At critical stages this project benefitted enormously from a New England Regional Consortium Fellowship, which enabled my travel to archives in Boston, and from a Barra Dissertation Fellowship at the University of Pennsylvania's McNeil Center for Early American Studies, which provided an environment utterly unique in the rigor it demanded, the scholarly relationships it nurtured, and the affections it continues to inspire. My thanks go especially to Kate Viens and Conrad Wright at the Massachusetts Historical Society, the staff at the Congregational Library, Mary Warnement at the Boston Athenæum, and Dan Richter at the McNeil Center.

Over the years this project took to complete I was married, my beloved grandmother passed away, I moved from the West coast back to the East, I bought a house, and I became a mother. The constants are dearer than the changes. To my mother I give my most profound thanks for showing and shoring me up with a tenderness mixed with ferocity such as I have never seen. To her mother, my grandmother: even in death you show me what it means to be strong while alive. To my father, I give you back all the little moments of awe I experienced when in the course of writing or reading something I saw just how many of my analytic dispositions are yours. To my stepfather, Larry Kaplan, I thank you for your gentleness and your care, for your glasses of wine, your roast chicken, your always-open house (which is, you remind me, my house, too). Nathan, Bethany, Hannah, and Micah: It is always better with you in it. Mama, thank you for your elegance and your faith, for moving through the world with so much light. Sean, for your constancy; Poco, for your joy; Harley, for your bright white pouf.

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Introduction

The Profanities

“Verbal artistry can be a force for mercy.”

—Susan Howe, 2009

The Puritans had an exceedingly active concept of profanity. What one did, what one spoke, what one thought were all occasions where perversion might enter. The third category, what one thought, was the most fearsome, because beyond the uglinesses of one’s whole hidden intellectual-affective life – private lusts and petty jealousies, for example – it included harder doubts about the existence of God or his goodness. “Whatsoever men thinke of thoughts,” warns one of the giants of the first generation, “yet they are the very life and sinews of sinne” (Hooker, *Preparation* 28). This study explores three varieties of struggle with this profanity of mind as it appears in the literature of Thomas Hooker, Cotton Mather, and Jonathan Edwards, by attending to the techniques of mental representation – what I call ‘cognitive style’ – that their writing makes manifest.

Fuller definition of my term, ‘cognitive style,’ begins by stating that my inquiry has two general points of departure. The first can perhaps best be described as an impatience with recent appraisals of the religious turn in early American studies, in at least one regard, and which we can look to Edwards to introduce.¹ “The beginning of the late work of God in this place,” the minister writes in his preface to a sermon series seeking to explain the 1734-35 Connecticut Valley revival, “was so circumstanced that I could not but look upon it as a remarkable testimony of God’s approbation of the doctrine of justification by faith alone” (*Preface* 795). The sermon was published in 1738, adapted from a version Edwards gave at Northampton; the occasion it spoke to – the mass evangelical conversions commonly known as The Great Awakening – had been extinguished several years earlier, after having pitched themselves, by all accounts, further and further into a wildness like delusion; and still here Edwards grounds this “late work” of revival in *doctrine*. The particular point Edwards has in mind he calls ‘justification,’ as did his predecessors and contemporaries. Today we are apt to sum it under the concept of predestination, though the Westminster Catechism (1647) – one of the three or four “most generally received and authoritative standards of the Reformed Churches” (*Systematic Theology* 115), one of Edwards’ successor’s, Princeton’s Charles Hodge, expounds – states that justification is more fully: “An act of God’s free grace, wherein He pardoneth all our sins, and accepteth us as righteous in His sight, only for the righteousness of Christ imputed to us, and received by faith alone” (qtd. in *Systematic Theology* 114).² At the center of my study are these two doctrines of salvation by faith and grace alone, *sola fide* and *sola gratia*. Though these concepts fill the writings of New England divines from Hooker to Edwards, they are ideas from which Puritan studies has become increasingly unmoored – even as early American studies’ new interest in religion is what, ostensibly, revitalized Puritan scholarship in the first place. As both Jenny Franchot (1995) and David Shields (2000) have observed, between 1990 and 2000 – in

the very moment religion was becoming visible in literary scholarship – consideration of religious doctrine was all but obsolete. With some exception, it still is.³

This is sensitive territory, rightfully so. It has taken extraordinary scholarship across African American studies, women's and gender studies, and Native American studies, among others, to bring into view lived experiences that our field has historically occluded.⁴ The work has been to loosen the long, really quite tenacious, identification of early America with New England's "religious history as the origin of American intellectual history" (Rivett, "Early American Religion" 994), with all the exclusions of subjecthood that privileging entails. It is equally true that the best recent work in Puritan literary studies has discovered relations between body and mind, experience and doctrine, which give up new ways of reading Puritanism altogether: thus Sarah Rivett (2011) demonstrates the intertwining of salvific with sensational and empirical knowledge, and Cristobal Silva (2011) traces the rhetorical practices spurred by sick and well bodies. Their studies widen our conceptualization of Puritanism by bringing it down, for example, to the deathbed and the inoculated body. Nonetheless, the point remains that if religion has largely become reclassified as experience,⁵ theology itself is still more often regarded as erroneous, superseded, suspect, or quaint.⁶ Thus "each shift in emphasis," note Jordan Stein and Justine Murison in their very good survey on religion and method in early American literary studies, "can be understood as a flight from the possibility that a prior or alternative approach to "religion" is *too theological*" (4). That Stein and Murison themselves say little more on this state of affairs is only a sign of how tacitly the theological omission has ghosted this "turn around religion." In contradistinction, I argue, one of the promises of studying Puritanism in a post-secular age is that we might become attuned in radically new ways to the aesthetic expressions of religious belief, by assuming the imaginative task of appreciating how, for early New England divines, the intensities of doctrine were never anything other than vital. "American Puritanism and the Cognitive Style of Grace" motivates this effort in a double way: by taking as its theme the mental labors specific to a Puritan theology of grace; and by maintaining the imperative of calling those labors arts.

This latter claim is neither straightforward nor intuitive, and it is my study's second point of departure. In the past quarter-century, cognitive studies in literary scholarship has become increasingly adept at apprehending acts of mental representation – a "poetics of mind" (Gibbs 1994) – through the histories and methodologies of the sciences. Within the discipline, what is often called "embodied cognition" (Jaén and Simon) places a premium on the universalism of the processes that occur in the human brain when we imagine – not, that is, the content of creative thought, but its neurological apparatus. As soon, evolutionarily, as we had cognitive processes, says Mark Turner, we had a capacity for narrative imagining: "the literary mind," he declares in a volume of the same title, "is the fundamental mind" (v).⁷ The methodological implications for literary criticism and theory are extreme. Reframing operations of mind as universals, cognitive studies has on one hand restrained a freewheeling poststructuralism that admits to no universal truth. On the other, cognitive studies of this sort professes to contain all varieties of interpretation within an 'ur' theory of human interpretative capacity writ large. To listen to its extreme advocates, cognitive studies will subsume all past and future socio-political, ethnic, ethical, and linguistic perspectives within a longer, surer history. "When the intellectual history of the late twentieth century is written," insists Alan Richardson,

“Anglophone literary theory and criticism will probably come in for a wry footnote or two”:

Scholars of the future age may well find amusement in the pretensions of one English professor after another to solve the riddles of human agency, subject formation, language acquisition, and consciousness, with little or no awareness of the spectacular developments in psychology, linguistics, philosophy of mind, and neuroscience that form the central story of Anglo-American intellectual life from the 1950s to the present. . . . The cognitive neurosciences have emerged as [the] most exciting and rapidly developing interdisciplinary venture of our era. That this remains news to many working in literature departments has already become something of an embarrassment; it will steadily prove more so. (39)

Beyond the imperiousness of Richardson’s commentary, his point is that the uniformity of human neurological processes “form the possibility of the cultural” (Richardson and Steen 3), because these universal or “phylogenic” operations must result in *specific* outcomes as a matter of course. As a critic, I might skew toward queer theory and you toward posthumanism, but the neurology that leads to both perspectives is the same. Cognitive activity produces difference, in other words, precisely by proceeding “naturally.”

This is historicizing on the largest scale, and it does well enough for a meta-narrative of human thought. For the literary scholar invested in exploring her subjects’ own models of cognition, however, it is quite impossible not to feel that it rather misses the point. The totalizing bent in cognitive studies makes all other conceptual systems internal to its framework, each being but another moment within what we might call ‘a natural history of subjectivity.’⁸ It should not surprise us, then, that the discipline has had most benefit for our understanding of genres, primarily the novel, which take their place in a secular tradition, amid rising belief in a liberal subject for whom truth and reality are mutable precisely insofar as they are understood as being constructions by the self for the self. Cognitive studies does considerably less for apprehending a people’s own framework of cognition, because it leaves little room to pay respect to ‘styles of thinking,’ as I will call them, which work on behalf of essentialism of another kind altogether – a theory that holds, for example, that there is a God who has determined your salvation or damnation before the beginning of time.

For the Puritan who traveled to the New World and for their immediate inheritors, cognition was internal to these doctrines of *sola fide* and *sola gratia*; they were the domains that ordered thought, and not the other way around.⁹ Together, as I have articulated, they refer to the inscrutable and wholly unearned (thus arbitrary) mercy God grants to a soul he has elected for heaven. They also levied a particular difficulty: If one’s eternal fate was determined before the beginning of time, how was one to move closer to God? I argue that in addition to the phenomena of belief, feeling, social being, devotional practice, and self-scrutiny, *thinking* itself became a means of inhabiting this paradox at the center of the Puritan question of grace.

This project revolves around three moments in the history of what Mary Carruthers (1998) has called “the craft of thought” – instances, respectively, of thinking in image, in word, and in number. The first occasion was a 1584 dispute between iconographic and dialectic arts of memory that came to exert significant influence on

Puritan sermon style. The second was the Renaissance ideal of *copia*, a unified field theory that dreamed a correspondence between all words (*verba*) and things (*res*) and was taken up by Mather. The third was the rise of an infinitary mathematics that peaked in England with Newton's introduction of calculus and was plied by Edwards in his disquisitions on conversion. To grasp not merely what these 'styles of thinking' were but how they felt, I also contend, it is necessary to remember that many of the fields we today identify as cognitive sciences were first and most powerfully understood as cognitive arts. From the classical period through the Renaissance, the cognitive labors required first of the orator and then of the preacher were understood within the context of rhetoric. They related particularly to the act of creative invention, or *inventio*, classical rhetoric's first part (Carruthers [1990] 2008; 1998). "American Puritanism and the Cognitive Style of Grace" aims to revive this essential fact, by formulating an idea of 'cognitive style' that mediates between intellection, representation, and belief. In doing so, I launch a new history and theory of American Puritanism around the arts of thinking that Puritan theology made requisite.

2.

How, then, should we parse the rhetorical tradition that came down to the Puritans? As one part of the *trivium*, those three "arts of language" – grammar, logic, and rhetoric – "pertaining to the mind" (Sammartino and Rappaport xiii), it structured much of the curriculum at Emmanuel College, Cambridge – "that Puritan seed plot" (Sawyer 153) that nourished two-thirds of Massachusetts' first-generation ministers. "Grammar is the art of inventing symbols and combining them to express thought; logic is the art of thinking; and rhetoric is the art of communicating thought from one mind to another; the adaptation of language to circumstance" (3), Sister Miriam Joseph reminds us. "Rhetorique is an art," Thomas Wilson tells his own readers in *The Arte of Rhetorique* (1553), "to set further by utteraunce of wordes, matter at large, or (as Cicero doeth saie) it is a learned, or rather an artificial declaration of the mynde." Its threefold "ende" is "To teach. To delight. And to perswade" (1). Instruction in the last, persuasion, filled the textbooks at Harvard, erected as it was to train the future ministry in the wake of Anne Hutchinson's heterodoxy. Rhetoric especially was paramount to a community of God's men who turned their whole lives to communicating the light of Scripture (and to flocks that had, in many cases, come to the New World all in order to hear them). When in the *Soules Preparation* (1638) Hooker instructs, "As the steward disposeth every thing at his Masters will, and the Apothecary orders drugs as the Phisitian appoints ... let us take that course & use those meanes that God hath appointed" (59), he is referring to the labors by which we see our sins; but he could as easily have been speaking to the minister's use of the art of rhetoric.¹⁰

In his Harvard oration in the mid-seventeenth century Michael Wigglesworth defines rhetoric as the "ability, fully & clearly, & gracefully & readily to express in words what the mind in thought conceives" (qtd. in Miller, *Seventeenth-Century* 303). Perry Miller, of course, provided much in the way of its topography and application; but given that praise of Miller in any regard still constitutes something of a profanity in the field, and, more to the point, given that rhetoric is its own discipline, treated with enormous complexity by philosophers, literary theorists, linguists, and historians, it seems prudent here to specify what this project is by stating what it is not. It is not a project *on* rhetoric

(or its affiliated art of logic, or dialectic),¹¹ nor is it a history of the ideas of memory, *copia*, or infinity. It is a literary study that refracts Puritan ideas about grace through Puritan uses of rhetoric, exploring three styles arising from the cognitive ordeals wrought by a theology that was driven, on the one hand, by a belief in predestination, and on the other by a conviction that no matter the state of one's soul, one must spend his whole life striving toward God. My suggestion is that these 'topics,' when properly understood in light of the classical tradition the Puritans inherited, emerge as rhetorical exercises that constitute, rather than merely avow, the theological subjects around which they coalesce. The cognitive style did not reflect a theology of grace; it composed it.

'Topic' is an Aristotelian concept, so best to begin there. '*Topos*' (Lat. '*locus*') is not properly a thing, but a technique for the finding of arguments – finding, not 'making,' as our contemporary understanding of invention prescribes. Likely it derived from the ancient *ars memoria* I take up in Chapter 1: "For just as in the art of remembering, the mere mention of the places instantly makes us recall the things," says Aristotle, "so these will make us more apt at deductions through looking to these defined premises in order of enumeration" (*Topics* 163b28-32). Genealogy aside, as Ernesto Grassi explains: "For a successful discussion all arguments have to be at hand. In other words one must know the *loci*, the places where they are to be found easily. Here, too, topics would mean the theory of arguments or points of departure which have to be available" (42-43).

Topoi themselves occur within the framework of classical rhetoric's famous five canons: *inventio* (invention), *dispositio* (arrangement), *elocutio* (style), *memoria* (memory), and *actio* (delivery). "[A]ll the activity and ability of an orator fall into five divisions," Cicero instructs in *De Oratore*: "he must first hit upon what to say; then manage and marshal his discoveries, not merely in orderly fashion, but with a discriminating eye for the exact weight as it were of each argument; next go on to arrange them in the adornments of style; after that keep them guarded in his memory; and in the end deliver them with effect" (I.xxxi.42-43). The five-part delineation is in some senses confusing, because the very necessity of the model proceeds from the fact that neither thought nor style are sufficient on their own. On this the classical rhetoricians and philosophers are insistent: "Every speech consists of matter and words," explains Crassus, Cicero's avatar in *De Oratore*, "and the words cannot fall into place if you remove the matter, nor can the matter have clarity if you withdraw the words" (III.v.19-20). A great many Renaissance and early modern thinkers devoted themselves to plotting this interplay. Only more recently has scholarship in rhetoric begun to understand that a concept of the literary was vital to these theorizations (Cummings, "Invention").

My study moves, in a sense, in the other direction, taking as axiomatic the Puritans' literary artistry, and relating that activity to their theories of thinking. Nearly thirty years ago Patricia Caldwell showed that for the individual who desired membership in New England's churches, faith was an act of sheer literary vitality, to be professed, we will hear New Haven's John Davenport say, "with all my heart and confesse[d] with my mouth" (*Profession* n.p.). A multitude of anxieties hounded this vitality. One concerned taking too much liberty, being too 'inventive'; another concerned being too formulaic. All expressed Puritanism's essential ambiguity: that one could never be sure of the state of his soul.¹² In her readings of conversion, Caldwell beautifully explained this constellation of feeling as a literary problem. I want to suggest that it is also a problem of mind.

For what remains to be said is that the Puritans' intellectual-affective activity was literary *by virtue* of being cognitive. As William Weaver reminds us, in the rhetorical

tradition from Cicero and Quintilian through Erasmus and Ramus, one spoke of figures of word (*figuræ/schemata verborum*) and figures of thought (*figuræ/schemata sententiarum*). Erasmus, famously, refers to *res* ('things'/subject matter) and *verba* ('words'/style), which ideally come together both to form and to formulate an idea (also called *sentia*). One of the undercurrents in the history of rhetoric – the very same that hovers around Cummings' reappraisal of Erasmus' literariness – is the series of intentional and unintentional modifications by which style comes to assume greater significance. Weaver's own reappraisal on Melanchthon, "[l]ong relegated to footnotes status—as a precursor of Peter Ramus" (368), centers around Melanchthon's taking of "some of what [Quintilian] covered under the heading of *invention* and treat[ing] it again as part of style because of its persuasive effect" (376). Erasmus, again more famously, brings 'the abundant style,' *copia*, even further toward invention. Though his *De Copia* (1512) means to subordinate *verba* in service to *res*, the total effect of the treatise may be to show that the primacy goes the other way around. His text, writes Terrence Cave:

reveals that 'things' can only become apparent by virtue of language. *Res* are neither prior to words as their 'origin,' nor are they a productive residue which remains after the words cease. *Res* and *verba* slide together to become 'word-things'; the notion of a single domain (language) having a double aspect replaces that of two distinct domains, language and thought." (21)¹³

Or here again is Cummings: "*Res* comes to us already formed in words, and in the writing that contains them. It is not therefore an affect of literary style that makes Erasmus place primary attention on the universe of extant writing. Literature ... provides us with the storehouse of all the ways in which human beings have thought to express themselves. (Cummings, "Encyclopaedic" 191). One of the oddities and one of the powers of *copla* lies in its habit of subsuming, almost despite itself, the content of thought into the form of thought's rendering – that is, into language itself.

To understand Hooker, Mather, and Edwards as participating in this history of rhetoric is to reconceive the plain style in ways other and stranger than have been done before. Miller, who understood that the Puritans welcomed rhetoric so long as it did not overstep its purpose to be "a sugar for the pill" of doctrine (*Seventeenth Century* 361), undermined that position by so strenuously insisting that their rhetoric stood on the back of logic. For Bercovitch, of course, typology was what allowed one to say that "plain style and passionate allegorizing are related elements of Puritanism" (*Ziff* 40);¹⁴ but his ideological imperative – and that of many works of scholarship that followed suit in the 1980s and 1990s (Toulouse; Kibbey; Schweitzer) – lay Puritan rhetoric with a charge it would not have recognized.¹⁵ Zachary McLeod Hutchins (2014) has examined the Puritan plain style lexically, Michael Brown (2007) materially, Meredith Neuman (2013) as the literary production of its auditors. The intention of this project, in contrast, is to seam together Puritan rhetoric with the particularities of doctrine that Puritan literature always took as its implicit or explicit subject, by restoring cognition itself as a rhetorical category.

Does this approach run the risk of retreating into a high intellectualist history. To this question I would give two answers, one practical and one essential. Practically, I would insist that the men I am concerned with *were* intellectuals, and that to ignore their influence in this regard is to begin any analysis of lay piety from a position of serious disadvantage, if not distortion. More essentially, to say that looking at the cognitive frameworks of New England divines is intrinsically exclusivist is to ignore that the way a people think is a basic means of holding them in relation to others, of establishing a horizontality, rather than a hierarchy.¹⁶ Although drawing those relations is not the purpose of the present study, I do hope that the readings in the chapters that follow can help to spur that work by offering new ground for exploring Puritanism's social, cultural, and political registers, both their powers and their inflections.

This study also aims to dispel the fantasy, first exposed by Gene Wise, which “liked to think of the society and culture of the US as a seamless whole” (124). I would argue, even, that this project is a necessary first step in that process, insofar as the “ur-theory” of American History was the result of a whole Whigish trajectory from “Puritan to Yankee” (Bushman), in which the awesome pieties of the former transmuted into the ideologies of the latter. In the most general terms, the history of Puritan scholarship since at least the 1980s can be understood as an endeavor to dispel that exceptionalist idea.¹⁷ (It should also be said, openly, that an early Americanist's greatest fear is to be seen as contributing to an opposite direction.) Over the past quarter-century historians and literary scholars have very cogently understood Puritanism in the context of its transnationalism and increasing sectarianism (Foster); its social frameworks (Hall 2011; Butler; Lambert); its power structures and normalizing systems (Brooks 2003; Wyss; Bross; May); its performative dimensions (Gustafson 2000); its popular culture (Winship 2012); its material culture (Brown, Neuman); its affective orders (Van Engen); its experiential registers (Rivett 2011; Silva). Less directly has it been seen as a religious movement, where by religious – to invert Stein and Murison's phrase – we mean “creed not practice.” In contemporary scholarship, in fact, it has sometimes seemed that Puritanism could be fairly apprehended as anything but.

This monograph returns Puritanism to its doctrines. Simultaneously, by contextualizing Hooker, Mather, and Edwards' theories of thinking it pursues a new route to dislodge an exceptionalism that has often rooted itself in a Puritan myth of American origins. When Hooker uses a late-sixteenth-century memory debate to explain preparation; when Mather suits the Renaissance ideal of *copia* to New England's ecclesiastical crisis; and when Edwards dispenses the epistemological paradoxes allowed by British calculus to ‘treat’ revivalism, we see them as thinkers who strove with enormous creative energy to reckon with the theological convictions of their time and place, and who in the process were of many times and places. A significant effect of my study, then, is to reconceive American Puritanism as the *end* of a European intellectual inheritance, rather than at the start of an American telos. For what we find, when exploring Puritan application of three cognitive styles that had their origins in antiquity and significant afterlives in the West, is that the ‘distinctiveness’ of the Puritans' craft of thought lies not in its bringing forth the “fresh green breast of the new world” (as Fitzgerald had it), but in the literary and formal registers of its melancholy for worlds existing always behind or outside it. The Puritans were immigrants, they were Englishmen, and their use of memorial, copious, and infinitary cognitive styles was not an innovation, but a continuity.¹⁸

That memory, *copia*, and the infinite should afford Hooker, Mather, and Edwards styles for reckoning with their theology is all the more remarkable given the Puritan directive that, as a general rule, they were topics to be avoided. The threat, in every case, had to do with their powers of aggrandizement: in their sheer capaciousness, memorial, copious, and infinitary styles threatened to express in excess of the powers afforded to man. Increase Mather's brother, Samuel Mather, quite neatly sums the point. In *A Testimony from the Scripture against Idolatry & Superstition* (1672):

As in the sixth Commandment, Thou shalt not kill, this forbids all rash anger, even passionate words, and thoughts. Mat. 5. 21, 22. and in the seventh Commandment, though Adultery only is named, *yet by the like Synecdoche all other kinds, and Degrees of uncleanness are included, and intended under that, even filthy thoughts.* Mat. 5.21. Therefore, so are all Humane Inventions under graven Images. For there is the same reason of Carved, painted, molten Images, yea, the most refined spiritual devises and Inventions of men. (7; emphasis added)

The heresy of image, word, and thought blur under the sin of invention. In the case of at least the former two – impulses toward image and word that I contextualize within the art of memory and the history of *copia*, respectively – the concept of '*topos*' itself helps to illuminate (or telescope) the danger. I have said that '*topoi*' as places of argument likely derived from classical place-memory, where '*topoi*' were the architectural structures, mentally beheld, in which one kept images associated with the words and things he wished to remember. "Now let me turn to the treasure-house of the ideas supplied by Invention, to the guardian of all the parts of rhetoric, the Memory," says the unknown author of the *Rhetoric Ad Herennium* (III.xvi.28). The former structures are, "for example, a house, an intercolumnar space, a recess, an arch, or the like," while the later images are "a figure, mark, or portrait of the object we wish to remember" (III.xvi.29). It is difficult to overstate the elaborateness of the visions this mnemonic required: one might build not merely houses or streets, but palaces, kingdoms, worlds. In the Puritan view this same elaborateness was at the heart of ideographic or iconographic heresy. So many visual forms blasphemed God's singularity, just as embellished literary forms violated the truth that God's word needed no adornment.

The danger in the visual sphere especially hounded the Puritans' complex attitudes toward sense perception – toward empiricism – as Rivett has wonderfully contextualized them: "Baconian empiricism," she writes, "anticipated the limitations of mechanical philosophy that would emerge most fully by the late-seventeenth century. Mechanical philosophers replicated this hierarchy of metaphysical and physical knowledge and then confronted the frustrations of developing a system for understanding the physical that simply could not lead to the metaphysical" (*Science* 26). Absolutely everywhere in Hooker's writing, for instance, is there a freighted relationship with sight: even as the minister reminds us and implores that we must behold our sins with an inner eye, "not in the appearance and paint of it, but in the power of it," his imperative constantly falls back onto the experiential life for its own explanation. Thus (the passage is worth quoting nearly in full):

There is great odds betwixt the knowledge of a traveler, that in his own person hath taken a view of many coasts, passed through many countries and hath taken up his

abode some time ... and another that sits by his fireside and happily reads the story of these in a book, or views the proportion of these in a map. The odds is great, and the difference of their knowledge more than a little: the one saw the country really, the only in the story; the one hath seen the very place, the other only in the paint of the map draw. The like difference is there in the right discerning of sin. The one hath surveyed the compass of his whole course ... *He hath seen what sin is and what it hath done ... and could count it happy that himself was not, that the remembrance of those hideous evils of his might be no more.* Another happily hears the like preached or repeated, *repeats them writ or recorded in some authors, and is able to remember and relate them.* The odds is marvelous great! The one sees the history of sin, the other the nature of it; the one knows the relation of sin as it is mapped out and recorded, the other the poison, as by experience he hath found and proved it. (qtd. in Miller, *The Puritans* 292-93; emphasis added)

It is not coincidental, I think, that memory plays a role in this vexed appraisal of experience; for (as my first chapter explains) the memory debates turned on the profundity or indecency of representations that took their cues from sensory experience. Perkins expounded Ramus' dialectical method because it conveyed the (ostensible) Reformed principle that to think about God meant that one had to think without the aid of things.¹⁹ Memorial *loci*, in contrast, held things *ad infinitum*, and so came treasonably close to usurping God's domain – which was, of course, the infinite itself. “As for that God is infinity and infinite in his mercy,” says Hooker: “there is no proportion, no comparison, the Earth is not of a valuable consideration to the Heavens, but like a Centre in the Circumference, it is as though it was not. So here ...” (*Application, Ninth and Tenth Books* 22). Each *locus* injures God's supremacy by putting another image of worship in his place; collectively, in “that universal treasure house the memory” (Cicero, *De Oratore* I.v.18), they erect a virtual pantheon of little gods. Small wonder, then, that for Hooker distempers exist in a storehouse, a warehouse, a treasury (*Application, Ninth and Tenth Books* 148). The virtuosity of his own memorial style, we will see, is that it both makes innumerable the things one wants to remember and purifies that innumeration in a moment of recollection that irradiates one's mind with the truth of them as a whole.

Copia was, in one of its formulations, a ‘place’ bearing just slightly different contents: not images but language. This is the treasury even Mather's contemporary critics of his style praise him for accessing: “It was Conversation and Acquaintance with him, in his familiar and occasional Discourses and private Communications,” says Benjamin Colman,

that discovered the vast compass of his Knowledge and the Projections of his Piety ... Here he excell'd; here he shone; being exceeding communicative, and *bringing out of his Treasury things new & old, without measure ... His Wit, and Fancy, His Invention, his Quickness of thought, and ready Apprehension ... were all consecrated to God ... and out of his Abundance ... overflow'd ... richness and brightness, pleasure and profit.* (qtd. in Murdock, “Cotton Mather” 22; emphasis added).

We must imagine Cotton choosing from among the vast store of doctrines, treatises, and texts he had at his mental as well as physical disposal, marshaling his ‘troops’ (another meaning of *copia*): “His Wit, and Fancy,” again, “His Invention.” What redeems these

multitudes, in Coleman's words, is that they are "all consecrated to God." Mather's style gathers linguistic variety into a point that illuminates God's majesty, turning over his 'topics' while keeping a singular and devoted focus on his subject.

Edwards' *topos* is perhaps the most impossible, because it is not an accumulation of endless things, but endlessness itself. The description Hooker gave of God is in fact a variant on the common definition of the infinite. Consider Pascal in Edwards' English edition of the *Pensées*:

The whole Extent of visible Things, is but one Line or Stroke in the ample Bosom of Nature. No Idea can reach the immeasurable Compass of her Space. We may grow as big as we please with Notion; but will shall bring forth meer Atoms, instead of real and solid Discoveries. This is an infinite Sphere, the center of which is every where, the Circumference is no where. In a word, 'tis the greatest among all the Sensible Marks and Characters of the Almighty Power of God. And let our Imagination lose it self in this Reflection. (164)

Neither sense nor imagination nor thought can fathom the infinite, and it is that very impermissibility that suits the idea to express an event that both is and is not 'sensible': the experience of conversion. Since Aristotle, the infinite had exemplified a negative theology that held that the divine was precisely what we do not know. Late-sixteenth- and seventeenth-century mathematical advancements that revealed we could, after all, have some positive understanding of infinity, made the concept newly and vitally applicable to "religious affections" that could not rationalize themselves in available terms, but must rationalize themselves nonetheless. Practical applications of the calculus modeled how, insofar as that mathematics did not merely permit but required a paradoxical idea of the infinitesimal for the successful calculations of curves and areas. To be able to plot, say, the trajectory and area covered when a stone is thrown from one bank to another meant that infinitesimals were somehow in this world though not *of* it. In the strangeness and profundity of that ontological possibility lay their purchase for personal 'awakenings' that existed on the bound between reason and imagination. With Edwards especially, then, we have come back around to experience. From the vantage of the present study, one of the most crucial benefits of that late critical emphasis – particularly as an extension of the scholarship in the 1980s on the affective life of Puritanism (Cohen; Delbanco) – is that it illuminates how seemingly inflexible theological doctrines become rather less rigid in devotional and other practices. In post-exceptionalist Puritan studies, my readings of Hooker, Mather, and Edwards suggest, we would still do well to emphasize that such practices include the act of writing itself.

Chapter 1, "Thomas Hooker on Memory and Grace," argues that Thomas Hooker's well-known but controversial doctrine of "preparation" was a memory art that mediated between works and grace. Contrary to a long scholarly tendency to categorize memory as part of the rational understanding, I show that Hooker made use of a far more prodigious concept. Concepts, rather, for the Renaissance featured two opposite and equally capacious models for the memory. The first derived from a classical mnemonic in which one memorized an almost infinite number of things by associating them with architectural 'places' – again, *topoi*. On a foray into England the Italian hermetic philosopher Giordano Bruno promulgated this general model through increasingly fabulous images and icons. The other system was the strictly dialectical 'method' of Peter

Ramus, which worked according to a relentless process of dividing and subdividing a subject, “presenting it to the eye as a coherent whole with its parts clearly and distinctly arrayed in space” (Johns vi) – that is to say, on the printed page. When Ramism “then vanished as an explicit intellectual cause,” continues Adrian Johns, “it did so not so much because its limitations had become apparent – they had always been that – as because the attitude it embodied had become a prerequisite for the act of thinking itself” (vi). The Cambridge Puritan theologian William Perkins, author of one of the master texts on Puritan sermon style, defamed Bruno’s system as perversely iconographic, and insisted instead on the intellectual stability and purity of Ramus’ approach. Hooker’s preparation has long been seen as an expression of it. This chapter eschews any such easy mapping of Hooker’s program onto Ramus’ by exploring the memorial style that undergirds preparation. I show that only by adapting both classical and dialectical models for the memory could Hooker find a program vast enough to convey his doctrine. Moving between memory as an operation for learning preparation’s stages, and recollection (*reminiscentia*) as a sudden spiritual witnessing of those remembered truths, Hooker rescues his program from the charge that it slid too far toward works-righteousness. Seen through the art of memory, preparation is not a litany of cognitive ‘works,’ but an intensely creative means to “set up the sail” by which one might “catch the gale of grace” (*Exaltation* 111). Memory redeems preparation as an intellectual-affective labor by which one primes oneself, as best his finiteness permits him, for the experience of apprehending in an instant God’s enormous gift.

Chapter 2, “Mather and the Multitude: The Halfway Covenant as Literary Event,” finds the rhetorical ideal of *copia* behind the Halfway Covenant’s drive toward numbers. From the late 1650s, as New England’s second generation came of age, Massachusetts found that the requirement that one ‘confess’ his or her conversion experience for admission into the church had run it into a corner. Many in this second generation, unable to give such an account, would be disallowed from baptizing their children; and yet to enforce that disavowal would effectively be to end Puritanism’s line. A series of synods between 1657 and 1680 ratified a more expansive policy, extending to anyone who “owned the covenant” – gave a ‘historical’ profession of faith – the rite to baptize their children. The expansion unleashed a pamphlet war between those who defended the synods’ decisions (‘synodals’) and those who denied them (‘antisynodals’). Moving beyond sociological analyses that have appraised the Halfway Covenant by tracing church populations, this chapter dwells in the rhetorical theory and method by which synodals and antisynodals alike used a copious style both to sustain themselves and defame each other. Significantly elaborating directives given by Cicero and Quintilian, Erasmus’ ‘abundant style’ proposed to match an infinitude of words (*verba*) to an infinitude of concepts (*res*). By the mid-seventeenth century, however, as the Royal Society codified the plain style, *copia* degenerated into a synonym for *garrulitas* – and so became a mark of increasing injury when applied to one’s writing. First the Halfway disputants themselves, and then Cotton Mather in his very clever retelling of the controversy, associate themselves with *copia*’s older ideal while levying its newer insult against their antagonists. The power of the latter charge as it flew between synodals and antisynodals – and as Mather coheres it the *Magnalia* – was that it spoke not merely to a deranged verbosity, but to an idea of church membership likewise compromised by placing quantity of bodies over quality of souls. To illuminate how the Halfway debates were waged in this copious style is to show the dispute as a rhetorical (hence literary)

event as much as a sociological one – and to demonstrate, in fact, that the former conveyed the latter.

Chapter 3, “Endless Things: The Infinitary Techniques of Jonathan Edwards,” proposes that Edwards used the paradoxes of the infinite as they unfolded in English and continental mathematics to reckon with the world of evangelism and revivalism. Though scholarship has made it admirably clear that for Edwards conversion was an affective-aesthetic experience, what remains to be explained is how “religious affections” account for themselves as an epistemology. This chapter provides an answer, by showing how Edwards recruited the new science of infinity for a cognitive style that could negotiate between knowledge and belief in precisely the historical moment when the two were splitting from one another. Edwards was not a solitary genius among the wreck of a Reformed tradition, alone in his grasp of Enlightenment science and its impacts for theology, nor was he a stolid defender of the faith against Enlightenment technologies of reason.²⁰ As critiques of the Awakening increasingly decried the frenzy of enthusiasm, Edwards sought to justify evangelical conversion in empirical terms while upholding it, always and ultimately, as a revelation of one’s predestined estate. To do so he did not soothe the differences between natural and supernatural explanations so much as he seized on the changing face of reason itself. It was precisely this that infinitary mathematics was codifying. Simultaneously as seventeenth-century advances in geometry and algebra converged in the introduction of infinitesimal calculus, neither they nor it could give consistent account of their operations. Natural phenomena showed that the predictions made using infinitesimals were correct, but to come to those calculations required that infinitesimals be, at two different points in calculus’ operation, two different things: now a quantity less than zero, now a quantity equal to zero. Necessarily shifting their denotations in this way, infinite entities ratified paradox, their natures not a dissimulation but a key into the mystery that Edwards throughout his corpus is at pains to uphold.

These memorial, copious, and infinitary styles reaffirm that for the Massachusetts orthodoxy, trenchantly bibliophilic and exceptionally trained in scholastic, humanistic, and Enlightenment methods, writing was the first, best means of reckoning with doctrine. As recently as 2013 it has been said that the genre of the tomes that resulted, “the sermon and the theological treatise, are peripheral to literary studies” (Gustafson 965). A popular author writing on the witchcraft crisis still refers unblinkingly (though alliteratively) to “parched Puritan prose and pursed Puritan lips” (Schiff 14). Hooker, Mather, and Edwards’ cognitive styles give the lie to both assessments, because their literature discloses how the Puritan orthodoxy thought, or strove to think, by modeling Reformed principles as rhetorical exercises. Hooker in cohering two opposite though equally capacious models for the memory, Mather in utilizing *copia* to confess plainness, and Edwards in recruiting a new mathematics of the infinite to elucidate conversion as an emotional event, demonstrate how rhetorical methods of accumulation are finally restorative, because they ‘compose’ not what one has made but the eternal reality in which one *is*. They take ‘forms’ of thought assumed to be profane, and call them holy.

¹ For foundational work on the secular, see Talal Asad, *Formations of the Secular* (2003); Charles Taylor, *A Secular Age* (2007); and Michael Warner, Jonathan VanAntwerpen, and Craig Calhoun, eds., *Varieties of Secularism in a Secular Age* (2010). For the new prominence of religion in literary scholarship, beginning around 2000, see Tracy Fessenden, *Culture and Redemption* (2007); Nan Goodman and Michael Kramer, eds., *The Turn around Religion in American Literature* (2011); Bruce Holsinger, “Literary History and the Religious Turn” (2006); and Ken Jackson and Arthur Marotti, “The Turn to Religion in Early Modern Religious Studies” (2004). Lawrence Buell (2007), Philip Gura (2009), and Sarah Rivett (2013) provide excellent overviews of this shift in the context of early American studies. Gura, affirming that “Shields’s observation echoed what many trained in the 1970s had observed, publicly and privately, as fewer doctoral students took the time to learn the intricacies of seventeenth- and eighteenth-century religion” (180), speaks especially – even poignantly – to the eclipse the present study aims to counter.

² Hodge in his *Systematic Theology* (1845) insists, quite correctly, that Edwards “was firm in his adherence to this view of justification, which he held to be of vital importance” (3.116). For an accessible history of predestination in America, see Peter Thuesen, *Predestination* (2009).

³ As a general rule, we have had to go to religious studies (i.e. Holifield (2003)) to find the exception.

⁴ An exhaustive list would run much longer than space permits. Some of the most important critical studies include Ivy Schweitzer, *The Work of Self-Representation* (1991); Joanna Brooks, *American Lazarus* (2003); Cedrick May, *Evangelism and Resistance in the Black Atlantic* (2008); Hilary Wyss, *Writing Indians* (2000); and Kristina Bross, *Dry Bones and Indian Sermons* (2004).

⁵ In addition to Rivett and Silva, and with very different and equally pioneering focus, see esp. Joana Brooks, “Soul Matters” (2013) and Ann Taves, *Fits, Trances, and Visions* (1999).

⁶ This is especially true, as Michael Kauffman (2010) and others have elucidated, in the secular academy, where for example we “teach the Bible as literature – that is, as a body of work whose value resides in its responsiveness to the techniques of (secular) literary analysis. Or you teach American Puritanism as a fascinating instance of a way of thinking we have moved beyond: There used to be these zealots and they wanted to run things, but we’ve gotten over that and now we can study them without being drawn into the disputes about which they were so passionate” (Fish n. p.).

⁷ Reuven Tsur (2002, 2008) holds, similarly, that universal mental operations can “explain the historical appearance of certain more or less universal elements of prosody” (Jackson 2002, 170). Raymond Gibbs and Eric Berg (2002) have provided experimental validation for these “cognitive universals”; and Mark Turner (1996, 2002, 2007) and Turner with Gilles Fauconnier (1999) have persistently advanced a theory of ‘blending’ – conceptual integration of “two mental packets of meaning” into a new third.

⁸ Tellingly, for example, religion is only one of the “historical systems” Turner offers. Religion itself is one of the effects of the acquisition, during the Upper Paleolithic Age, of “a human imagination with its ability to create new concepts and new mental patterns” (“Cognitive Study” 16).

⁹ This is a variation on Lucien Febvre’s (1942) idea of the “limits of the conceivable.” We do well to remember, in other words, that full rejection of theism was not possible before the scientific revolution of the late seventeenth century, because the hard distinctions between natural and supernatural causes initiated by Descartes, Hobbes, Spinoza, and Newton had not yet appeared.

¹⁰ We can say the same, even more concisely, in this point of ‘Doctrine’: “A plain and particular Application of special sins by the Ministry of the word is a special means to bring the soul to a sight of, and sorrow for them” (*Application, Ninth and Tenth Books* 193). Aristotle too had compared the rhetorician to the physician in his *Rhetoric* (I.2.1355b26f).

¹¹ For classical, medieval, and Renaissance rhetoric, see George Kennedy (1980), James Murphy, (1974), and Peter Mack (2011), respectively.

¹² Scholarship in the 1980s (Cohen, Delbanco) discovered this ambiguity – the wracking cycles of doubt and assurance – as the hallmark of Puritan style. For an excellent survey of that critical disposition, see David Hall, “On Common Ground” (1987) and Michael McGiffert, *God’s Plot* (1994).

¹³ For memory’s role in their integration, see esp. 131-33.

¹⁴ For other early summations of the plain style, see David Hall, *The Faithful Shepard*, (2006), esp. 52-55; Marvin X. Lesser, “All for Profit: The Plain Style and the Massachusetts Election Sermons in the Seventeenth Century” (Ph.D. diss., Columbia University, 1967); and Jesper Rosenmeier, “‘Clearing the Medium’: A Reevaluation of the Puritan Plain Style in Light of John Cotton’s *A Practicall Commentary Upon the First Epistle Generall of John*,” *William and Mary Quarterly* 37 (1980): 589-91.

¹⁵ This is not at all to say that illuminating the more latent motivations within Puritan rhetoric is unimportant. But I do think, particularly in its most indignant formulations (Kibbey), criticism of this sort threatens to elucidate nothing so much as its own indignation.

¹⁶ Jared Hickman (2013) has in fact offered a similar prospect, indicating how a global or ‘cosmic’ view of religious cultures might challenge a secular perspective by showing it as the exception, rather than as exceptional.

¹⁷ It would be tiresome to diagnose this state of affairs, beyond saying that one way or another it still comes down to Perry Miller’s ghost. In this trend as in most others, there have emerged principle camps.

¹⁸ Might it even be that this methodology can participate in reconceiving the idea of the Puritan scholar him- or herself, insofar as one’s especially (or egregiously) “emotionally charged investment” (Weber 381) with the field has been almost insolubly associated with one’s feelings for the *nation* – for America? For scholars of the 1960s and 1970s, as Leo Marx has impressed (2005), those emotions were deeply fraught; half a century later, they are most legible to the extent that one detects a bashful nostalgia for them. And yet, identification of the Puritan scholar with one who puzzles in one way or another over the American nation is so persistent that to propose there may be other reasons to be “crazy for the Puritans” (Weber 380) may be radical indeed.

¹⁹ Early modern studies (Dyrness; Spraggon) has for some time now nuanced our understating of the role of visual culture in the Reformation and in post-Reformation practice and habit. Historically and on the whole, scholars of American Puritanism have been disinclined to regard their work as part of that broad revision, preferring instead to apprehend Puritan aesthetics within a national, if no longer an exceptionalist, frame. One of the aims of my work, particularly with regard to Hooker’s adaption of classical mnemonics, is to incite a reappraisal of that tendency.

²⁰ Attempts to up the ante in either direction, taking Edwards as plainly exemplary either of the radical Enlightenment mind, or of a persevering dogma that unaffectedly Christianizes wherever it goes, fare badly. Leon Chai, *Jonathan Edwards and the Limits of Enlightenment Thought* (1998), is representative of the first impulse, Avihu Zakai, *Jonathan Edwards’s Philosophy of History* (2003), of the second.

1. Memory and Grace in Thomas Hooker's New England

It is impossible even to think without a mental picture.

—Aristotle, *De Memoria et Reminiscentia*

I cannot remember many things which I cannot now express.

—Confession of Nathaniel Sparrowhawk,
Cambridge, 1636

This is one thing which is undoubtedly implied in that place by the consent of all interpreters that I know ... *in remembering I remembered*, they were daily musing.

—Thomas Hooker, *The Application of Redemption, Ninth and Tenth Books* (1657)

At the center of the orthodox Reformed tradition lay one conviction with two parts: the total, indelible depravity of mankind, result of Adam's disobedience in the Garden; and the will of an omniscient, absolute, and perfectly arbitrary God who, upon that fatality, took it entirely in his own hands whom he would redeem and whom he would not. The Puritans refused to ascribe to any other power the outcome of their souls.¹ In the sermons of Thomas Hooker, whom scholarship on Puritan New England once took to broker an exchange of grace for works, we can still hear the ardency of this belief in *sola fide*.² “*The offer of grace from God is altogether free*,” the minister tolls in an early forerunner to his colossus, *The Application of Redemption*. “There is nothing but onely Gods will that moves him, nothing but his owne good pleasure that perswades him to shew mercy to a poore soule, there is nothing out of God that can move him, or purchase this favour from him,” says Hooker: “and this cuts the throates of merit-mongers the Papists” (*Unbeleevers* 6-7; emphasis added). The Catholic Church, Hooker proclaimed with his brethren, had for centuries and with its parade of bishops and their promises defamed God's rule, insisting that one could wipe his sins clean by practicing devotion to any of the manifold idols “this pretended Catholike Church of Rome” had fashioned – if only, after everything, he could pay the right price.

The Puritans' outrage, then, had to do with the assumption that man could worship his way to heaven.³ If one could do that, then God's all-sufficiency was defiled. This religious dispute, which concerned the possibility or impossibility of man's contribution to his own salvation, was equally and essentially about how one was to represent divine things in the mind. ‘Works,’ I am contending, was really about cognition. Such plumping confidence as we gain in *thinking* about means comes uncomfortably close to committing a heresy of works in mind. My argument is that we elucidate this relationship between works and grace in a most powerful way when we look at memory.

For what we find, when viewing the faculty through the history of its idea, is that memory surprises in terms of its absolute centrality to style. By this term, crucially, I mean the art of rhetorical composition and the activity of creative thought out of which that craft arises and which it serves as a living, because literary, testament. From antiquity through the Renaissance, and with some of the severest aftershocks in Hooker's own period, memory was the element that both fused and kindled this relation between form and content. Hooker unfolds it better than most, for reasons and with effects this chapter will explore. Applying memory to the doctrine known as preparation, I argue, Hooker discloses that one's style of thinking *is* the content of thought.

Why this corollary should bear so urgently on Hooker's Puritanism has a great deal to do with the contests preparation waged with other branches of the orthodoxy in Massachusetts and with itself. Preparation was the system, as Andrew Delbanco once described it, by which Puritanism "attached an intellectual program to its emotion" (49). More discretely, it entailed a sequence of steps by which a sinner could plot his readiness for grace in experiential time. The labor involved in following this series, lavished on the whole mass of instructions, corrections, and intonations by which one "tried to order the relations of man to God" (McGiffert, *God's Plot* 38) lay preparation open to the charge of works-righteousness. It is in this accusation where iconoclasm and preparation most cohere. The former designated the lunacy of worshippers praying, as Hooker says, to the "Idols of the Heathens" who "in the day of distresse will leave them in the lurch" (*Application, Ninth and Tenth Books* 25); but the latter, with its emphasis on serialization and order, refined iconoclasm as an ordeal of intellection. Hooker knew, as the Cambridge Puritan divine William Perkins had known before him, that the heresy of works is born as a thought: for "a thing fained in the mind by imagination, is an idol" (*Warning* 680).

Whether or to what extent preparation was guilty of works was, through the 1980s, a topic of such debate that we are still replaying the prevailing arguments rather than recognizing that in terms of complicating preparation, we may have moved the line of scrimmage slightly less than we would have thought. Scholarship has had a long tendency to share, often obliquely, in Perry Miller's original estimate that preparation urged Puritanism's grievous exchange of a sacred for a secular errand. Norman Pettit (1966), while building on Miller's argument, was the first to complicate that cast by tracing the idea of preparation in Reformed thought from Calvin through Hooker, though in the way of all criticism several of Pettit's original contentions were corrected or refined by later works of scholarship.⁴ Of these William Stoever (1987), explaining the theological contours of the Antinomian Controversy better than any work before or since, illuminated how preparation operated within a doctrine of free grace by utilizing an Aristotelian language of first and second causes. That insight topped a collective sense emerging in the 1980s, that our traditional labels of orthodoxy and heterodoxy had only gotten American Puritan studies so far (Hall, "On Common Ground").

One might have hoped that other scholars would go further, seeing in Stoever's work ground for exploring the possibility that preparation, precisely in its Aristotelian application, was radically more creative than we may have realized. That did not come to pass, but the anatomizations of the faultiness of the orthodox/heterodox divide that did continue to provide the foundation on which that work can stand. Through the beginning of the twenty-first century, the finest scholars of American Puritanism have located Puritanism's meaning in the most embedded sites of its ambivalence: Michael McGiffert (1994) in its cycles of doubt and assurance, Patricia Caldwell (1983) in its confessional

literature, Andrew Delbanco (1989) in its felt experience, Charles Cohen (1986) in its optimism, Michael Winship (2002) in its controversy with free grace, Sarah Rivett (2011) in its relation with the new science. Nonetheless, each of these studies in their own ways slants preparation's 'discipline' through other registers – gracious, literary, affective, psychological, socio-cultural, empirical – rather than troubling that inflection outright. In Winship's words: "Hooker and Shepard's fascination with preparation and conditions seems to have gone hand in hand with an inability to intuitively experience grace" (70).⁵

As *doctrine*, meanwhile, preparation continued to typify one of Janice Knight's two "orthodoxies in Massachusetts." The first of these privileged the working of the Holy Spirit, its line extending principally from Richard Sibbes in the Old World to John Cotton in the New. The second orthodoxy used preparation as a way to straighten experiential religion into rule, its idea traveling from Perkins to Thomas Hooker, who made it his domain (*Orthodoxies* 78-81, 96-99). Proceed through your raking and your humbling, Hooker's preparation insisted, and know whether your contrition is true; now move through your humiliation, your vocation, your justification, and know whether you can be assured of your salvation. Even as God alone could make contrition incise the heart, the elect were those who consented to that breach by their own will. Such participation Knight's "Spiritualists" could not concede.

To apprehend the unacknowledged role of memory in preparation troubles the conviction that Hooker had some squeamishness about Spirit. "Hence it is," Hooker announces:

that a poor ignorant creature that hath come many years to the Congregation, and hath learned nothing he understands nothing, remembers nothing, or if out of the strength of memory he remember something yet he knows no more the thing than a Parrat. But when God hath once turned him, and left this sett upon his understanding ... he can understand it, and remember it. (*Application, Ninth and Tenth Books* 42)

There is a reason why Hooker figures the cognitive experience of grace in precisely these terms. The event of the spirit re-speciates us, he would have us know. Where before we were a "parrat" that could repeat but not understand, now we see that sound is not the same as meaning. Although it makes use of recall, memory is something altogether other than bare repetition; and although it sparks man's greatest affective event, his coming to God, it is likewise distinct from a purely emotional shock. Instead, memory bred a cognitive style that permitted preparation to escape both the problem of images on the one side and the mechanistic 'works' of thought on the other.

To walk this line between idolatry and intellection posed great difficulty for the Puritans, particularly because the entrenched relationship between iconoclasm and cognition showed itself the more one strove to extricate himself from it. In England at the end of the sixteenth century, Perkins had already learned something of the pyrotechnics involved in holding both that "God is to be conceived as he reveals himself unto us" (*Warning* 658) and that God's unity in the Trinity means that "neither hath he given us power to represent him in this or that forme" (660). Anxiety concerning the difficulty of explaining, in positive terms, just how one *is* to represent the divine hounds the peripheries of Perkins' thought, inflecting his pains to distinguish the point at which, as a contemporary would have had it, "representation is to be distinguished from worship"

(Elliott n.p.).⁶ What we must bear in mind, Perkins exhorts, is the singularity of God, not in spite but because of the Trinity's impossible conflation of the numerous in the particular. It is precisely on this account that God "neither hath given us power to represent him in this or that forme." To lose hold of that singularity, and the style of worship that it impels, does "bleare the eyes of the world" (*Warning* 671). This was idolatry's substance. And yet, it is becoming clear, Perkins spends considerably more time than we might expect prescribing how we are to compose our thoughts – more time, as it happens, than demarcating what those thoughts must or must not be. That is to say, the ill-crafting of our prayers is as severe a breach as the more forward violation of prayer's content. "For when the mind abstracts the godhead from the father, sonne, and holy Ghost, god is transformed into an idol" (*Warning* 662).

Perkins' stress, though surprising, is less interesting in-and-of itself than for the trouble it leads us into. This was a mental difficulty that quickly enough was seen to infiltrate devotional practice: One could not think properly about God – in a word, one could not pray – when one's mode of thinking was itself so impaired by the Fall.⁷ If we are to represent God only as he reveals himself to us; and if God, being three-in-one, does not reveal himself in any material form, then what means are we left with to represent him? How are we to answer or obviate the heresy of our mental representations? Does proper worship require, inextricably, that we void devotional thought of perceptual content?

I argue that the collaboration Puritanism raised between the faculty of memory and the doctrine of preparation was one of the arts, and one the ordeals, by which it sought to try. Drawing on the faculty's classical history and Peter Ramus' purification of it, preparation invented a memorial style that, by making it neither bare intellectual nor affective labor, made it both. If in this view correct memory became crucial, so too did its failure become more dire. Perkins' *Warning against Idolatrie*, which was in fact the theologian's final word in a series of 1584 memory debates, and Hooker's *Application of Redemption*, which gives explicit place to the sin of forgetfulness, are only two of the most obvious testaments to that fact. "Againe," says Perkins in his *Warning*, "when God is adored in devised Images, the worshippers are *said to forget God*, though they thinke that they well remember him. And the reason is, because they forget not onely his commandements, but also the true knowledge or acknowledgment of God, so soone as they represent him in an image: for then he is conceived to be otherwise, then he is" (661). It is, finally, in the profoundly literary means by which Hooker composes an alternative to this 'otherwise' that it is possible to discern memory at the juncture of intellection and grace.

Memory and rhetoric from antiquity to Ramus

What, then, was memory, as Hooker would have understood it? What did it mean to remember? There are two routes by which we can approach the questions, one more interesting than the other. The first hoops memory entirely within Puritan faculty psychology, the general structure of mind that the Puritans understood to organize their intellectual-affective labors. Specifically, Puritanism subscribed to a tripartite conception of the soul, in which there existed the Understanding (the mind, reason, or brain), which advises; the Will (or heart), which accepts or rejects the reason's determination; and the

Affections, which spark the muscles that enable the Will, the truly active principle, to be done.⁸

Memory's place has been too routinely slotted into this hierarchy. For Bush, Hooker's finest reader, memory was a goad to meditation, the "impetus and subject of the meditative experience ... after which the understanding went to work on it, analyzing it first and then taking it to heart personally, with a final outgoing of spirit and will to God in colloquy" (*Writings* 196).⁹ Frank Shuffelton, Hooker's biographer, understood memory as an arm of the understanding. Miller before them thought likewise. None of these designation are without reason. Indeed, memory's role was ingrained enough in the mind of Hooker's congregation that he could, in *The Saints Dignitie and Dutie* (1651), afford to be perfunctory:

By hearkening, briefly you must understand these several particulars. The first is, a hearing with the ear. The second is, a closing with the truth, by the understanding of that we hear, for look as the ear receiveth the sound, so the mind and understanding must apprehend the sense, and assent to the truth of what is delivered. Thirdly, the memorie must retain and hold, that which the understanding hath received. The last and principall thing is the stooping of the soul, and subjection of the heart, to that which is understood and remembered. (124-25)

It is telling that until, perhaps, his last word, Hooker utilizes the kind of memory that he is describing, a rote recall ("retain and hold") that can speak to the order of mental events but not to their dimension, depth, or emotional effect. More significant are the instances where such strict separation of the faculties, not unlike the once crystallized line between orthodoxy and heterodoxy, gives up a limit to its use. In preparation, memory provides chief occasion, because to group the faculty as an aspect of the understanding does not explain why the great moments in Hooker's writing where intellection shudders into feeling cohere so forcefully around memory and forgetting. When coming, for example, in *The Soules Preparation* (1638) to a moment of "Doctrine," Hooker iterates and insists: "There must be a true sight of sinne before the soule can be broken ... First, they shall remember their workes, and then loath themselves" (10-11).

The second and more profound way to comprehend Hooker's use is by attending to the historical synonymity of memory with what Mary Carruthers has exquisitely identified, in largely literary terms, as "the craft of thought." In her words: "Human beings did not suddenly acquire imagination and intuition with Coleridge, having previously been poor clods. The difference is that whereas now geniuses are said to have creative imagination which they express in intricate reasoning and original discovery, in earlier times they were said to have richly retentive memories" (*Memory* 4). That slant endured for a good deal longer than scholars of Puritanism, in both Englands, have been given to assume, even as historians and literary scholars (Sullivan; Helfer) are heeding William Engel's call, some twenty-five years after the fact, to explore memory as an 'art' around which a people's conceptions of their relation to this world and the next cohered. "[I]t is surprising to me," Engels says in his "manifesto," that "so few literary historians have chosen to pursue the implications of what was surely commonplace to jurists, notaries, scholars, doctors, divines, teachers, and merchants from the fourteenth through sixteenth centuries" (12), especially given "the extent to which the artificial memory

persisted well into the seventeenth century and informed the literary works of the day” (19).

Memory, we find, grounds various statements by the Puritans that have all along disclosed the faculties have a thicker intimacy than we have been given to assume.¹⁰ Perhaps the most pointed example occurs in Perkins’ discussion of ‘thought,’ or what the Puritans frequently called ‘imagination.’ “By *Imagination*,” Perkins clarifies, we

meaneth the frame, or framing of the heart. And this is taken two wayes: of some, for the naturall disposition of the understanding after the fall of man: of others, for that which the minde & understanding by thinking frameth, plotteth, and devisech ... Where by *thoughts* or *Imaginations* can nothing else be meant, but that which is devised and plotted in the thoughts of mans heart. (*Imaginations* 458; original emphasis)

Particular strands within the history of memory go a considerable way toward apprehending the bizarre fact that thought, or ‘imagination,’ happens in one’s heart as often as in one’s head. One is etymological; another, which expounds it, is conceptual. “Even though the physiology of consciousness was known to occur entirely in the brain,” Carruthers writes of the Alexandrine model that continued through the Renaissance,

the metaphoric use of “heart” for memory persisted. “Memory” as “heart” was encoded in the common Latin verb *recorandi*, meaning “to recollect.” Varro, the second-century BC grammarian, says that the etymology of the verb is from *revocare* “to call back” and *cor* “heart.” The Latin verb evolved into the Italian *ricordarsi*, and clearly influenced the English early use in English of “heart” for “memory” ... there is an Old English use of “heart” to mean the “the place where thoughts occur,” *cogitationes*. (*Memory* 48-49)¹¹

Owing almost entirely to Carruthers’ work, we know that memory from antiquity through the Renaissance assumed the power that we today assign to creative, indeed literary, thought. Its conceptual preeminence traveled, as is now necessary I should elaborate, from Greece and Rome through Augustine to the greatest names in scholasticism, Albertus Magnus and Thomas Aquinas himself. From there it passed, with some change in emphasis, to humanist luminaries (Erasmus), to the first and subsequent architects of the Reformed tradition (Melancthon, Beza), and, most crucially, to the Anti-Aristotelian Peter Ramus and to those such as Perkins and Hooker who, assuming the tradition, inherited the presuppositions both about human thinking and rhetorical invention on which it was borne.

By the late sixteenth century the art of memory had split into two quite hostile camps. The first of these was a hermetic elaboration of the classical art known as place-memory, which worked as follows:¹² think of an architectural place, preferably a building, usually a house.¹³ Choose a room within it; this is our *locus*. Into this place we will put a mental picture, what Aristotle calls *simulacrum* or *imago* or *eikón*, corresponding to the word or thing we wish to remember. When we come to that part in a speech – or, later, a sermon – requiring reference to Cotton, we will simply enter that room in our memory house, find the image, retrieve its store. The same for every room in our memory-place. A complex oration requires that we multiply our houses altogether. The process is

phenomenally imagistic. As Yates explains, “In a classically trained memory the space between the *loci* can be measured, the lighting of the *loci* is allowed for” (8):

We have to think of the ancient orator as moving in imagination through his memory building *whilst* he is making his speech, drawing from the memorized places the images he has placed on them. The method ensures that the points are remembered in the right order, since the order is fixed by the sequence of places in the building. (3)

For Perkins, such visual impulse was precisely the error, which during the Renaissance was carried to the highest planes of mysticism. At the same time, this strange Renaissance hermeticism was the object of a near rabid scorn. Perkins, channeling the sixteenth-century humanist Peter Ramus, would be that scorn’s mouthpiece. This second camp espoused a purely dialectical system, Ramus’ innovation, which sought to purge the idolatrous mnemonics that underlay antiquity, its scholastic resurgence, and the maddening extremes of the Brunian art.

Here we must make a pause to note that Ramism, as scholarship has long known, found a fitting theological counterpart in preparation. Much as preparation relied on series, Ramism consecutively mapped a field of knowledge into its ‘generals’ and ‘specials’ until each branch, and so the subject as a whole, reached its conceptual terminus. Invoking this sequential as opposed to imagistic method, preparation could approach its field – which was salvation – without idolatry; though we have also seen that what the doctrine lacked in sensory and affective titillation it also lacked, critics waged, in spirit.

The exemplary model of Ramism in New England is Hooker’s *The Application of Redemption*, a massive prose-poem meant to espouse all the preparatory steps, swelling their sequence into a long walk from contrition, humiliation, and vocation, to spiritual union and communion with Christ, to faith, justification, and sanctification.¹⁴ By the time of his death in 1647, some 4,000 pages later, Hooker had only covered the first two of these stages. The “Eleven Books” advertised by Hooker’s publishers in the 1656 edition of *The Application* were in fact only ten, and the promised “Six more Books of Mr. Hooker’s, now printing in two volumes” (Goodwin and Nye n.p.) were never to appear. Nonetheless, over the bulk that does exist, as scholars from David Parker (1973) to Baird Tipson (2013, 2015) have impressed, Hooker employed an archly Ramist organization.¹⁵ It presents itself most completely in Book 10, Hooker’s great book on contrition.

Contrition was the preparatory stage that grounded all the rest, it was “that Preparative Disposition of Heart, when by the sight of sin, and the punishment due to the same, the soul is brought to sound sorrow for it, and so brought to detest it, and to sequester it self from it.” More plainly, contrition was the breaking of one’s heart, the “penitential abjection of the soul” (Parnham 915) – a repeated event, as Delbanco notes, “not so much of growth as of radical pruning” (49).¹⁶ Over its course one came, with grief and with lowliness, to such a consciousness of his sin that at last he was impelled with great pain to wrench himself from it. Only thereafter was he “so fit to be implanted into Christ” (*Application*, *Ninth and Tenth Books* 10). Particularly, Hooker instructs, contrition exists:

Partly in the	}	Causes of it,	}	Sight of sin, Sorrow for sin.
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Effects of it,

} Detestation of sin.
} Sequestration of sin.

We do not need to parse too deeply the meaning of either of these subsets to note the supremely Ramist organization of contrition's stage. The same stands for the *Application* at large.¹⁷

The more interesting aspect of Hooker's Ramism, however, is not its use but its insufficiency. It is by now a critical commonplace that Hooker never does reach his essential term, and the practitioner of preparation never does come to rest in the knowledge of his predestined grace, or what in Hooker's system goes by the name of Implantation. "Preparation we get, emphatically and to a point near its limit. But nothing further," writes Michael Colacurcio:

It is easy enough to imagine the topics left uncovered – and even to name them, from the titles of Hooker's earlier publications. But when we examine the careful – "Ramist" – structure of the work that does get published, we notice a space for only one more really essential book: ineluctably paired with Preparation is the crucial topic of Implantation, the beginning of such salvation as may lie beyond everything that necessarily went before.¹⁸

Preparation in its relentless divisions and subdivisions has long been accused of neglecting the felt experience of grace, a lack that we can regard as one of the shortcomings, or incoherencies, of a purely cognitive system. Even Perkins, damning idols, reveals their sensory, affective, power. Indeed, he spends much of his energy in his *Warning* separating us from the Catholics whose prayers are "spoken to the very wood of the crosse," or the Pagans for whom "Balzebug" is a fly, Sidonian gods are sheep, Dagon is a fish, Diana is a silver plate" (680-81, 663). But it is not hard to feel that despite himself Perkins luxuriates in the forms he mocks and condemns, that their colors and textures provide a source of stability, a *ground* for his discourse that is no less concretizing for being so resplendent. The inverse is also true: it is not difficult to see how Ramism manifests a certain coldness, or why Miller so many years ago found Hooker's 'method' of preparation to harden the heart of pure Puritanism.

Conversion, it had been said by the non-preparationist camp, required an unbidden shock to the spirit, an event that obliterated all man's temporal faculties and cast the truth of his salvation before and within him in terms only God could impart. Thus John Cotton – more often than not taken as "Exhibit A" of subscription to this doctrine, as many others¹⁹ – famously imparts: "for our first union [with Christ], there are no steps unto the Altar." It is Cotton whom critics from James Maclear (1955) to Janice Knight (1994) have chiefly granted knowledge of the power of the spirit, though all Puritans maintained it – and maintained it, the rest of this chapter will demonstrate, in ways less wildly effusive but no less profound than those named the "Spiritual Brotherhood."²⁰ It is Hooker who ventriloquizes, "I shall never have power to pray better than I have done, and I shall never be able to wrestle with God more earnestly than I have done ... but I have not done them in a right manner. I have not had an eye to Christ's mercy" (*Humiliation* 66); Hooker who insists that "as long as the soule can look out

to the infiniteness of Gods Mercy and free Grace, the invaluable efficacy and vertue of the Merits of the Lord Christ, his death and obedience, a man is within sight of Land, when the Ship is split he may swim to shore” (*Application, Ninth and Tenth Books* 30).

We must, I believe, take the minister at his word. Some scholars have begun to. Baird Tipson’s very recent work is the obvious, though not the most nuanced, example. More complexly, David Parham compares the minister’s conviction that the giving of grace “was framed by a process ... that mandated a phase of preparatory humbling for recipients of the gift” (926) against the antinomian rejection of the need of an ever-cowed soul. Parham also frames the difference thus: “What sets the antinomian apart is the tenor of his apprehension that Christ’s blood purifies not by progressively suppressing sin but by sending it, in an instant, to ‘a land of forgetfulness’ ... Hooker would not have sins so conveniently forgotten” (927). In applying instead the rakes of the law, Hooker “sought to make his own redemption of free grace” (916). My question is how Hooker does so by distinguishing grace from works as matters of cognitive style.

Why this style should be *memorial* – why, in short, memory should be key to refiguring grace as cognition – has a very great deal to do with an aspect of the faculty’s history in which Peter Ramus and first-generation Puritans, like all educated men of the sixteenth and seventeenth centuries, were embroiled as a matter of course. It has gone curiously unmentioned that the scholastic and Renaissance vogue for classical learning, about which so much has been said, entailed the revival of a distinction between memory as recall and memory as compositional activity. That difference, I argue, goes considerable way toward explaining the transformation of Hooker’s parrot, that master of repetition, into the “new creature,” the soul turned to God. The origin of the split lies in a metaphysical mooring first imparted by Aristotle in *De memoria et reminiscentia*. There the philosopher distinguished between memory (*memoria*) and recollection (*reminiscentia*). The first referred to the business of memory-storage; the second, to the creative activity of reminiscence. More recently, Mary Carruthers has differentiated the two phenomenologically. Memory is heuristic, mnemonics being a device for recall. Recollection is hermeneutical; it *interprets* what has been summoned by thinking in pictures, in words, or according to a more abstract mental imagining, such as Ramism provides.²¹

The resilience of this division between *memoria* and *reminiscentia* has not been appreciated enough in Puritan studies, though it remains visible throughout Puritanism’s scholastic and devotional heritage. What the *Ad Herennium* “says of artificial memory which is confirmed by induction and rational precept,” announces Albertus Magnus, “belongs not to memory but to reminiscence, as Aristotle says in the book *De memoria et reminiscentia*.” Aquinas, who like his master wrote a commentary on Aristotle’s text, elaborated the difference.²² The distinction is alive as well in Hooker’s sermon literature, where it negotiates between memory as computation and memory as composition, the latter being nearer (though in no way proximate) to the creative work of God. Thus meditation, what I will identify as the great purveyor of memory, is holy precisely insofar as it “recalls things formerly past, sets them in present view before our consideration and judgment ... revives the fresh apprehension of things done long before ... such things which were happily quite out of memory” (*Application, Ninth and Tenth Books* 212). By the same token, Hooker can ask, without diminishing the faculty’s estate, whether God has not “lent thee the help of many common Gifts and Graces, which by Art and Education have grown to some ripeness ... Has not god given you a memory to retain things?”

(*Application, Ninth and Tenth Books* 142). And John Preston, Hooker's English peer who in 1622 became Master of Emmanuel College, Cambridge, can explain that true prayer is "not when a man delivers to God that which the understanding and mind hath devised only, (for prayer is not a work of wit, or of memory)" (*Exercise 7-8*), with no injustice done. They are speaking only to one aspect of it, the quality and quantity of memory's store.

Preston, in fact, used that basic meaning of the faculty to sum the general imbecility of our mental affairs, what he calls "the unaptnesse of the minde to beleeve" (*Qualification 43*). Speaking first to our incapacity to "consent to" the impossible attributes of God, Preston then seizes on our inability to keep those attributes in mind: "if a tale be told us in a Sermon that we can remember" (*Qualification 46*), he cries, "but what is profitable and wholesome, that we forget. Our minds are like strainers, all the milke passes thorow them; that we should grow by ... but the drosse remains" (*Qualification 50*). His lament is for the flimsy *retention* of our thoughts, a grief Hooker will echo when describing his first class of forgetful persons, for whom thoughts of God "slip away out of their weak memories like pure liquor out of a leaking vessel" (*Application, Ninth and Tenth Books* 136). Our limit of mind is articulated as a fault of containment.

The relation between memory and grace concerns memory's other capacity: not containing, but composing. While recollection, as Carruthers tells us, was figured as a collecting or a gathering, remembering was the key to establishing an object in mind in the first place. In view of that designation we can understand why Hooker equates forgetfulness with unthinking dispersion: "things that are of mean account with us," he says, "we lay them by, cast them into any blind corner, we judge them not worth the remembrance ... but if there be a pearl of price ... each man cares where he laies it, and can easily find it and that in the dark" (*Application, Ninth and Tenth Books* 136). Remembering provides the raw material out of which recollection can arise: first we must retrieve elements from within our mind's store, only then can we 'arrange' them in the service of rhetorical invention, or *inventio*. Just how one was to do so was the very crux of a dispute that came to a head in 1584, two years before Hooker's birth.

Memory houses falling down

In April 1583 the Polish Palatine Albert Laski arrived in London, and was treated with a lavishness scholars still cannot quite explain. But Alasco is of less import than the man who accompanied him, Giordano Bruno – Nolan philosopher, fled Dominican, magician, believer in the indefatigable love of the World Soul, mathematician of the infinite, peer of Galileo and Shakespeare – who had come with his rattling bag of hermetic arts into England earlier that spring.²³ There he had published in his *Ars Reminiscendi* a work called *Sigillus Sigillorum* (*Seal of Seals*), presenting his memory art alongside creative invective against the Christian religion. Bruno with Alasco went up and down the Thames; he was among the number of notables, including Sir Philip Sidney, who enjoyed Alasco's grand reception at Oxford. "The trip was evidently one of those Arcadian happenings that agreeably punctuated the drama of Elizabethan politics" (23), says the inimitable John Bossy.²⁴

Not long after, the University would become a site of considerably greater stress. Bruno held himself to be the true inheritor of classical place-memory, from which position he spun an elaborate mnemonic system that consorted with a range of Egyptian, cabalistic, and zodiacal signs, among others – for example, the image of a beautiful

woman, half unclothed: for the philosopher encouraged memory images that would rouse the flesh.²⁵ The specifics of his program are for our purposes not crucial; it is enough to note, with Bossy, that Bruno taught memory “more as an occult science than as a technical skill” (13).²⁶ Not surprisingly, given this bent and the turbulent politico-religious context into which Bruno introduced it, his arrival set off a debate at Oxford, where the philosopher championed various astronomical theories, including those of Copernicus, against the University dons, who ultimately expelled him.

The dispute traveled to Cambridge. There in 1584 it was taken up by one advocate of Brunian and one advocate of Ramist memory, who sparred unflinchingly with one other across a series of pamphlets. Whatever intermittent scholarly attention the debate has received, the event’s maddening vocabularies, tensions, and stakes most truthfully appear in the contemporary novelist John Crowley’s retelling. Here the contest is waged in real time, two men at lecterns in a hall with “water or wine beside them; the Ramist to have reams of paper and sharpened goose-feathered pens and a jug of ink if he likes. The Brunist needing nothing but heart and mind”:

First problem set, the names of the inventors of all human arts and useful things. The Ramist slowly starts his cart’s wheels with a General—Agriculture. A Special beneath that, Grain; a more special Special, Sowing of; and at length the name of the inventor of sowing, Triptolemus. Meanwhile the Brunist sheds the light of an inner sun through the spheres of the planets, to the elements they inform, to the light of man on Earth, to the inventors of things rank on rank in their places, colored by the planets’ colors, each holding the sign of his Art ... under Sol Apollo there was Mirchanes who first made figures of wax, Giges who first painted pictures, Amphion who invented the musical notes; Mercury had Theut who invented writings, patron of the scribbler at the next lectern; Prometheus, Hipparchus, Atlas, dozens more ...

The struggle goes on for hours ... (421-22)

We would be excused, I think, for failing to identify in this portrayal the Scotsman Alexander Dickson, Bruno’s disciple.²⁷ His *De Umbra Rationis et Iudicii* (*On the Shadow of Reasoning and Judgment, or About the Personification of Memory’s Virtue*), an even less comprehensible restatement of Bruno’s *Shadows*, sparked the debate – its introduction announcing that “I am not in the habit of being disturbed by the pecking beaks of little birds” (n.p.).

But the colors of the other, the Ramist, are faithful enough that we should be unsurprised to learn he was none other than Perkins himself. Though the theologian’s own words in the debate (the *Antidisconsus* and *Libellus de memoria*, the latter including his “Admonitions to A. Dicson about the Vanity of his Artificial Memory”) have yet to be translated into English, it is enough to say that these were attacks levied against Dickson in explicitly Ramist terms. The coolness of Perkins’ dichotomies were the answer to the outrage of so many idols libidiously run amok. “The controversy is waged strictly within the limits of the subject of memory,” explains Yates, and yet “whilst the controversy is always ostensibly about the two opposed arts of memory, it is at bottom a religious controversy” (267). Being a scholar of Puritanism, as Yates was not, I would emphasize that it is only in light of the history we have drawn – of Puritanism as it stood between the contests of iconoclasm and dialectic, intellection and abstraction, works and grace – that

we can appreciate how the controversy's terms bore on Hooker and his doctrine of preparation. Toward that end, what matters is not the intricacies of the dispute, which are mired in "mystical claptrap" on the one side (as D. F. Sutton has called it), and endless logical stratifications on the other, but the rhetorical and representational aspects of the classical art of memory on which they stood, or which they contested.

This art, Yates taught us, which was derived from Cicero's *De Inventione* and his later *De Oratore*, the anonymous *Rhetorica ad Herennium*, and Quintilian's *Institutio oratoria*, asked that one entrust what he wished to remember to various 'places' of a building that he envisioned in mind. Into each room of his 'memory house' or 'memory palace' (or whatever architectural structure he conceived) he was to put an image associated with each word or thing he wanted to remember. Cicero – and later Perkins, following convention – explains that this "mnemotechnic" originated with Simonides, a poet whose great fortune was to be summoned outside by the gods Castor and Pollux in the seconds before a banquet's roof fell in. Simonides alone could identify the bodies of the guests, by remembering the order in which they had been sitting.²⁸ Simonides raised a mental vision – banqueters at a table – that corresponded to a material scene now struck from view. But crucially, the technique does not require that what one wants to remember or the images he uses to represent them or the architecture into which places them have real existence. It was instead the elaborateness of the internal world that mattered.

This visual emphasis coalesces around the persistence of three of memory's own representations in the West. From antiquity through the seventeenth century memory was likened to a storehouse, to a mystic writing pad, and to the impression of a seal or signet ring in the wax. Often, these metaphors were invoked simultaneously. "For the backgrounds" of our places – "a house, an intercolumnar space, a recess, an arch, or the like" – says the author of the *Ad Herennium*, "are very much like wax tablets or papyrus, the images like the letters, the arrangement and disposition of the images like the script, and the delivery is like the reading" (II.xvii.30, III.xvi.29). Likewise Perkins in *A Case of Conscience* speaks many centuries later to knowledge of our predestination by limning recollection as a gathering with memory as stamping: "through this constant election," he says, "we perceive that that election which is in God as concerning us, is firm and sure; not onely as we gather the cause by the effect, but also, *as wee gather the pattern by the picture: like as by the similitude of the forme as a seale, fashioned in wax, we doe easilie understande, what is the very forme and fashion of the seale*" (45; emphasis added).

Given what we know of the corollary between "memory" and "heart" we should not be surprised that in the sixteenth and seventeenth centuries the receiving surface of these impressions was at times the mind or brain, though just as frequently it was the soul or the heart. Here is Preston, in the process of enumerating the perversions our Understanding, Will, Memory, Conscience, and Sensitive Appetite suffered in the Fall: "Philosophers were wont to say, that the Soule, the Minde of a man is *Rasa Tabula*, that having nothing written on it, it is a Table of wax to any thing that is evill, and will receive a quick impression; but a table of Flint, of Adamant, to any thing that is good. Therefore the mighty God must write His Law in our hearts" (*Qualification* 42). Hooker, invoking the image to describe the heart under the duress of contrition, explains: "as it is with the hardest flints, when they are broken to dust, they are easily yielding, and give way to take the impression of the hand, or whatever is laid upon them" (*Application, Ninth and Tenth Books* 12). Other examples from the minister are too many even to contemplate listing, though there can be little doubt that in his writing of such lines Hooker, like Perkins and

Preston, was in one way or another recouping the Aristotelian metaphor, itself one of the earliest representation of *memoria* as a rhetorical art.

If to an astounding degree in ancient Greece and Rome memory served oratory in the realm of men, Augustine turned it radically toward heaven. As Paige Hochschild reminds us, in Augustine's "theological anthropology" memory was, with understanding and will, one part of the human trinity that constituted the image of God in man (137-224). Particularly in *De Trinitate* and the tenth book of the *Confessions*, memory creates the conditions for an encounter with the holy; it is the means of our long rowing toward God.²⁹ "The scope of my memory is vast, my God, in some way scary, with its depths, its endless adaptabilities—yet what are they but my own mind, my self?" asks Augustine. "My God, you who are my real life, what course is left me, reaching no bottom of memory?" (73) Showing the marks of all these influences, memory traveled to medieval Europe. There the giants of scholasticism, Magnus and Aquinas, kept its devotional associations while endowing it with the civil virtue of prudence. They gathered the faculty anew under the auspices of rhetoric, such that memorial "places" imparted a rhetorical style (*elocutio*) put at once to civil, moral, and pietistic ends.

The sixteenth and seventeenth centuries could not but imbue this intimacy between rhetoric and ethics with religious fervor, and it was in this constellation that memory came to bear on English literature and to be radicalized during the Renaissance. (Famously for Donne, for example, "The art of *salvation* is but the art of *Memory*" (qtd. in Guite 9)). Augustine, of course, was one source of such spiritualized memory. Plato, as clearly, was another. The philosopher in his *Meno* (80c), *Phaedo* (72e, 91e), and *Phaedrus* (275a, 276a) took rhetoric as an art of truth-telling; it was to bring one's listeners to truths of an essential kind through recollection of the forms that transcend being, time, and the world. Though we are very far from itemizing the Platonic influences on Hooker's generation, I think we can nonetheless say, by recruiting Peter Lake's very useful understanding of 'style' as an ethos shared among men, that the Puritan 'style' entailed subscription to a state premised on the inscrutable difference between the feebleness, in both the perceptual and mental world, of the reality we apprehend and the reality that is. "For imaginations are nothing but shadows of things," says Perkins in *A Direction for the Government of the tongue* (1593). "And as an image of a man in a glasse hath not power in it, but only serves to resemble and represent the bodie of a man: so it is with the phantasie and conceit of the mind, and no otherwise" (*Direction* 443).

To learn the art by which to command that truth, the Puritan ministry turned to the same Latin sources and their purveyors I have already mentioned. Thus, as Frank Shuffelton has argued for Ann Bradstreet in the single study of memory arts in American Puritanism, the relation between memory and grace occurs across a fundamentally rhetorical space. In Bradstreet's poem "Contemplations," he maintains, that 'space' is the idea of a Renaissance garden. "Botanists and scientists as well as poets and rhetoricians found God in the Renaissance garden," Shuffelton writes, "[but] gardens were other kinds of places as well ... [they were] inextricably connected to notions of rhetorical places that could both bring order to 'wild' knowledge and, by offering the writer a pattern of topics or *topoi*, could become a source of poetic invention" (29-30). Gardens as rhetorical places, in other words, formalized a compositional aspect of invention, or *inventio*, rhetoric's first part: that the searching out of arguments relied on what, we remember, were also called *topoi*, or, in Latin, *loci*.

As they traveled from Cicero to Peter of Spain, Rudolph Agricola, and the scholastic trajectory, these ‘topics’ or ‘places’ were less items of thought than they were schematic thought *processes* meant to enable one to speak convincingly. They comprised, as Walter Ong once said, “an attempt to analyze for oratorical or literary exploitation the contents of the mind or of memory (and indirectly of reality), but also a register of the live front of ideas or notions which ... served as effective suggesting-apparatuses” (63). As such, *inventio* was the spring of the other four. “[A]ll the activity and ability of an orator fall into five divisions,” Cicero had said in *De Oratore*: “he must first hit upon what to say; then manage and marshal his discoveries, not merely in orderly fashion, but with a discriminating eye for the exact weight as it were of each argument; next go on to arrange them in the adornments of style; after that keep them guarded in his memory; and in the end deliver them with effect” (I.xii.53-54). The remaining parts of rhetoric thus followed suit. Arrangement (*disputio*) was the putting of the argument in order. Style (*elocutio*), first treated in Latin by the *Ad Herennium*, dealt with language’s distinctive poetics.³⁰ Delivery (*pronuntiatio*) concerned its projection, attending to voice and to posture.³¹ Only in light of this iteration are we able to grasp the radicalness of Ramus’ purification of classical rhetoric.

Classical instruction in rhetoric’s fourth part, memory, opens as follows in the *Ad Herennium*, our oldest surviving source on the subject: “Now let me turn to the treasure-house of the ideas supplied by Invention, to the guardian of all the parts of rhetoric, the Memory” (III.xvi.28). What aspects of the faculty bequeathed it such honor? “What need to speak of that universal treasure-house the memory?” asks Cicero in Book 1 of *De Oratore*, “[u]nless this faculty be placed in charge of the ideas and phrases which have been thought out and well-weighed” (I.v.18). Nothing as that is so immediately apparent, for the *Ad Herennium* speaks of memory curtly enough; so does Cicero in Book 2 of *De Oratore*, and Quintilian in Book 9 of the *Institutio*. These sights are deceiving. For we learn from Cicero that style cannot be divorced from content. We cannot “separate words from thoughts as one might sever body from mind—and neither process can take place without disaster,” he warns: “it is impossible to achieve an ornate speech without first procuring ideas and putting them into shape, and at the same time that no idea can possess distinction without lucidity of style” (III.vi.24). As crucially, we learn from Quintilian that style *includes* memory and delivery. Of the twelve books to comprise the *Institutio*, he declares, “Four will be given over to Style, under which head come Memory and Delivery” (I.v.18). Style gathers them both.

Ramus slanted that coupling. “There are two parts of rhetoric: Style (*elocutio*) and Delivery (*pronuntiatio*),” he asserts in his 1548 *Rhetorica*: “these are of course the only parts, the ones proper to the art, and so for the sake of clear and easy teaching you should distinguish the general and common principles of Grammar, Rhetoric, and Dialectic, and not mix in matters foreign to each discipline” (qtd. in Murphy 27). In making that sweep, Ramus banished the entire process by which one was to uncover the way of making his most persuasive case. There would be no need to unearth an argument or its course because memory would unfurl both ‘methodically.’ “If we therefore inquire into what the art of order is, and what is the art which divides and structures things,” Ramus informs, in the process of approving a view put forth by Quintilian, “then we shall discover the art of memory”:

Of course my teachings have already laid out carefully this theory of order in the

dialectical instructions on the syllogism and method. It is clear therefore that the art of memory is entirely the property of dialectic. Thus in this chapter [of the *Institutio oratoria*] Quintilian records things that are quite out of place and generally also ridiculous, even though they are closer to the truth than many of the things he has asserted up till now. (*Arguments* 159)³²

Ramism, unmaking memory as a rhetorical art and refiguring it as dialectic *par excellence*, led less to the eradication of memory than usurpation by it. His method obviated traditional memory precisely by encroaching on memory's own bounds. In Ramist view, the dialectical process merely restored memory to its proper work. Exemplary of logical structure, the faculty was seen to underlie those "many other things" that had been mistakenly judged as separate arts – including theology, including literature. "For there is a fixed theory of syllogism and artistic method," Ramus instructs, "common to everything which can be treated with order and reason."

That method is, in the end, coeval with memory's work. Ramus, in fact, equated memory *with* judgment or *iudicium*, one of two parts of his very definition of dialectic (the other being *inventio*) (Sellberg 15), simultaneously as memory was both intrinsic and exemplary of the dialectic method at large. Thus, as Ong explains:

Striking expression and delivery are still allotted to rhetoric, but invention and judgment cannot be, since they have been assigned to dialectic. Memory, the fifth part of the traditional rhetoric, is unconvincingly identified by Ramus with judgment on the score that judging properly about things facilitates recall. But the real reason why Ramus can dispense with memory is that his whole scheme of arts, based on a topically conceived logic, is a system of local memory. Memory is everywhere, its "places" or "rooms" being the mental space which Ramus' arts all fill. (280)

Why "unconvincingly," and why "dispense"? Even as Ramus insisted relentlessly on the division of the arts, maintaining that each subject or "General" was composed of its own "Specials," he held with equal rigor that the same dialectical method, the same movement from general to particular, ordered every field. Memory was but this order by another name. Ong pronounces Ramus' shuttling of memory from rhetoric into logic unconvincing because even if we remove memory from rhetoric as a subject, we cannot remove it as rhetoric's method. Ramus "dispenses" with memory, in other words, only because it becomes the governing structuring principle of all the arts. One way, then, to attend to Ramism's influence on Puritan mental and literary composition – what I call Puritan style – is first to recuperate the method *as such*, as an art of memory, then to explore its triangulation with Puritan style and with the Puritan theology of grace to which it spoke. The most remarkable consequence of this memorial orientation was to preserve, in fact to re-emphasize, that the style of one's thinking was indistinct from the matter of one's thought. This was, as we have seen, the very issue at the heart of the memory debates.

Godly seeing

Perkins in his *Warning*, quoting Augustine, "*the similitude of a shape, and the counterfeit*

composition of lines doth lead ... [to] sicke affection" (682; original emphasis), affirms that proper representation of the divine has nothing to do with likeness. In fact it eschews any pretense to formal 'similitude' or equivalence out of hand. "Paul saith," the theologian reminds us, that "the *Gentiles turned the glorie of the incorruptible God, into the similitude of man and beast*" (679; original emphasis). Nor will God "lie hid under the forme of bread" (662), he insists, because to presume that man can fashion God out of his own fallen hand and mind is the gravest of inversions. The essential requirement, given that danger, is that other representational strategies must be called into play.

Perkins himself gives this alternative: "I answer, the right way to conceive God is not to conceive any forme: but to conceive in mind his properties and proper effects" (*Warning* 671). His rhetoric – these "properties and proper effects" and, as scholars have repeatedly noted, all the 'majors' and 'minors' and 'contraries' that pepper his corpus – is unmistakably Ramist: it follows the 'method' of dividing any topic into its finer and finer parts until the process admitted to no further term. These 'dichotomies' were spread out in diagrammatic form upon the printed page. "It is a simple device, its advantages and drawbacks nowadays self-evident," explains Adrian Johns. "But in its day it was proclaimed as revolutionary" (vi). Ramist practice is best illustrated by example, which we can turn to Hooker's 'treatment' of a certain class of sin to provide. Under the heading "*Forgetfulness an ordinary, but sinful excuse,*" the minister tells us that we invariably fail in our duty to attend to the Lord: "every man fayles in this, says Hooker, "let every man ingeniously own and acknowledge his sin" (*Application, Ninth and Tenth Books* 224). To call a fault common in no way mitigated its heinousness. Precisely to guard against that appeasement, a minister was to 'pincheth with particulars' – to put one's face in the mud, so to speak, to bring him into such searing proximity to his vileness that he could not turn away. The minister was to do so, moreover, in imitation of God's own dispensation. "For the sinner would not look upon ... the filth of his sinful distempers, but the Lord laies it before him, and holds his apprehension to it, follows him with the remembrance of it, and forceth his thoughts to give attendance thereunto" (*Application, Ninth and Tenth Books* 14).³³ It is toward this end that Hooker itemizes two sorts of forgetful persons according to "doctrines and particulars" – Puritan content according to Ramist form.³⁴ There are those who by "their own feebleness and brickleness [brittleness] of memory are not able to keep the wholsom truths." And then there are those who "stuff their minds and memories so ful" of worldly things that they keep no room for things divine. Their treachery is the worse because they fail not in facility but in want: for true "love and faithfulness *wil cause attendance and remembrance where ever it is*" (*Application, Ninth and Tenth Books* 136-37; emphasis added).

Ramist application of memory is most baldly formalized in Perkins' *Art of Prophecyng* (1607), his exposition on "Grammaticall and Rhetoricall properties of words" and the ur-text of Puritan sermon style. It is built entirely on Ramist form. Be that as it may, the most important aspect of Perkins' system is not to be found in any one part of his horizontal tower of dichotomies, but in the means by which one is to store and retrieve – and so ultimately to deliver – the information it presents. As Perkins announces in the Epistle, "I perused the writings of Divines, and having gathered some rules out of them, I have couched them in that method, which I have deemed most commodious: that they might be better for us, and fitter for the memorie" (n.p.).³⁵ Thus it is that his *Art of Prophecyng* has a chapter "Of Memorie in Preaching," whose subject is not diagrammatically itemized with the rest:

It is not therefore an unprofitable advise, if he that is to preach doe diligentlie imprint in his mind by the helpe of disposition either axiomaticall, or syllogisticall, or methodicall the severall doctrines of the place he meanes to handle, the severall proofes and applications of the doctrines, the illustrations of the applications, and the order of them all: in the meane time nothing carefull for the words, *Which* (as *Horace* speaketh) *will not vnwillingly follow the matter that is premeditated.*

Their studie hath many discommodities ... Pronunciation, action, and the holie motions of affections are hindred; because the mind is wholly bent on this, to wit, that the memorie fainting now vnder her burthen may not faile. (131)

Memory, though here presented as a technique, is also far more. Insisting on the minister's need to "imprint in mind" the material of his sermon by Ramist 'axiom, syllogism, or method,' Perkins insists that the way to salvation and the way we think about salvation are not discrete. Memory is the faculty, and remembering the cognitive labor, by which one comes to knowledge of God and one's grace. Unencumbered by sight or by touch or by whatever sensory apparatuses God has given as condescension to our limited understanding, and surpassing even "the holie motions of the affections," memory and its work accede to a rarefied abstraction of divine order. Doing so, they bring us nearer to apprehension of the divine. "[P]revail with us to take the right way to enjoy Gods presence, not only to seek for mercy, but seek it in Gods Order," Hooker exhorts in Book 9 of the *Application*: "Every man catcheth at Christ, and Mercy, and Comfort, but not in a right Method, and therefore they lose him, and their labor also" (14).

As a Ramist "art," then, memory held the possibility of coming closer to conceiving God through bare intellection, attending neither to "signes nor images" (*Warning* 660) but to a right sequence and schema that went some way toward healing the disorder caused by the Fall, both of the world and of man's reason in apprehending it. Because God in his inexplicability cannot be pinned to material form, holy thought no less than holy practice requires that we eschew it. Indeed, by 1559 iconoclastic teaching had established that "the duty of church governors and churchgoers was to create and inhabit a white-washed state of walls and minds." Incontrovertibly, such instruction "came to the forefront at the very time when the phenomenon of puritanism was recognized" (Aston, "Iconoclasm" 420) between the 1560s and 1643, four years before Hooker's death.³⁶

Considering that rule, it is strange indeed to find that Hooker, in the *Application*, returns to the memorial representations of old, though it has never been noted that Hooker describes memory in an iconic, architectural language that derives consciously from classical mnemonics. Describing, for example, his first species of forgetful person: "the narrowness of their memory was like a house that had but scant rooms, kept them in a lumber together, but there they were" (137; original emphasis); and "through the scantness [*sic*] and narrowness of their memories, they are not able to keep things in their order" (136-37). True contrition and the meditation that impels it, on the contrary, "lifts up the latch and goes into each room, pries into every corner of the house." See how "it is with the Searcher at the Sea-Port, or Custom-house," Hooker directs, "[he] unlockes every Chest, romages every corner" (*Application, Ninth and Tenth Books* 213-14). Let our meditation be as that officer, that customs house official:

for this is the nature of meditation ... as it is with a man who goeth into the house and puls the latch, when he was without, he might see the out-side of the house, but hee could not see the roomes within, unlesse hee drawes the latch and comes in, and goe about the house: meditation pulls the latch of the truth. (*Preparation* 80-81)

We might say that Hooker's literary style, by invoking imagistic mnemonics to denounce those whose memorial and meditative systems are deranged, pays respect to God's omnipotence by showing how various compositional efforts crumple under various labors to apprehend it. Of greater issue, as I now conclude, is that those labors register preparation's commitment to the distinctly Calvinist ordeal of how to particularize without images.

Meditation's end

That trouble most commonly appeared in meditation, which for the Puritans was what we would today call both a psychological and a somatic occasion, a mental attendance on spiritual things that showed a corresponding physical commitment in the position of the body and the bent of the head, and, in its deepest reaches, the turning of the heart.³⁷ Meditation "is nothing else," says Hooker in *The Soules Preparation*, "but a settled exercise of the minde for the further inquiry of a truth, for the affecting of the heart therewith" (79).³⁸ So he urges: "Be watchfully careful to observe the first wandrings and out-strayings of thy thoughts, how they first go off from the attendance to the work [at] hand ... immediately recal them back" (237):

I have heard Hunts-men say when they have young dogs, raw and that hath not been entered nor acquainted with their sport, if a fresh game come in view, or some other unexpected prey cross them in their way, they forsake the old sent and follow that which is in their eye, but their manner is to bat them off, and cal them away from that, and then to bring them to the place where they left their former pursuit, and there set them to find the sent afresh, until at last being often checked and constantly trained up they wil take and attend the first game, so here, with our wandering minds which are not tryned up to this work of meditation, *suffer not thy thoughts to range, but bring your mind back again.* (238; emphasis added)

There is some conclusion to be drawn from this analogy, beyond the fact that our thoughts are as hounds. 'Recalling,' 'bringing your mind back again,' is the cognitive practice of essence, a disposition at once so difficult and so requisite to "this work of meditation" that Hooker must render it in the fervid language of the chase and the hunt. Memory has in general been viewed as a spark to this turn from *distractio* to *intentio*, though such analysis (while in many senses true) evades the question of how the faculty of memory, which is merely intellectual, could give rise to a practice, meditation, which is far more.

Hooker's writing asks that we reconceive the order of these terms, an imperative that becomes clear when we realize the purchase meditation had for contrition. "*Through Meditation of sins applied, is a special means to break the heart of a sinner,*" says Hooker, a responsibility so great that by Book 9 meditation merely goes by the name of "duty" (208;

original emphasis). It does so in terms that are unequivocal. They who “*FORGET their duty wholly*,” thunders the minister, “*therefore did it not.*” Then he ventriloquizes:

The throng of business pressed in upon them, and that something unexpectedly, did distract them, that croud of occasions coming in like a mighty sea did so take up their thoughts & surprise and hurry them, they remember not what they should do and therefore did not perform what they ought, it was the slip of a mans memory, no such great matter ... (135)

Hooker’s *Application* does not entertain meditation long before memory asserts itself less as that subject’s formal prerequisite and more as its conceptual terminus. Contrarily, forgetting is a breech of the promise by which God redeemed man, the threat of that loss so great that it persists when the minister resumes his own voice:

forget thy duty man? what couldest thou say more wherein thou mayest aggravate thy fault in a most heavy manner? ... the only charge that is laid upon us by the Almighty ... [is] to discharge thy duty, if thou forgettest that, thou forgettest why thou livest ... and thy punishment wil be answerable when out of thine own mouth thou wilt be condemned. (134-35; original emphasis)

The total effect of Hooker’s portrayal is to figure meditation as sacralized memory.

That reorientation also ultimately broadens meditation’s scope. Toward that end, finally, I want to differentiate between the intellectual-affective aspects of Puritan meditation, which scholarship has recognized, and meditation’s significance for Puritan doctrine, which I think it has not. That tendency is best brought to view by critical example. Charles Hambrick-Stowe, treating an early entry from Shepard’s *Journal*, takes it as proof that “theological issues were inappropriate to meditation” (8). In fact the passage Hambrick-Stowe refers to, taken more fully from beginning to end, suggests otherwise. “As I was walking in my study musing,” Shepard writes on January 9, 1641, “I considered when I come to Christ there is no wrath, justice to devour, but sweet love. Wrath there is for refusing him, not else.” But then, fast upon the conclusion, Cambridge’s minister endures a mental complaint: “It was then objected, But is it not to the elect only?” Shepard tells what course his thoughts next took:

The Lord let me then see I had nothing to do with that but to look on his truth which is to them that come to him, that he would stand as a rock between the scorching sun and their souls. Hence my heart was sweetly ravished and began to long to die and think of being with him. And my heart said, Remember to comfort yourself thus when you lie on your sick-bed, to lie under this rock as in a hot day. If one saw a rock in a hot day and should say, That rock will cool [me only] if I be elected and God hath purposed it, and so keep off in fear; no, God hath purposed that one and the other shall be thus to all that come to them and are drawn by his love. (*Journal* 84-85)

Whatever else Shepard may be said to be doing here, it seems to me that in his “musing and meditating” he is very much engaging with doctrine, namely, with the belief in limited atonement (“if I be elected”) and the promise of free grace (“keep off in fear”).

Even without entering into closer reading of Shepard's entry, we can observe that the minister's effort of self-persuasion (that he is one of the saved) is deeply reliant on the construction of mental images (a rock, a hot day).

But of course entering into closer reading we must, since by that literary practice we can see how memory sparks *reminiscentia*, recollection, a course we can use two further passages to explore. "I saw I did not remember the sins of my youth, nay, the sins of one day I forgot the next day and so spent my time" (89), Shepard mourns at the start of his entry for April 5, 1641. Three months later, laboring under a similar pain, "the Lord helped me there":

I saw my blessedness did not lie in receiving good and comfort from God and in God, but in holding forth the glory of God and his virtues, for 'tis (I saw) an amazing glorious object to see God in a creature, Good speak, God act, the deity not being the creature and turned into it but filling of it, shining through it, to be covered with God as with a cloud, or as a glass lantern to have his beams penetrate through it. (95-96)

What is striking about Shepard's account is its rendering – several centuries before the fact – of a psychological effect Elaine Scarry, taking from psychologist J. J. Gibson, applies to Proust's memory of a magic lantern whose lights glint across the walls of his childhood room at Combray. Proust is exemplary, Scarry says, of the astonishing ability, exclusive to the literary arts, to achieve the "solidity" of an imagined object" (11-13). What does it amount to that Shepard manifests such a like capacity here? Certainly it is worthwhile to note that it is by the sheer virtue of his memory that Shepard succeeds, momentarily, in quelling his terrors. By the faculty of memory he gathers an idea of God that revolves around the infinitude of his mercy. What is crucial, though, is that Shepard's art depends for that outcome on his making of images. These glide and flicker with hyperreal vivacity. They activate, we might say, exactly the sort of material shapes – seen or conceived, in the visible world or, as here, in the mind – which outraged Perkins. However frequently we take Shepard as representative of Puritanism's negative theology, of the tremendous confluence it effects between anxiety and assurance in matters of salvation, we are less likely to regard him as a negative example of Puritan cogitation. That, in short, is more or less how I regard him here.

His failure notwithstanding, Shepard's technique literalizes the fact that meditation's chief work was to make particular. Hooker, critically, understood that work in a different way: "[D]aily meditation slings in one terror after another" (*Application, Ninth and Tenth Books* 208), he issues, "[it] brings to mind such things which were happily quite out of memory" (212). This was meditation's task, to collect one's sins into a veritable bill of accounts, an office so paramount that it dominates the table of contents to Hooker's earlier text, *The Soules Preparation*. Here a "Broken heart is made by meditation of the word preached"; Conscience is "a helpe to meditation"; "the word preacht must be meditated on" (n.p.). These are the aspects of meditation a sinner must muse on; or, put otherwise, the reading of "The Table" is itself a meditative exercise. "By recounting and recalling our corruptions to mind," says Hooker, "by serious meditation we sew them all up together ... Meditation calls over again those things that were past long before" (*Application, Ninth and Tenth Books* 213). What Hooker's meditation finally particularizes is not an image, but gracious truths one comes to by remembering their rhetorical serialization. "And here I

desire that still may be remembered which I mentioned and discovered before,” Hooker writes early in the tenth book of the *Application*: “That all these are things rather wrought upon us by the impression and motion of the Spirit” (*Ninth and Tenth Books* 16). What “I mentioned and discovered before” speaks both to the prior books of the *Application*, and to the volumes on preparation that have preceded it. For “with hearing, and reading, and conferring, [one] seeth the thing he doubted of is too certaine” (*Preparation* 128). Hear, then, what I have taught; then remember it whole, Hooker asks of us.

This is the pedagogy of *The Application* writ large, even as its style presumes that we have forgotten something of it. Hooker in *The Unbelievers Preparing for Christ* introduces a new section in his sermon series by requesting that “you take your eyes backe to the beginning of the [biblical] Chapter” (*Unbelievers* 81-82) with which we began. That “place” or section of text, tolling our fundamental inability, had demanded crucially and in turn that we give ourselves over to God’s mercy. Simultaneously, our inevitable inability to grasp God’s mercy is what casts us back on our need for it in the first place. There “is no failings on Gods side ... but the failing is onely in our part” (*Unbelievers* 58), Hooker iterates. It is this dialectic, which is the very dynamic of free grace, to which Hooker’s style pays respect. Having reviewed already five circumstances of preparation, he once again anatomizes the fifth. “We have heard heretofore ... the last general circumstance of preparation we did handle, was this ... Now concerning this [that last] point, there are two circumstances of special consideration ...” (*Unbelievers* 188), Hooker intones, launching into near-verbatim repetition of the rule. What broadcasts itself, formally, as a new section, is in fact a retracing and then a tunneling into what has come before. By the time, in an adjacent sermon some hundreds of pages later, Hooker remarks in one and the same breath, “therefore mark the next and last cord: I should have added more to the former point” (*Unbelievers* 189), we are quite at our wit’s end.

But there is this caveat: our hearts have changed – or, more accurately, the way Hooker speaks of salvation has become corporealized according to the figure and form of the heart. We may walk again (and again) the line from one stage of preparation to another, but that distance is now calibrated according to the difference between a “stony heart” and a “fleshy heart” capable of receiving God’s impression: “a frameable heart and a teachable heart” (*Unbelievers* 131), as Hooker describes it. All that we have needed to experience that change is to bear in mind all the reiterations of the lessons that have come before. What the rhetoric of these statements begin to reveal is that this endeavor, or leap, into a unified field of understanding exceeds the achievement of intellectual memory. It constitutes an emotional event.

That change works according to a method of mental compilation that activated the labor first of attending to each of preparation’s elements, then of remembering them, in an instant, as a whole. When we are working out preparation, it comes incrementally – this is, after all, the very (Ramist) form of the sermon. But the labor of recollection that supersedes it is holy, because it is labor of a different kind, distinct from remembering by the cheat of images, or any bit of text now before us, even as it depends on those more prosaic labors. In learning and then forgetting preparation’s lessons, we learn them not merely again but anew. Inciting that transformation, that conversion, meditation announces recollection as a style that concedes the necessity of cleansing the visual methods of the ancients, as Ramus had done, simultaneously as it restores the classical difference, and the intimacy, between *memoria* and *reminiscentia*. Memory emerges as a cognitive condition of grace exactly *because* preparatory recollection requires that we have

read all the hundreds of pages that have gone before. To view Hooker's theology of grace through the collection and recollection of those hundreds is ultimately to reconfigure preparation as a doctrinal style, one which establishes a correspondence between acts of memory and acts of salvation linking the cognitive to the affective, the experiential, the devotional, and the theological.

¹ One premise of this chapter is that there remains considerable worth in designating some person or group 'Puritan.' Toward that end, it lays early ground for my study's pursuance of a reading that concentrates our idea of Puritanism in the *style* – that is, in the rhetorical and literary representations – conjured by its distinct theology of grace. Here I will be emphatic that to speak of a 'Puritan theology of grace' is not to dispute the keen and very crucial revisions inaugurated by Patrick Collinson in the 1960s, and which continue to teach us that Puritanism was at times and in aspects virtually indistinguishable from a more traditional English (Anglican) faith, and that there was within Puritanism itself a slew of variations, some hotter, some colder. Rather, it is to insist that those Non-Separatists who considered themselves Calvinists, and the men I am concerned with did, felt with a depth I think is quite difficult for us to imagine that salvation was the gift of grace alone. For key writings in the historiography of the word 'Puritan,' see Collinson, *The Elizabethan Puritan Movement* (1967) and "A Comment" (1980); Peter Lake, *Anglicans and Puritans?* (1988); Anthony Milton, *Catholic and Reformed* (1995); Nicholas Tyacke, "Anglican Attitudes" (1996); and Peter Marshall, *Religious Identities in Henry VIII's England* (2006).

² Perry Miller's first articulation of this breach was "'Preparation for Salvation' in Seventeenth-Century New England" (1943), expanded in chap. 4 of *The New England Mind* (1953). R. T. Kendall, *Calvin and English Calvinism* (1979), taking a similar stance, charged Hooker with seeing in one's assumption of the preparatory process a sign of salvation itself; see 125-40. The most important early rebuttals to the position that preparation betrayed the spirit of Calvinism were William Stoever, "*A Faire and Easie Way to Heaven*" (1987), esp. 12 and 196, and Charles Hambrick-Stowe, *The Practice of Piety* (1982), esp. 197-241. I will have cause to return to both. As will become explicit later in this chapter, I am, with David Parnham (2008), skeptical that we have moved entirely beyond Miller's estimation.

³ A frank argument between Puritans and Catholics, it had a more fascinating life as a Puritan-Arminian debate. The latter theology maintained that man could accept or deny God's offer of salvation. While strictly speaking, one could not make himself elect, he could do a very good deal to urge the outcome along.

⁴ Thus we find, for example, that even Cotton was a preparationist in his way; see Stoever 192-99. So was Sibbes, as Mark Dever (2000) has shown; see esp. 98, 99, 122, 134-35.

⁵ For exemplification of a similar tendency, see Michael Colacurcio, *Godly Letters* (2006), esp. 275, 282-302, 304-09, 314-18.

⁶ Elliott is speaking to the Scottish poet and courtier William Fowler, whose *Tarantula of Love* (c. 1584-87) broadcasts, Elliott argues, his own proficiency in the art of memory.

⁷ For the best account of that degradation and its effects, see Rivett, *Science* 1-22.

⁸ On Puritan faculty psychology, see Sargent Bush, *The Writings of Thomas Hooker* (1980), chap. 5. Needless to say, writing on the issue is vast. For other principal works see Norman Fiering, "Will and Intellect in the New England Mind" (1972) and Fiering, *Moral Philosophy at Seventeenth-Century Harvard* (1981), 110-37; Miller, *The New England Mind* (1936); and John Morgan, *Godly Learning* (1986), chap. 3.

⁹ Hambrick-Stowe with far blunter an analysis follows suit; see 106, 109, 114.

¹⁰ The fact, for example, that Reformed theologians' own terminology was so variable – for Perkins the Soul was 'Queene,' while for another is was 'King' – may be more easily explained by conceding the faculties' greater fluidity. For Puritan ministers' descriptive or designative tendencies with regard to the soul, see Bush, *Writings* chap. 6.

¹¹ Perkins and Hooker employ the last term also, as when Perkins titles the second chapter of his *A Treatise of Mans Imaginations* (1631), "The idlesnesse of mans natural cogitations" (458).

¹² Our knowledge of the technique as I describe it below derives from what Frances Yates calls "The Three Latin Sources for the Classical Art of Memory": Cicero, *De Oratore*, II.lxxxvii.350-67; the *Rhetorica Ad Herennium*, III.xvi-xxiv; and Quintilian, *Institutio Oratorio*, I.vi.3, XI.ii.17-22. For a millennia, Cicero was wrongly assumed to be the author of the *Rhetorica ad Herennium*. In the twelfth century, when commentaries on the text began to appear, the text was commonly referred to as *Rhetorica Secunda* or *Rhetorica Nova*, understood to follow *De Inventione*. Translations began to appear as early as the thirteenth century. The author today remains unknown. For the first, best study on these sources and their art, see Frances Yates, *The Art of Memory* (1966), chap. 1.

¹³ The vision could be of a real building; indeed, many ancient authors recommended that it be, because familiar structures were easier to keep in mind. On the other hand, memory places should be unique; otherwise, says Yates, paraphrasing the *Ad Herennium*, "their resemblance to one another will be confusing" (7); *Ad Herennium*, III.xix.31-32. Regardless, the crucial fact is that this building and its contents were not sensibly present.

¹⁴ For an overview of preparation see Phyllis Jones and Nicholas Jones, eds., *Salvation in New England* (1977), 61-62. For a full anatomization of Hooker's preparationism, see Bush, *Writings* 146-230.

¹⁵ Parker finds Hooker's Ramism most explicit in its use of 'contraries.' Tipson is concerned with pivoting our attention to the "Calvinist" Ramism of Alexander Richardson, typically seen as secondary to Ramus himself.

¹⁶ "This fitting and preparing," Hooker says, "is nothing else but the taking away of that knottie knarlinesse of the heart, and that pride, and all such curled corruptions"; "humiliation pares away all self-sufficiencie from the soul by compunction (*Humiliation* 4, 5).

¹⁷ The diagram occurs in *Application of Redemption, Ninth and Tenth Books* 193, with an earlier, slightly different, presentation on 16. For a view of the entire whole work of redemption according to a similar template, see Colacurcio 26, 275.

¹⁸ Colacurcio understands preparation to exist exclusively in contrition (and its attendant, humiliation), noting that "it would be false to say that preparation is Hooker's only theme; for the sequence of sermons he delivered in the days before New England resulted in published work on the Soul's "Vocation" (or 'Effectual Calling'), its 'Ingrafting' (or 'Implantation') into Christ, and even its eventual 'Exaltation' ... And yet when Hooker settles down, in the New England Context, to go back over his system, in the name of fullness and finality, he never does seem to get beyond preparation" (249). I find it more accurate to take all these stages together as constituting a preparatory process that it one and the same *with* a salvation process, and which is *in toto* in idea, if endlessly deferred in practice.

¹⁹ See, for example, Sargent Bush, ed., *The Correspondence of John Cotton* (2001), 7.

²⁰ See esp. Knight 82, 112, 121-22.

²¹ See Richard Sorabji, *Aristotle of Memory* (2006) and Carruthers, *Memory* 20-21, 26, 33-34. For ease of understanding, I will continue to use 'memory' to describe both *memoria* and *reminiscentia*.

²² See Yates chap. 3, esp. 61-76 (quot. on 61).

²³ On Bruno's career see Hilary Gatti, *Essays on Giordano Bruno* (2011), esp. chap. 4, and Paolo Rossi, *The Logic and the Art of Memory* ([1983] 2006), chap. 4.

²⁴ Bossy, who argues very convincingly that Bruno was the unidentified anti-Catholic spy known as Fagot, gives the best historical treatment to date of Bruno's London visit. See Bossy 22-25.

²⁵ See Ingrid Rowland, *Giordano Bruno, Philosopher/Heretic* (2009), 156, 218. “Bruno beheld a world,” as Rowland puts it, which “was not only infinitely immense but infinitely sexual” (220).

²⁶ Bossy is in this regard of course following Yates, whose *Art of Memory* follows memory’s transition from a rhetorical technique to a hermetic art.

²⁷ On Dickson see Yates chap. 11.

²⁸ The account occurs in *De Oratore* II.lxxxvi.351-54.

²⁹ The College’s Library held Augustine in eight volumes. See Catalogue nos. 307.4.11 and MSS 6.1.7 (2) in Sargent Bush and Carl Rasmussen, eds., *The Library of Emmanuel College* (1986), 155-56.

³⁰ In Book 4. See *Ad Herennium* xx. The general advice was to use moderation in all matters of style, including Apostrophe, Maxims, Disjunction, Onomatopoeia, Metaphor, Comparison.

³¹ The advice here as well was moderation.

³² Ramus is referencing Book 11, in which Quintilian notes that, “it is Division and Composition which are important factors in memorizing what we have written, and almost uniquely important factors (apart of course from practice, which is the most potent of all) in helping to retain what we compose mentally. The man who has got his Division right will never be able to make mistakes in the order of his ideas” (XI.ii.36-37).

³³ Cf. 194: “Thus our saviour the great Prophet of His Church ... layeth his finger upon the sore, and mark how he pincheth with particulars, as his ordinary manner of dispensation ... He that could not erre in what he did teach, he teacheth what Ministers should do in their dispensation; And there was nothing more useful with our Saviour, then to point our particular sins and sinners.”

³⁴ See, for example, “A Table of the Soules union with Christ,” in *Exaltation* n.p.; see also *Preparation* 3-5.

³⁵ William Ames, whose Ramism was at least as extreme as Perkins’, delivers similar instruction in “Ordinary Ministers and Their Office in Preaching,” chap. 34 in the first book of his *Marrow of Theology* (1639). Ministers who do not follow the order of doctrine, proof, and application in their sermons, Ames warns, “make it difficult for their hearers to remember and stand in the way of their edification. Their hearers cannot commit the chief heads of the sermon to memory so that they may afterwards repeat it privately in their families; and when this cannot be done, the greatest part of the fruit, which would otherwise be made available to the church of God through sermons, is lost” (192).

³⁶ Any work dealing with English iconoclasm must begin with Margaret Aston, *England’s Iconoclasts* (1988). For a useful timeline of the official injunctions against images, see Julie Spraggon, *Puritan Iconoclasm during the English Civil War* (Woodbridge, England: Boydell, 2003).

³⁷ Joseph Hall’s *The Art of Divine Meditation* and *Occasional Meditations* were perhaps the most important routes through which knowledge of meditation traveled. Frank Livingstone Huntly (1981) provides an accessible introduction.

³⁸ Cf. *Application, Ninth and Tenth Books*, where meditation “is a serious intention of the mind,” a “practice as that which employs the mind to the ful” (210).

2. Mather and the Multitude: The Halfway Covenant as Copious Event

Our debates are (as it was said of the disputes of the ancient *fathers*, one with another about lesser differences) not *contentiones* but *collationes*...

—Cotton Mather, *Magnalia Christi Americana* (1702)

Elegance consists partly in words used by suitable authors; partly in using the right word; and partly in using it in the right expression. What clothing is to our body, diction is to the expression of our thoughts.

—Erasmus, “First Precept Concerning *Copia*” (1512)

To borrow or inherit a form of verse or a figure of speech may not be significant; to fall heir to a form or figure of thought, however, may have infinite and infinitely subtle consequences.

—Norman Grabo, 1974

Hooker, for whom the “images of things would come so nimbly, and yet so fully into his mind, that he could utter them with fluent expressions” (*Magnalia* 1.306) used classical mnemonics with a skill that purified them of idolatrous tilt, but a generation later Increase Mather lacked the talent. If we are to believe his critics, far from exhibiting an eloquence that corresponded word to idea with perfect economy, Increase brandished a rhetoric fattened with ornament. “What the Scornor more Particularly bestows his Flouts upon,” says Cotton of one of his father’s assailants:

is Dr. Mathers PREACHING. Strange! His PREACHING! Of all things, – His Preaching! – Yes He says, This Mather, Preached often in Dissenters Meetings in London; *His Style was more Affected and Quaint than those of the Nonconformist Teachers, who are most famous in that Way; and would Confirm all that has been said [which was with Derision enough] of the Harvard-Eloquence.* (*Parentator* ix; emphasis added)

Michael Wigglesworth’s 1650 college oration, “The prayse of Eloquence,” notwithstanding, ‘eloquence’ had at this time particularly barbed connotations, signaling pomp and a postured display of learning; insinuating pride, even literary gluttony:¹ “it is beyond my care to please the nicenesse of mens palates, with any quaintnesse of language,” Hooker had written in his preface to the 1648 *A Survey of the Summe of Church-Discipline*, one of New England’s first statements of Congregational polity. “They who covet more sauce than meat must provide cooks to their minde,” he had continued, before citing Erasmus: “*Ciceronianus non Christianus*” (n.p.). Given Hooker’s intimation of

eloquence with what amounts, in culinary terms, to a popish fondness for costume, one would expect Cotton to reject characterization of Increase's style out of hand. On the contrary:

I will take leave to say ... That if the *Nonconformists* would more *Preach after the manner* of Dr. *Mather*, and be so *Affected* and *Quaint* (if it must be called so,) as to have much of the *Sacred Scripture* well Explained and well Applied in every Paragraph of their Sermons, and the *State of Souls* reached with Skilful and Pungent and Adapted Searches into it: It would be no Disservice to the Kingdom of God. (*Parentator* x; original emphasis)

Style, Cotton explains, makes the man, manifesting his virtue in the graciousness of his word as well as act, a combined dispensation that the minister calls "PIETY."² What, however, is most remarkable about Cotton's posing of this resonance between interior and exterior selves is his reminder that the equivalence is, at root, a literary art. Particularly, it is a statement of the relation between form and content. In *Parentator* (1724), his biography of his father, Cotton specifies it as the correspondence between "the *Style of this Narrative*" (v) and "The SUBJECT of the *History*" (1); or, referring to Increase, "The *Manner* and the *Matter* of his *Preaching*" (214-15; original emphasis). Increase and Cotton's accusers, a flock of "*Gentlemen-Criticks*" who prattle and tumble forth useless, discordant analysis of both ministers' form, can neither apprehend nor enact the correlation between style and subject matter that underlines righteous eloquence. "[A]s for the *Style of this Narrative*," Cotton promises them, "I will make no Excuses ... until you are better agreed among yourselves, upon the *Rules of Criticizing*" (v-vi; original emphasis). Rather than beginning from the premise that these critics dispute his doctrinal positions, which by this point in New England's history many did,³ Cotton seizes on the insufficiency of their reproach of the style he uses to express them. Their criticism, that is to say, is failed literary criticism.⁴

Cotton, meanwhile, is adept in the genre. One of the contentions of this chapter is that he frames his defense according to its terms – according, again, to a correlation between form and content – because his theological convictions are inseparable from their conveyance as rhetorical exercises. When commending the length of his *Magnalia*, Cotton puts this indivisibility as simply as possible: "the Famous and Acute Mr. Alsop," he relates, "when some were Proposing to make an Abridgment of that History, said upon it: Tis Impossible to Abridge it! You Injure it, if you go to do it. There is nothing Superfluous in it ... *No man that has a Relish for Piety or Variety can ever be weary of Reading it*" (vii-viii; emphasis added). The "Variety" Cotton speaks of is not the unrestrained mass of Oldmixon's accounts, nor is it the petty differences of opinion that allow Mather's rebuke of party politics to take the form of a denunciation against squabbling literary critics. Far from exposing either internal or external fractiousness, variety marks the singularity of one's devotion by showing a multitude of literary representations of it. "The same verity is again and again perhaps set before the same guests, but drest and disht up after a new manner," says Wigglesworth, slanting Hooker's metaphor: "So that Eloquence gives new luster and bewty, new strength new vigour, new life unto trueth; *presenting it with such variety* as refresheth, actuating it with such hidden powerful energy, that a few languid sparks are blown up to a shining flame" (180). Piety is variety, or *varietas*.

At many points in its history, William Fitzgerald (2016) reminds us, the latter

concept has gone by the name of *copia*, a rhetorical ideal that holds “an inexhaustible variety of themes and arguments (*res*) has to be matched by a corresponding expressiveness that allows the author to dress them in an equally profuse variety of words (*verba*)” (Stievermann, “Writing” 268).⁵ We can best think of *copia* as a linguistic unified field theory that dreams a correspondence between style and subject matter. Several years ago Jan Stievermann (2004) demonstrated Mather’s use of the idea simultaneously to assert his own voice and to pay respect to God’s supreme authorship.⁶ Elucidating how *copia* achieves this double work, Stievermann restitutes a style earlier critics had regarded as mere plumage and bare heft.⁷ The Mather who emerges utilizes *copia* to cohere the typological and the original, providence and experience, divine power and individual will in an attitude about literary production. The effects are impressive indeed. “Mather’s much-scolded bombastic style,” explains Stievermann, in Bercovitch’s vein, is “an expression of his wish to accomplish an ultimate and at the same time truly American act of writing” (264-65). Mitchell Breitwieser (2013) is even clearer that one end of Mather’s style is our contemporary, postmodern moment: stretch the line from Mather and see that it touches all “other sorts of loose-limbed structures, backyard cosmoi, bricoleur extravaganzas,” including “the tradition of massively digression-ridden prose works” (401-02) by Tom Wolfe and David Foster Wallace, and the lifelong poems of Pound and Williams. For Breitwieser, as for Stievermann, the defense of Mather’s abundance has been in the literary tradition.

I propose that *copia*’s effects go further. Beyond illuminating the lives of New England’s divines and the circumstances met or suffered by their churches, the copious style of Mather’s *Parentator* and *Magnalia* has consequence for how we regard what are typically conceived of as socio-political events. Of these, I am concerned with one, the seventeenth-century expansion of Congregational church membership termed the Halfway Covenant.⁸ The Covenant was a response to a crisis that showed itself with increasing urgency as New England’s second generation came of age. The first generation had taken as a matter of course that their children’s entrance into the church by baptism would segue to full membership when, upon reaching maturity, they would confess the work of God on their souls.⁹ But “[t]he case was This,” explains Cotton in *Parentator*:

When our Churches were come to between Twenty and Thirty Years of Age, a numerous Posterity appeared, among whom there were Multitudes of well-disposed persons, who professed themselves desirous to Renew their Baptismal Covenant ... but yet they could not come up to that *Experimental Account of their own Regeneration*. (50-51; original emphasis)

The implications fell hardest on *their* children. If only full members could baptize their children, the sons and daughters of the second generation could not receive the rite, nor the children of that third generation, nor the children of those children, all the way down the line. New England thus beheld the instrument of its discontinuity. In response, a series of Massachusetts synods between 1657 and 1679 affirmed that *all* church members were heir to the promises and privileges God had granted to his chosen people. Seek to inhibit that inheritance, warns Richard Mather, and you but tamper with God’s decrees. Does not “their changing the Frame of the Covenant, whereby his visible Kingdome in his Church is constituted and continued,” he charges his dissenting brethren, give “a most deep and dangerous Wound to the Interest and Progress of Christ’s Kingdome?” (*Defence*

3).¹⁰ It is difficult to mistake the numerical inflection of Richard’s ‘increase.’ As Cotton’s counting (“Twenty and Thirty,” “numerous,” “multitudes”) likewise suggests, restricting baptism to the children of full members meant in most practical terms that New England faced the specter of a quickly diminishing church, and with it, the end of the Puritan experiment. To prevent that eclipse, the ‘Halfway Synod’ of 1662 adopted a generational or ‘genetic’ model of salvation. Its fifth proposition specified that baptized, though not yet full, members could transmit membership to their children.¹¹ Neither these parents nor their children, however, were entitled to vote in church affairs, receive church discipline, or, most severely, take the Lord’s Supper until they, like the men and women before them, had given personal account of their conversion. The position made them in some eyes but “meer” or “mediate” members.¹²

My intention in exploring the controversy that ensued is to look not merely at the instance but at its rhetoric, and in doing so to reconceive the Halfway Covenant as a literary event. Traditionally, it has been apprehended as a mark of spiritual declension, a charge that ‘synodals’ including Richard Mather in Dorchester, Jonathan Mitchel in Cambridge, and Increase Mather (after Jonathan Mitchel turned him) in Boston, all sought to confound. “Such Inlargment of Baptisme, and that Consociation of Churches, which is in the Synod Book asserted,” says Increase, “is no Apostacy from the first Principles of New-England, nor yet any declension from the Congregational way” (*First principles* “To the Reader”). Early critics, including Williston Walker at the end of the nineteenth century, and Perry Miller very famously in the 1950s, were hardly convinced.¹³ In the following decades, still energized or pursued by a need to distance itself from Miller’s narrative of spiritualism lost, scholarship on Puritan New England remedied the deficit. The declension theory was but the “perpetuation of misconceptions and failure to recognize the relationship between social realities and church polity” (9-10) Richard Pope insisted in 1969. Edmund Morgan (1944), Ross Beales and Gerald Moran (1979), Catherine Brekus and Harry Stout (1991), Anne Brown and David Hall (1997), and Katherine Gerbner (2012), have all parsed baptism and membership statistics to determine whether the Halfway Covenant decisions led to a decrease in New England’s church numbers.¹⁴ Finding very frequently that they did not, their studies have complicated the charge that the Halfway Covenant was a diminishment of quality for quantity – piousness for the sake of the body count. However, I argue, they have also risked stagnating the debate, insofar as discussion remains largely about calibrating the truth or falsehood of declension in sociological terms.

What such interpretations have concealed, I also contend, is that this relation between ‘quantity’ and ‘quality’ is not circumstantial but essential to the Halfway Covenant and that in the enormous pamphlet literature to which the Covenant gave rise it is expressed in the rhetorical idea of *copia*. *Copia*, that is, is the rhetoric by which we can reconceive the instance. My argument proceeds along three lines. First, I look at how ideas about the relation between form and content emerge during the Halfway debates as topics (*topoi*) that structure arguments. Second, I propose that the closer we read the pamphlet literature that came out of these disputes, the more we realize that writers on both sides of the controversy recruited the rhetorical concept of *copia* that underlay these ideas. The key players in the Halfway debates invoked *copia*’s ideal and its methodology. What we also find is that they invoked its history, particularly its latter-seventeenth transition from “a qualitative sense associated with rhetoric” to a “quantitative sense” (Shinn and Vine 17) associated with material reproduction – and that of bodies as well as

texts.¹⁵ Third, I show that the style that resulted from these manifold applications of *copia* is particularly alive in Mather’s history of the Halfway Covenant, and around one issue central to its debates: the nature of confession.

A test case vis-à-vis this last: Tracing the history of New England’s synods in the fifth book of his *Magnalia*, Mather takes pains to emphasize the fundamental agreement of the 1680 Reforming Synod with platforms that have gone before. Thus “for a concurrence with the confession of faith made by the assembly at Westminster,” explains Mather, “a synod assembled at Boston, May 12. 1680. whereof Mr. Increase Mather was moderator, [and] consulted and considered” the Savoy Declaration of 1658,

which, *excepting a few variations*, was the same with what was agreed by the reverend assembly at Westminster; and afterwards by the general Assembly of Scotland; was twice publicly read, examined and approved; and *some small variations* made from that of the Savoy in compliance with that at Westminster; and so, *after such collations, but not contentions*, voted and printed, as the faith of New-England. But *they chose to express themselves in the words of those assemblies; that so (as they speak in their preface) we might not only with one heart, but with one mouth*, glorifie God and our Lord Jesus Christ.

It is true, that particular churches in the country have had their confessions by themselves drawn up in their own form; nor indeed were the symbols in the most primitive times always delivered *in ipsissimus verbis* . . . Nevertheless, *all this variety has been the exactest unity; all those confessions have been but so many derivations from, and explication and confirmations of, that confession, which the synods had voted for them all.* (2.156-57; emphasis added)

This unanimity-in-variety – “unity in hybridity,” as Kevin Chovanec (2015) has recently called it – is the very meaning of *copia*. As an art of rhetoric, *copia* held that successful presentation of one’s subject matter lay in the varieties he used to express it, by all the techniques of reference and representation he could invoke. This was an art of assemblage, not accumulation, an act of creative thinking – what the classical tradition summed under the first two canons of rhetoric, invention (*inventio*) and arrangement (*dispositio*) – that provided room indeed for individual expression. Simultaneously, *copia* tells how to effect this *varietas*. *Copia*, in other words, is both an idea and its practice, a theory of the relation between form and content and the art that forges that correspondence.

Erasmus’ *De Utraque Verborum ac Rerum Copia* (*Copia: Foundations of the Abundant Style*) was both its user’s manual and a statement of its poetics. *Copia*’s practice, we learn, entails varying a sentence in twenty different ways and varying one’s material eleven different ways. As Peter Mack (2011) has spelled out, these techniques all amount, more or less, to quotation or citation; annotation; and collection or collation. Mack is less able to appreciate – as Scott Crider (2014) and Heinrich Plett (2004) have – that none of these skills produce mere amassment or bare copy.¹⁶ For true *copia* is antithetical to garrulousness, the “bottomless abyss of continuous vacuity” (Striar 269); or, as John Cotton once disparaged it: that “swelling words of humane wisdom [that] makes mens preaching seeme to Christ (as it were) a blubber-lipt Ministry” (*Canticles* 112). It is closer to a poetics of the infinite. For if “true *copia* comes from a fitness between *res* and *verba*,” Brian Cummings notes, it may be because “[w]ords are inexhaustible in exactly the same proportion as things in the world are inexhaustible, and thus can truly form a ‘copy’ of

them, since for every one there is a matching pair, like in a mathematical series imitating infinity” (“Encyclopaedic” 186-87). As an art of rhetoric, *copia* instead collates all the variants it has required, making a massive network of reference and representation to put the same subject matter in different terms.

Mather’s matter, of course, was God, the Puritan God of his grandfathers John Cotton and Richard Mather, though by the mid-to-late seventeenth century some charged that their faith had begun to adapt to a population for whom its ordinances were too hard. On the contrary, I argue, in Richard’s hands as in Cotton’s *copia* argues that the Halfway Covenant was not a softening but a continuance of orthodox doctrine. Those baptized in infancy, Richard announces, so long as they “perform the Duties, and retain the Essentials of Christianity, or of Faith and Obedience ... “continue (yea regularly continue) in the Church, for ought that hath yet appeared, either in 1639. or in 1662” (*Defence* 17). Some thirty years later his son will say that we can go even further back, for New England’s statements of its church policy are but variations on “[t]he confession emitted by Irenæus and Athanasius, formerly, and Beza, as well as others more lately” (*Magnalia* 2.156). We can take such cross-referentiality as evidence of the typological strain in Puritanism, on which so much has been said (Bercovitch 1967, 1975, 2011). We can also understand it, as Theodore Dwight Bozeman has explored, as an extension of Puritanism’s “[r]esistance to the inventive propensity of the mind,” for if man could not let his imagination roam, “nor might ecclesiastical arrangements be devised to alter or supplement those of apostolic times” (51).¹⁷ Beyond typology and beyond primitivism, I am arguing, Puritan figuring of the Halfway Covenant as a compilation of, rather than breach with, apostolic laws times is as an essentially rhetorical act. In the writing in and around the Halfway Covenant, it manifests as a copious style.

In this chapter, then, I take as a premise the understanding of the Halfway Covenant as a political phenomenon. But I also suggest that there has been a great deal of scholarship on what the synods did, and rather too little on what they said. Writers on both sides of the controversy saw themselves as participating in a literary as well as an ecclesiastical event. *Copia* offers a point of entry into that phenomenon, by modeling how a rhetorical idea – a unity between form and content; style and subject matter; quantity and quality – informs their dueling representations of doctrine, polity, and generational change over time. The payoff is a new conceptualization of the relation between the Puritans’ rhetorical and theological principles on the one hand, and ecclesiastical practices on the other. By looking at *copia* as a literary form, I am suggesting, we can seam together the sociological/spiritual dialectic through which the Halfway Covenant has been understood.

Copious forms: preliminaries

Copia broke into two aspects, *copia verborum* (abundance of words) and *copia rerum* (abundance of things). Erasmus’ *De Copia* is divided accordingly, its first book concerned with *copia verborem*, the second with *copia rerum*. In *copia verborem*, the eminence of one’s ‘style’ exists in direct proportion to one’s capacity for so many variegated (rather than repetitive) verbal transformations. *Copia rerum*, in contrast, finds rhetorical virtuosity in the amplification of one’s content. It makes the leap from playing with, even luxuriating in, words to an art of arrangement of themes and concepts. Here, then, is the basic analogy: *verba*–words–form :: *res*–subject matter–content. It is this dual or twofold quality of *copia*, I

propose, which grounds the idea's applicability to Halfway debates that swarmed around the relation between the outer form and inner substance of New England's churches. Toward that end, I offer a chronology of *copia* that allows us to see how advocates and opponents of the Halfway Synod's decisions ('synodalsists' and 'anti-synodalsists' or 'dissenters,' respectively) routed their ecclesiastical anxieties through the concept.¹⁸

These were not merely individual and ecclesiastical but doctrinal anxieties concerning the nature of church membership. The question was not simply *who* was or was not a church member, as sociological analyses of the Halfway Covenant have plumbed, but what membership *was*. There were two answers. One held that the promise God made with his chosen people entitled to baptism those whose parents had been baptized in their youth, even if those parents failed to provide the personal narrative of conversion requisite for full membership. In this view membership was a continuum derived from the covenant. God has been "pleased to extend the Grace of his Covenant not only to the Parents, but also to their seed," says John Allin, and these "Infant-seed are in their own persons actually Members of the Church, being actually in this Covenant with God as His People, and he Their God, and having the Covenant in their flesh, the Seal of it applied to their persons" (*Animadversions* 18). Baptism initiated membership as an external sign, affirming that one was Abraham's seed. Personal confession completed it, testifying to the internal experience of the work of God on one's soul. To continue as members of the church, upon maturity one need only "own the covenant," a largely ambiguous phrase indicating that one had vouchsafed his or her subscription to Puritanism's chief articles. If the requirement in this case was somewhat less, so too were the rights and privileges it entailed. Synodalsists never denied that those brought into the church by baptism as children were prohibited from approaching the Lord's Table until they had given confession of their conversion experience. Mediate members they may be until this point, the synodalsists affirmed; *but members nonetheless*.

In contradistinction, anti-synodalsists insisted that experiential confession was the necessary condition for membership, which derived neither from a dilute historical understanding – a mere "profession of faith" – nor from the "seal" of baptism that synodalsists claimed was sufficient. Baptism was only ever provisional, explains the leading dissenter, John Davenport, for "what membership is this?" he asks, eyeing the subjects of the fifth proposition. "This membership, in their minority, was *mediate*": merely by virtue of their parents' baptism. "It remains then, that, when grown up, they must be, either not members of the Church personally, or members by their personal covenanting" (*Another essay* 10). Baptism was no promise that a child would reveal himself to be an immediate member. If baptism was a sign of anything, it was of a people's good faith: extension of membership vouchsafed a belief in the federal covenant, simultaneously as its precariousness paid respect to that fact that one could never be sure of one's salvation – either another's or one's own. In adulthood, typically age sixteen, one must assume the burden of giving the personal confession that attested to one's saving faith. In doing so one proved (as best his mortality permitted him) that he was a member of the invisible church, and so worthy of full, or immediate, membership in the visible. Without that, his membership ceased. Thus in the dissenting view membership did not placidly continue until a congregation had cause to think otherwise. One could not go halfway toward God's altar and stay. Membership ultimately demanded a positive act. "So quick they are," Allin laments of this rule, "that if the Lord be not pleased to give them Saving Faith and Grace so soon as they come to adult age, [they] Disown them as No Members, and

so let them go” (37). This ‘quickness’ of the dissenters sprang from an impressively multivocal concept of membership. “True it is,” says Increase in his preface to Davenport’s *Another essay for investigation of the truth*, before switching sides: “we have made much use of that distinction of *Immediate*, and *Mediate Members*”: for the *Antisynodalia Scripta Americana* had affirmed of those children baptized, “though they be Members in general, yet Infant-seed are onely fœderally holy ... These have a Parental and partial Right, not compleat and perfect” (n.p.).

I argue that the synodalsists’ counter-argument is most remarkable insofar as it makes use of a particular theory of language: “Before I come to Answer their Reasons interwoven in this Discourse,” says Allin in his response to the *Antisynodalia*:

Seeing our Brethren have so oft recourse to their distinction of Members into actual, not actual; personal, not personal; by Parental Covenant, and personal; immediate, and mediate; perfect, and imperfect: and lay so much weight upon them; as, That the Parental Covenant cannot capacitate their seed to Baptism; That their Membership by Parental Covenant lasts no longer than minority, pag. 37. and, The personal Covenant of such, makes them Members; is the Form of their Membership, and the like: I shall therefore here, once for all ... try what Light is in them.

And first, in my best Observation, I can find no such distinction of Parental and Personal Covenant, that should make two sorts or kindes, of Members, *neither in the Name or Thing*: but all along in the Scripture, the Covenant is one and the same that God makes with his People, and is called by the name of Gods Covenant. (emphasis added)

All these terms of which you are so fond, argue the synodalsists, *are but different words for the same thing*. There may be multiple ways of becoming a member, and membership may admit to gradations, but as an identity, membership is singular. Those who meet the genetic condition for membership and are made members by baptism “are and have always been properly and compleatly within the Church, and not half in, and half out” (Mather, *Defence* 19-20). The question, as Robert Middlekauff once summarized, was whether there were two different means to church membership, as the synodalsists claimed, or two different kinds of church membership, as the antisynodalsists countered. “The covenant, [Richard] was convinced, was one,” and “he remained certain that the Church would endure if it could be protected from the over-zealous within,” writes Middlekauff. “The covenant that gave it form continued as always, though ways of qualifying for membership varied” (56-57). This division between a concept of membership as a singular identity that can take different forms and a concept of membership as being of multiple and distinct kinds is still a useful frame for understanding the Halfway Covenant. It becomes more so when viewed in the context of *copia*, I propose, because the Halfway debates also made a contest between two different ideas about the relation, in Allin’s most telling words, between “name and thing.”

Copious forms: histories

In the seventeenth century, the intellectual histories of American Puritanism and of *copia* met in the nature of their anxieties about the forms representation should take. If the

Halfway debates, as we have seen, coalesced in large part around whether there was one kind of membership or two, sixteenth- and seventeenth-century theorists and practitioners of *copia* were preoccupied with delineating whether a word should refer to one and only one thing, or whether the verbal possibilities for expression should be more ‘abundant.’

From antiquity through much of the early modern period, *copia* was understood as a power of variegation that could either swell or condense language but was in no way reducible to either. Not a single operation – *copia* “transcends specific techniques and materials” (Cave 5) – but operations’ effect, *copia* was as apt to materialize as contraction as expansion. It can alternate with ease, says Erasmus, between including “the essential in the fewest possible words that nothing is lacking” and “enrich[ing] your expression of it that even so nothing is redundant.” *Nihil desit* and yet *nihil redundet*. In either case, as Margreta de Grazia has beautifully written, “words are by design made both to fall short of things or to exceed them. Linguistic virtuosity requires exercise in wielding the material properties of words: their duration as sound when spoken and their extension as marks when written” (n.p.). Under the sign of *copia* one could and must employ all ‘manners’ of figures, now utilizing one to skim the upper bounds of metaphor, now invoking another to refine a subject matter to its purest expression, not as an act of bareness but of *brevitas*. (With Samuel Torrey and Josiah Flint, for example, we might praise William Adams’ *The Necessity* (1679) for the “copiousness *and* (yet withal) conciseness of the method” (“To the Reader.”)) By the mid-seventeenth century, however, *copia* was increasingly charged with sliding too much toward the former – with becoming but a mass of words. Instead of skilled semantic and thematic variations that showed a point favorably, because numerous, from every angle, arguments were clogged with so much verbal tinsel. The effect was not to persuade but to mire in “that care of Embellishing,” Cotton calls it in *Parentator*, which “I have Studiously laid aside” (vi).

This is precisely the character of the critiques levied by synodalists and antisynodalists, one against the other. When during the Halfway controversies Richard declares that “it is Covenant-interest, or Federal holiness, or visible Church-membership (*which are but several expressions of the same thing*) that properly gives Right to Baptism,” he is announcing a method as well as making a point. Confounding Davenport’s distinctions of membership lies in revealing them as wordplay. The dissenting brethren, Richard says, have argued that it “is not meer Membership (as the Synod speaks) but qualified Membership that gives right unto Baptism” (35). But let us more carefully explore the meaning of these terms. “Remember here,” he instructs:

that our dispute properly is of Membership *de jure*, or regular Membership ... not of Membership *de facto* onely. Now Membership *de jure*, or regular Membership, implies *some qualification*, as · viz. that a person being a Church-member is not under such gross, and incorrigible Ignorance, Heresie, Scandal or Apostacy, as renders him an immediate Subject of Excommunication; hence *meer Membership* is not so to be opposed to *qualified Membership*, as if it were destitute of all qualifications. (35, original emphasis)

One who has qualified for membership by any valid means is a child of the church, and cannot easily be severed from it; or, we might say, for Richard, qualified membership *is* membership. “A person may be a Member (or in memberly Relation) and yet not bein full Communion,” he clarifies. “Now to say” (as the dissenters say), “that meer

Membership (in this sense) the Scripture acknowledgeth not, one should say, that the Scripture acknowledgeth not Logical Distinctions between *things in their Abstract and general Nature, and the same things as clothed with various Adjuncts and Accessions*; which to say, were strangely to forget our selves” (33-34; emphasis added). Davenport turns the tables, arguing that synodalsists’ multiplication of means dilutes the concept of membership by pluralizing it. Both are charging their opposing parties with participating in *copia*’s shift from *res* to *verba*.

To repair such pageantry required a whole new view of language: it was heretofore not to convey force, but fact. Just who – or what – was to be responsible for the correction was for Thomas Sprat, founding member of the Royal Society, perfectly clear. The “only Remedy, that can be found for this *extravagance*,” Sprat issues in his *History of the Royal Society* (1667), the only “constant Resolution, to reject all the amplifications, digressions, and swellings of style” is:

to return back to the primitive purity, and shortness, when *men deliver’d so many things, almost in an equal number of words* ... bringing all things as near the Mathematical plainness, as they can: and preferring the language of Artizans, Countrymen, and Merchants, before that, of Wits, or Scholars. (113; emphasis added)

It is science that imparts such orderliness. Particularly, it is British science, for the “one thing,” Sprat continues, “which will render this establish’d custom of the *Society*, well nigh everlasting: [is] the general constitution of the minds of the *English*” (113). The meat-and-milk language of the British would not let words mystify. Quite the contrary: to deliver “so many things” in almost “an equal number of words” reifies and demands a one-to-one correspondence between a thing and its name.

The rule began with Bacon. His 1605 *Advancement of Learning* had advocated a strict ideographical method that would influence languages systems sought by John Wilkins and Jan Comenius.¹⁹ These would institute a one-to-one correspondence between every word and thing, obviating simile in the literary and similitude in the visual arts, for to confuse a material thing with its representation – the painted grapes for the real – amounted to what Bacon termed “Pygmalion’s frenzy.” De Grazia describes it as “a madness like idolatry” (231). There may be an indefinite number of things, all of which the Royal Science would catalogue, categorize, and describe. But the possibility that a being could *be* multiple, that it could take manifold ‘forms,’ physical or verbal, amounted to more than rhetorical untidiness. It was scientific perversion. *Res* had become empirical, referring not only to rhetorical subject matter but to the physical world.

Cotton Mather’s writing, even more than Davenport, Richard, or Allin’s, catches *copia* as it moves from one meaning to the other, both in terms of its new affinity with corporeal matter and with the prohibition against multiplicity that accompanied it. Molly Farrell’s very fine reading of Mary Rowlandson’s *The Sovereignty and Goodness of God* (1682) through the frame of seventeenth-century population science provides a compelling point of entry. Increase, Farrell explains, had taken care that his son “had received an extraordinarily high level of mathematics instruction” (77), a fluency that Cotton put to distinguishing the pure from the impure, and “of permanently separating people in order to count them – an essential tool of colonial power” (7). The sermon Cotton penned in 1697 ‘recounting’ Hannah Dustan’s Indian captivity is exemplary of the tactic. “The younger Mather packs his short narrative with precise numbers of children and adults

and exact dates and distances,” writes Farrell, “making sure to surround the exceptionally vulnerable Dustan – taken captive right from her childbed – with quantification.” The Indians who “dash’d out the Brains of the *Infant* against a Tree” number nineteen or twenty; five adults and seven children make an Indian family of twelve; the scalps of ten fetch fifty pounds. Cotton Mather thus offers an antidote to the Indian threat to English women’s fertility in the form of mathematical exactitude in the targeting of Indian children:

As in Rowlandson’s narrative, the interest in counting bodies in Cotton Mather’s tale of Dustan accompanies interest in the cultural identity of children. The precisely known ratios and market-determined values throughout the sermon on Dustan surround a vision of similar assembly-line reproduction of the young” (Farrell 78).

Cotton was writing forty years after the 1657 Synod prescribed an extension of church membership; thirty-five after the Halfway Synod codified it; and but seventeen years after the Reforming Synod reaffirmed it, a time when, as Cotton notes in *Parentator*, good Christians “were not so many as they had been, among a People greatly Multiplying” (82).

The same matter that drives Cotton’s 1697 sermon grounded the Halfway debates: the identity of children. King Philip’s War made targets of the young, Indian as well as English. Children were bodies to be aimed at (to modern readers particularly, Rowlandson’s experience of the bullet that “went through my side, and the same (as would seem) through the bowels and hand of my dear child in my arms” is a gruesome example of target practice). More contemporaneously, as Farrell elucidates, children are ‘figures’ that may be bartered or otherwise circulated within and between realms of material production and reproduction. (Erasmus, in a 1671 translation of his *Colloquies*: “What price dost thou set upon thyself? At ten targets.”) To each body one value: this is the strict correspondence that Mather fixes in his narrative of Dustan’s captivity by *writing* fixedly, counting rather than characterizing distances, bodies, scalps. The former models the practice of empiricizing *res*. The latter would be the contrivance of doing as the Indians do, ordering “the same feathers in a thousand varieties of figures.” It is no coincidence that in his most infamous literary contribution to the witchcraft crisis, Cotton signaled his adherence to the scientific paradigm by framing representational variety in the darkest possible terms: “As the Prophet cry’d out, *Multitudes, Multitudes, in the Valley of Decisions!* So I say, *There are multitudes, multitudes, in the valley of Destruction, where the Devils are!* When we speak of, *The Devil*, ‘tis, *A Name of Multitude*” (*Wonders* 38; original emphasis).²⁰ Similarly in the *Magnalia*, when Cotton turns to the Cambridge Platform, he distinguishes the 1648 Synod from Trent (1545-63) on the grounds that the latter is an imposter and is composed of imposters. “The reader is now to expect, a *council* at *Cambridge*,” he tells, “and in truth, another sort of *council*, than that sham *council* of *Trent*.” For Trent was formed only of bishops’ men who did consist

of disguised masquers; not of men, but of images, such as Dædalus made, moved by nerves none of their own. The difference between the *bishops* now to assemble at *Cambridge*, and the *bishops* which made such a noise by their conventicle at *Trent*, was I truth not much less than that between *angels* and *devils*.” (*Magnalia* 2.181; original emphasis)

The devil, we know, is a multitude; but multiplicity itself is profane because it explodes the singular relation between words and things that Mather, like Sprat and Bacon's other many inheritors, would institute.

In his explicit writing on the Halfway Covenant, both in *Parentator* and in the *Magnalia*, Mather's position on being numerous is markedly different. We have already seen that he locates both ecclesiastical and personal piety in the varieties confession can take. I would argue that what explains Mather's praise of *copia* as abundance in this regard, in contrast to his repudiation of *copia* as copies vis-à-vis witches and bishops, is the very register of his subject. For confession, as Patricia Caldwell has taught us, is itself a literary exercise. When applied to this 'matter,' as Mather applies it, *copia* recovers something of the power of persuasion that initially characterized it. Mather, I am suggesting, does not retire from *copia* altogether: in addressing himself to the issue of confession at the center of the Halfway Covenant debates, he seeks to recuperate its 'rhetorical sense.' The rest of this chapter is concerned with elucidating what Cotton redeems when he redeems that. For his writing in the *Magnalia's* makes clear that his defense is not merely of language but of policy. In using the meaning and methodologies of *copia* to argue for the legitimacy of the Halfway decisions, we will also see, Mather was representative, not exceptional. This, finally, is why Allin says 'word and thing': because the question at the center of Halfway Covenant was whether the very idea of membership could be grounded in such an idea of unity-in-variety as the synodalsists proposed (and on which Mather will insist). Allin in the *Animadversions* thus corrects the dissenters' objection that the fifth proposition in "three expressions propounded" (47) weakens the meaning of membership by introducing new words. As to the antisynodalsists' complaint that its requirement that one be not "scandalous in life" omits reference to 'offense,' Allin schools: "It is evident Luke 17.1, 2, 3. That Offences to be dealt with are Scandals ... So that Not to be scandalous in life, is full as large as that other Expression, and doth include Satisfaction for Offences that are fallen into" (49). In much the same way, were there not multiple names for the same thing, all of them being *means* of membership – or was the relationship more severe?

The copyists

Mather in *Parentator* has a certain fascination with his father's script. In his twenty-first chapter, unmistakably titled "A Variety of Sufferings," he returns as he began, to the designs of evil men. Cotton has one device particularly in mind. "I said, Sufferings are coming on," he warns his reader: "Having in *their* way, that is to say, *Basely*, Circumvented some Innocent Letters of his, to an Eminent Person in Amsterdam, which Enabled them to *Imitate his Hand* in Subscribing of his *Name*," his father's abusers "*forged a large Letter of Three Pages* in Folio, full of not only Ridiculous, but also Treasonable Expressions" (93; original emphasis). The irony is hard, given that only a year prior, in 1683, Increase had given a most "Elaborate Answer" (93) to King Charles' demand that Massachusetts resign its charter – a reply, Cotton tells us, so skilled and perfectly pitched that, "Copies thereof came into many Hands; and with so much Efficacy, that the Country was preserved from a Mean Compliance with the Vile Proposal" (90). *Parentator* ends with Cotton's attempt to convey something of his father's 'efficacy' by reproducing it

as literally as possible, first by transcribing selections from Increase's sermons; then, finally, by feeling for his script:

The Preacher, who *sought out the Acceptable Words* we have heard of, was One who wrote as Obscure an Hand perhaps as his Admired *Ramus*, of whom *Naucellus* Complains, That a Stranger would ask a deal of Time to spell out so much as Two or Three Lines of his Writing, or [as] Honoured, of whose Writing *Bonciarius* makes the very same Complaint: and herein also he was not unlike to *Bucer*, who wrote an Hand so bad that the Printers could not read it: (and *Erasmus's* too, it seems, was bad enough:) Yet his Pen may say to the World, *Have not I Written unto the[e] some Excellent Things?* (233-34; original emphasis)

There is a reason why Cotton likens his father's hand to that of these reformers', beyond the fact that it was similarly crabbed. Ramus, we know, was a humanist reformer; Lipsius was a Flemish philologist, roughly contemporary with Ramus; Bucer exerted considerable influence on Calvinist and Lutheran as well as Anglican thought; Erasmus, of course, articulated the idea at the center of the present chapter. In his closing paragraph of *Parentator* Mather announces Increase's place among these humanist luminaries by drawing parallels between their penmanship. The likeness of the marks they have dashed on paper, Mather suggests, speaks to a commonality that runs further down: Is it any wonder, begs the correlation, that Increase's hand should resemble that of such a religious mind as Bucer's, or a dialectical mind as Ramus', or – more to the point – a philological mind such as Lipsius'? Notoriously difficult hands, each of them; but we should not mistake the difficulty for rudeness. These most material markings reflect the profundity and the piety of the men who issued them. Penmanship, we might say, fixes an author's character, such that the 'obscurity' of Mather, Bucer, Ramus, and Lipsius' scribbled forms assure the worth of their content. The fact that "a Stranger would ask a deal of Time to spell out so much as Two or Three Lines" of Ramus' writing, or that "Printers could not read" Bucer's hand, thus comes to argue for the spiritual as well as the practical necessity of making the attempt. This is the urgency contained in Mather's "Yet," which coalesces the "Acceptable Words" of the first line and "Excellent Things" of the last, *verba* and *res*, respectively, into a unity.

In Cotton's hands in *Parentator*, Increase's script thus reifies *copia* both positively (as unity-in-variety) and negatively (as forgery); but in the pamphlet literature arising out of the Halfway Covenant the latter valence reigns, relaying Puritan anxieties about human authorship that had piqued by the time the second and third generations came of age. There is no criticism the disputants in the Halfway controversies levied so hotly against each other as that of 'invention.' Davenport snipes that synodalsists' willingness to take profession of faith as sufficient for membership will not replenish the church but only embolden hypocrites to flood it, for "Humane Inventions usually cause the Evils which they pretend to cure" (*Another essay* 15). Allin counters that "[t]his disowning such as no Members, is a meer invention of man" (*Animadversions* 34), it is no "Example to be imitated" (36). The claim lanced insofar as it could successfully accuse one of undercutting the Puritan conviction that God was first and last author of all things. As scholars have by now explored at length, from this avowal of God's agency followed a rule about human authorship: because God was perfect, one could not in any way alter his Word. Bypassing a point would be diminishment, adornment would be idolatry.

Antisynodalsists' claim that only full members are the proper subjects of baptism "is a meer Addition to the Word of God, which wholly fails them of any proof" (*Animadversions* 20). So let "God forbid," continues Allin, "that in searching after the Truth we should Cavill at the Word of God; but let us take heed of Adding to it, or Taking from it" (*Animadversions* 20).

This was a more complicated and more treacherous prescription than might otherwise appear. "Protestant preachers along the coast," we can say with Norman Grabo, "were after all professional analysts whose job was to interpret writings accurately, consistent with faith, and purposefully." These dual imperatives to annotate and yet not to invent gave up certain directives about one's manner of preaching. In short, God's Word needed no adornment. In light of this fact one's "way of *preaching*" should be (as Cotton describes Richard's in the *Magnalia*), "very *plain*, studiously avoiding obscure and foreign terms, and unnecessary citation of *Latin* sentences," aiming only to shoot "*arrows*, not over the *heads*, but into the *hearts* of his hearers" (1.409; original emphasis).²¹ It was also Grabo who first recognized that as an art of literary criticism, Puritan sermonizing could take more variegated shape. A decade later Stievermann demonstrated that it could enlist *copia* itself, both as an idea and a methodology. In quoting the Bible and quoting other authorities on the Bible, one radiated ceaseless analysis without introducing an act of creation that would presume upon it. When Cotton in *Parentator* says that Increase "much despised what they call *Quaintness*, but affected a *Plain* and therefore a *Short* sort of a Style," he is not saying that his father dispenses with 'eloquence' altogether (215). He is insisting that Increase's words, so far from claiming original effect, pronounce the singularity of God's will by multiplying glorifications of it. The devotional literature that results is and ought to be (to repeat Grabo's very useful list):

seasonable (a very prominent term in the prefaces, especially after 1660), concise, elaborate, methodological, fluent, directing, correcting, consoling, timely, proportionate, pious, judicious, gracious (as opposed to witty), copious, and edifying. Those qualities constitute a decorum, a fitness, an organization of values at whose base is proportion, whether between a translated text and its original, a tropological address and its audience, a metaphorical vehicle and its tenor, or a catechism and its learners. When Jonathan Edwards began speculating systematically upon the nature of beauty while still at Yale, he was to some extent merely summing up what had been in the critical air since the beginning of American critical thought. ("Running the Gauntlet" 709)

'Beauty' is not a word Cotton was most apt to use, but it does sum the profound, because paradoxical, effect of a 'Matherian' style that becomes plain by being copious.²²

What in their very astute readings Grabo and Stievermann miss, respectively, are two points of context. One is ecclesiastical. I introduce it now only by drawing attention to an omission. "Judging by the prefaces during this forty years of American publishing, especially in the 1670s," writes Grabo, Puritan remarks on writing "point to a reasonably diverse and various set of principles – ample when added up, and more highly textured than has been supposed. They betray a critical mentality – one that grew more edgy between the Half-Way Synod of 1662 and the reform Synod of 1679" ("Running the Gauntlet" 708). Grabo, surprisingly, offers no suggestion why such a "critical mentality" should cluster between these dates.

The other omission is material. An ineluctable consequence of Puritan proto-post-structural “multiplication of meanings,” as Stievermann has it, was a swelling of the material cultures of writing. Stievermann’s theoretical proclivity inhibits him from engaging with this point of fact. Increase himself, Grabo reminds us, sparked a critical consciousness that “the golden rules of art may include room” (“Running the Gauntlet” 697) for compound casebooks and anthologies as “model[s] of instruction and imitation” (701), ‘collections’ that could indeed “exercise judicious selectivity in displaying by quotation and paraphrase not just what to think, but various manners of thinking and expression” (706). In terms of sheer *amount*, the writing that came of all this citing and annotating was unprecedented in the colonies.

Judging from synodal and anti-synodal critiques, that writing was more often than not a waste of paper and ink. In their pamphlet wars adversaries sought to align each other with *copia*’s more recent denigrations, both banal and baneful: gross replication on the one hand, forgery on the other. It is not merely, as we have observed, that accusations ran high concerning combatants’ participation in *copia*’s decent into *garrulitas*; it is that the charge carried with it accusations that one had raised a literal mass of unfit prose. We can perhaps best observe the usefulness of the tactic by articulating its inverse. Authors on either side of the controversy understood their own writing as recuperating *copia*’s ideal by restoring it as a *methodology*. Says Davenport at the front of his *Essay*:

I conceive our principal inquiry should be, what those more general Principles of Truth are, which lie in the things controveted, and how they may be rightly applied: *using herein onely such Light as the Scripture affordeth, by comparing one Text with another, and depending on God in Christ for supply and assistance of the Spirit of Truth to lead us into these Principles, and to teach us by them; that thereby we may be brought to an universal harmony of Truth; all the Lines of Truth (however separated in the Circumference) meeting together in these Principles, as in their Centre, and becoming one Point. The finding out of such Principles, and rightly applying them, would make ... a sweeter closing of Spirits among good men, and the examining of other mens Opinions easier, then walking after the larger Circumference of the voluminous Writings of men, which lead us further from these Principles, then the Scripture alone.* (1-2; emphasis added)

Harmony, we remember from Grabo, can describe the relation between things in and across any number of registers. (We will see in the next chapter how fond Edwards was of invoking a mathematical one). Here, however, the “harmony of Truth” that Davenport envisions among men derives from their participation in a shared work of literary criticism, of rhetoric. The subject of all our collections and annotations, Davenport proclaims, is the Word of God. By scripture we come to all of our opinions about this world and the next. By scripture, likewise, we examine all “of other mens Opinions,” and, if they are “good men” we will find that their writings, however different on first appearance, converge in their fundamental avowal of the perfection of God’s decrees. Each and every of their “Lines of truth (however separated in the Circumference)” are variations in the expression, but not the substance, of this topic.

In the controversies surrounding the Halfway Covenant, whoever can best collect such “Lines” in respect of a particular ecclesiastical issue – regarding baptism, say, or the Lord’s Supper – wins the point. This is why, though all Puritan writing is citational, the

Halfway debates formalize the citational as an explicit methodology. The pamphlet wars play out as a contest between who can summon the most textual ‘troops’ (in one of its earliest meanings, as Marcus Boon reflects, *copia* designated a military corpus (45)). Conversely, critical bemusement seeks to disparage one’s *copia* as the work of fancy. “That the sin of those who forsake Church-assemblies,” Richard had said earlier in his response to Davenport’s *Essay*,

separate themselves from them, wander into wayes of Heresie and Apostacy, is grievous (and consequently calleth for Church-admonition) *this may be gathered from those Scriptures; but to gather thence*, that such forsakers, separatistie and wanderers, do thereby become Non-members, so as that the Church should not, need not, or may not follow them with any Censure, *is a strange Collection.* (*Defence* 14; emphasis added)

Richard in particular favors this adjective, ‘strange.’ In his hard critique of dissenters’ logic that those baptized in infancy are to be turned out of the church if they later prove unable to give an account of their conversion experience, because they have thereby proved themselves non-members: “Would it not seem a strange and vain thing,” he asks, “if the Church should put forth a solemn publick Act to disown a company of Non-members that are without the Church? to what purpose should this be? *How Acts 8.21. here cited in the Margin, should make for this disowning, we understand not*” (*Defence* 22; emphasis added).

“Strange collection” codes for miscarried copious persuasion. The failure smacks of critical ineptitude; “for, notwithstanding all that is here, or can be cited of theirs,” Richard will continue, “it is evident enough that Famous Martin Bucer, and Renowned Parker, (as the Preface styleth them, and that deservedly) do fully concur with the Synod in extending Baptism to such as the Synod describes, or to more then so. Vid. *Bucer de regno Christi*, Lib. 1. Cap. 2. pag. 14.” A representative torrent of citations follows, after which: “The Reader will take notice of what hath been before said, and cited to shew Mr. *Cottons* judgement in the Points controverted between our Brethren and the Synod, and will easily thereby judge whether Mr. *Cottons* judgement was as theirs is: but *It is strange they should make such a Collection from what is here set down*” (*Defence* 41; emphasis added). The chastisement is all the more stinging because strangeness signals transgression: concoction, not collection. Only the latter was what was properly meant by the rhetorical term ‘invention’; and only the latter was permitted by doctrine. “Orthodox Christianity,” we reiterate with Stievermann, “does not allow for a genuine sense of human innovation since everything that happens *sub sole* was ... determined by universal divine laws” (*Defence* 41). To accuse one of bad form was at root to charge him with impiety, because his ‘innovation’ was the product of a mind deluded by the fantasy of human authorship. Antagonists made much of this flagrancy, in order to exchange it. Richard has bared the dissenters’ fallacious *copia*, he explains:

all which we produce, not as if the Testimony and concurrence of *Authors* were the *Basis* that our judgement in this matter stands upon, but because this *Preface* doth, both in this place and in other parts of it, insinuate to the *Reader* as if *Authority* of Writers were for the *Dissenters*, and against the *Doctrine* of the *Synod*,

which is farre from being so: the contrary being abundantly, and undeniably evident. (*Defence* 30)

If an abused or feigned “abundant style” ends in apostasy-by-invention, Richard’s point is that when ‘collected’ correctly, citation instead functions as a form of self-evidence.

Particularly when held against this methodological emphasis, synodalist and anti-synodalist critiques are remarkable for how they implicate one another in a crisis of human authorship, by relegating their antagonists’ arguments to the very realm of material production in which *copia*’s denigration had landed it. Davenport’s *Essay* in particular reads as a study in the testiness *garrulitas* inspires in one obliged to correct it. Near halfway through his discourse he must clarify for his opponents that they “make not another Argument, but the same with the third Argument, though clothed with other words” (14). Perhaps the most interesting feature of the critique is its paradoxical capacity to ensnare one who would level it. For each pamphlet must incorporate, as point of reference, the text or text it seeks to confound. Argumentation and counterargument are interleaved, article by article, each reply carrying with it all the extra-textual citations the opposition had carried with *it*. The pattern is relentless, disputants now insisting on the decisive powers of their own quotations, citations, annotations, now decrying their opponents’ practice not as *copia*’s but its opposite. Davenport – sounding very like Thomas Sprat schooling the Indians – is speaking to a particular article, but the threat that *verba* might supersede *res* applies to the pamphlets as a whole.

The pamphlets’ presumed form of call-and-response quickly disintegrates into a swarm of contesting, corrective annotations so mutually referential that it is difficult to tell who, in fact, a given author *is*. Authors are thus everywhere in these pamphlets, and they are nowhere. Consider John Allin’s *Amniadversions upon the Antisynodalia Americana*, his 1664 reply to the dissenters: “It is no good sign, that the Publisher of these Anti-Synodalia doth so foully stumble at the Threshold,” Allin begins:

For whereas he pretendeth [Allin quotes], ‘... to Publish this Treatise without any Commission from the Dissenting Brethren ... and affirms ... “That the persons engaged in the this Dissent, had much rather this Treatise were suppressed” ... The contrary hereunto is evidently evinced by the whole Preface following; which speaketh no more in the person of the Publisher, but of the Disserters. (1)

Allin exerts great energy looking for an author, trying to expose one, or pin one down. The nebulosness is strange, given that the Halfway debates are obsessed with distinguishing one agent from another, cleaving those who warrant baptism from those who do not. Allin’s charge seems to be that the dissenters have undercut their occupation with delimiting who-is-who by being so cagey in their own admissions of authorship. Authorship is diverted into so many other channels, hoisted onto so many other agents. We might say that the dissenters have profaned the very concept of authorship that rests in God’s sovereignty by dispersing it to a point of oblivion.

What results is a prodigality that dovetails with *copia*’s increasing tendency, when applied to one’s writing, to designate quantity as divorced from quantity. Thus the nature of one of Allin’s first sustained charges against the dissenters: to “aggravate th[eir] course Entertainment,” he explains, the author of this *Antisynodalia* has “addeth” to his misjudged views of church membership this note: “Though it be no other Doctrine then of all the

Congregational Churches in Holland, England, Ireland, and New-England, and also in New-Haven, and Plimouth Jurisdictions; yea, and also that it hath been the Judgement and general Practice of the Churches in the Bay, some few inconsiderable excepted, for thirty years.” This profession of total support, Allin corrects, is only a conceit fashioned out of a few cheap turns of phrase:

Ans. Here is a great Pretense of general Concurrence with their Tenent [that only full church members may baptize their children], but without Proof, and beyond the truth. And to make the Number seem the greater, besides New-England, he addeth, ‘And also’ New-Haven, Plimouth, &c. as if these were not New-England Churches. (3; emphasis added)

In their efforts to maintain an appearance of support for their position, the dissenters have in two respects tried to pass verbosity (*verba*) for matter (*res*). To show greater support for their position than actually existed, they have attempted to cloak duplication as variation, naming “New-Haven, Plimouth, &c.” already contained in “New-England.” This is no expression of unity-in-variety; it is but counting twice. The ‘matter’ it accumulates has no ‘weight’; it is only the gauze of verbal ‘entertainment.’

Even the reader is drawn to participate in the accusation. One cannot observe the repetition of ‘New-England’ in the form of ‘New-Haven’ and ‘Plimouth’ without looking back to a chastisement Allin issued a mere paragraph earlier: “The Author of this Preface complaineth of ‘The course Entertainment of their Tenent, both in the Synod, and in the General Court, where *they expected more Patrons then did appear*” (2; emphasis added).²³ The dissenters try to plump the number of citations they may rightfully enlist; the dissenters try to plump the numbers of supporters they properly have. These two occasions of intentional miscounting associate in our proximate reading of them. The deception they have tried with ‘New-Haven’ and ‘Plimouth’ retroactively invalidates their former claim that their numbers, by all ‘counts,’ should have been greater. What is so striking about Allin’s disparagement is that it hovers between accusations of literary and literal duplicitousness. Thirty-nine years before the publication of Mather’s *Magnalia*, his writing formalizes an anxiety about ‘copies’ as both forged text and invalid bodies. It may indeed be, per Stievermann, that “the *Magnalia*’s copious plenitude of intertextuality ... tends to destabilize, if not to disintegrate the monological character of Mather’s discourse”; but the Puritans were more apt to apprehend *copia*’s negative value in light of its tendency, increasing over the course of the seventeenth century, to be regarded “more narrowly as a designator of number and volume.”

To return, now, to the ecclesiastical omission: Why that style should be profane (as opposed to merely unsuccessful), and why that profanity should register the declension controversies at the heart of the Halfway Covenant, has precisely to do with *copia*’s “inclination,” as Abigail Shin and Angus Vine have usefully summed it, “toward ‘copie’ rather than ‘weight’; an a focus on words at the expense of ‘matter’” (168).²⁴ For this rhetorical history, I can now argue, reconceives our understanding of the Halfway Covenant as a debate concerned with distinguishing population numbers from kind, quantity from quality. Indeed, it is a lexical truth so obvious as to have escaped discussion that in their arguments regarding membership, disputants in the Halfway Covenant dwell fundamentally in this language of quality and quantity. The 1648 Cambridge Platform had applied it to matters supremely practical, its third chapter being “Of the matter of the

Visible Church Both in respect of Quality and Quantity.” This covered in short order the disposition of those “accounted Saints by calling, who ought demonstrate their faith outwardly and feel it inwardly (“though perhaps some or more of them be unsound, & hypocrites inwardly”), and the size of individual congregations (“not to be of greater number then may ordinarily meet together conveniently in one place: nor ordinarily fewer, then may conveniently carry on Church-work”).²⁵ Over the course of the next decades these terms, quality and quantity, became more inflected. Synodalsists claimed that church membership was the identity *within which* one acquired what went by the name of qualification. “There is no individual man in the world that is a *meer* man, i.e. that hath a naked Humanity without Adjuncts,” explains Richard by comparison, “yet Logick distinguisheth between Humanity and its Adjuncts, and between what belongeth to a man as such, and what accreweth to him other wayes”:

So in the Church; Membership, or memberly Relation, is not existent in particular persons, without some Communion flowing from it, nor yet without some Qualifications (unto Charity) under it, more or less, at least ordinarily; though it may, and often does exist without those special and peculiar qualifications that fit men for the Lords Table. But surely we may well distinguish, especially between the memberly Relation and those special superadded Qualifications, and between what belongs to persons in the one respect and in the other. (*Defence* 34)

Membership came with it and presumed certain qualifications, including the right to baptize one’s children and to submit oneself to church discipline. Others had to be earned. There is a difference between being worthy of church membership and being fit for the Lord’s Supper; but it was the former that permitted one to be counted within the ranks of the church, even though that membership alone did not qualify one for the latter. Antisynodalsists clipped that synodalsists were merely trying to plump church numbers, and that expansion of membership to the unconfessed would overrun New England’s churches with such “hypocrites” as the test of faith sought so vigorously to confound. “It is apparent to all,” says Davenport, “what a corrupt mass of Unbelievers shall by this change throng into the fellowship of Gods people.”²⁶

Increasingly, the institutional question – who is a church member? – broke into these two parts, one’s visible status as a member of the church (whether ‘mediate’ or ‘immediate’ member), and one’s invisible status as a member of the elect (assumed of or projected onto ‘immediate’ or full members only). A long stretch of the *Cambridge Church Records* seguing from the members noted “in the Hand writing of the Rev. Mr. Jonathan Mitchel” to those tallied by William Brattle registers the bifurcation. Before 1663 Mitchel baptized children only of full members; his entries list the names and dates of those in full communion, below them their children baptized, occasionally other pertinent information. Thus we find the family narratives of Charles Chauncy – soon to become the author of the *Antisynodalia* (1662) and *Answer of the Dissenting Ministers in the Synod* (1662) so much sought after by Allin:

Mr Charles Chauncy president of the Colledge and Catharine his wife, dismissed hither from the Ch at Situate and Joyned here; in the 1st month of the yeare 1656.

Their children

Barnabas

Sarah	admitted also into full Communion Decemb 10 1658
Hannah	
Nathaniel	
Elnathan	
Israel	baptized at Situate (3)

Barnabas and Sarah were by 1658 old enough to make confessions at Cambridge for which their baptism (presumably at Situate) had readied them, and which their parents' joining at Cambridge had immediately preceded (thus the son and daughter are admitted "also"). Hannah, Nathaniel, Elnathan, and Israel were waiting for that eventuality in their own turn. Until that time, they were baptized at Situate and accepted as baptized at Cambridge because Charles and Catharine were themselves full members. Had they not been, baptism of their children – let alone the expectation that they, too, would come to approach the Lord's table – would have been impossible.

After 1662 there was a shift. If Mitchel, as Catherine Gerbner (2012) has parsed, gradually extended baptism, William Brattle, Cambridge's minister between 1696 and 1717, made ever more proliferating classes of membership. He distinguished chiefly among four: "Persons Admitted to full Communion;" "Infants and Others in Their Minority Baptized by Wm Brattle"; "Persons Adult who Own'd the Covenant and were Baptized by Wm Br.>"; "Persons who Owned the Covenant in order to their Children's Being Baptised."²⁷ Under each heading Brattle lists the names of those falling under it; to the side, he sums them. His figuring is meticulous, the result of cross-referencing and carrying numbers from one column to another, as in these samples from July 1699 and May-June 1702, both part of his long count of infants baptized:

	9:	Mary, the daughter of John Brooker:		
		William the son of Jacob Chamberlain		2
	30:	Emphraim the son of Philip Cook:	1	
				73
				89
				182
May:	3:	Hannah the daughter of Thomas Davis	1	
	10	Thomas the son of Gershom Cutter, <i>vid p, (13)</i>		1
	17	Abigail the daughter of Jonathan Butterfield	1	
June	14	John the Son of Samuel Sparhawk	1	
(10)		<i>brought from page 9th</i>		261 ²⁸

(49, 51; emphasis added)

In recording "Persons who Owned the Covenant in Order to their Children's being Baptized," Brattle's method is significantly more confused. The entrance of an idea, or ideas, of confession is responsible. Consider two excerpts, from 1708-1709 and 1711:

Nov:	21	Jonathan Robinson & Ruth his wife
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		Samuel Robins & Rebecca his wife	4
Feb:	6	Sarah Lewis was now restor'd having 8 or 10 weeks before made her confession before the Church for her falling once & again into uncleanness & making false pretences as tho' she were married:	
Feb:	20.	She was called forth before the Congregation and then it was declared	
		to the Congregation That whereas she had so and so fallen into Sin & been	
		<i>kept a long time from the Lord's table</i> , she had herself & made her confession before	
		the ch. & given such token of repentance that she was received into their charity & restored to Com. With God & his p.	
March	13.	Gershom David and his wife	2
Dec:	18	James Holding	1
...			
March	25, 1711	Hubbert Russell	1
April	8	Joshua Gammage	1
May	6	Daniel Squire	1
	13	Aaron Bordman	1
Oct.	7	<i>Goody Mullett made her confession before the Church Sep. 23. 1711</i>	1

(64-65; emphasis added)

Two things are observable. The first is that several decades after the passage of the Halfway Covenant, Brattle is yet noting his congregants' confessions. The second is that Brattle's record of these confessions is of an essentially different register than his tallying of church numbers. They have an unmistakable narrative bent. What can we say, then, of Sarah Lewis? We know that during the course of a week in February she gave a confession of a different quality than her listing as one who owned the covenant "in Order to their Children's being Baptized" would suggest. Brattle is explicit that she has been restored to the communion table; her confession must then have been of the experiential kind – since synodalsists and antisynodalsists alike, we remember, maintained that this was the activity that qualified one for the Lord's Supper. In this case Sarah Lewis' confession stands strangely among the utilitarian professions of faith among which Brattle has catalogued it. The dissonance affects Brattle's recording: there is no number beside her name. In place of counting her among a group by acknowledging her profession of faith, we have a narrative of the act that would separate her from it. Have we misread? Has Sarah Lewis been counted previously, or elsewhere? Has Brattle's narrative merely overrode his enumeration? Leaving aside, just for the moment, the ambiguity that the entries cast around the very idea of confession, they do make a visible distinction between features of church membership – its qualitative and quantitative aspects – that generations prior had better seamed together. Brattle's pages order a reading experience that is top-down and left-right, but their inability to correlate

membership as a term for population and membership as a mark of spiritual kind divulges how far the relationship had fractured.

The history of New England's churches through the Halfway Covenant is in many respects the story of their efforts to coalesce the quantity and quality of its membership, to join congregations' outer form with their inner substance. My suggestion has been that synodalsists and antisynodalsists used *copia*, both its ideal and its degraded form, to put forth contesting models of church constitution that sought to keep body and soul together. It is not that all the common pairs or contraries that have said to structure Puritanism – sanctification and justification, works and grace, covenant and conversion – can be scaffolded onto the Erasmian notions of *verba* and *res*, respectively. I am arguing, rather, that the pamphlet literature to which the Halfway debates gave rise at once reflects and strategically utilizes *copia*'s transformation from subject matter, with all the topical and verbal skill that its art entailed, into a concept that exchanged virtuosity for mere repetition. All of the pamphlets' authors affiliated themselves with the former rhetorical ideal simultaneously as they plied that 'abundant style' to criticize their opponents' writing *and* the relation that their writing proposed between a congregation's population and its purity; or, the quantity to be let into the visible church and the qualifications of those belonging to the invisible. They make ecclesiastical arguments, that is, by way of rhetorical ones.

It is worth returning for a moment to them. For the synodalsists: "Had our Brethren followed the Example of the Synod," cries Allin, "with like Love, Tenderness and Moderation as is expressed toward them in their Preface, the world had not been so Scandalized as I fear it is, by these Contests, and I had spared much of this labour." Allin's 'labour' is clearly to answer in the affirmative "these two things":

1. *Whether the Infant-seed of all Church –members ought to be Baptized?*
2. *What it is that Cuts off any from his Membership in the visible Church?*

Clear up these two from the Word of God; and the Whole Controversie is issued. To this end I shall premise three things, which being proved by the Word of God, will make my way plain and easie through all these *Antisynodaliam*. (*Animadversions* 16-17)

But that labor itself lies in the rhetorical style – "the plain and homely manner," he calls it, by which he "will make my way plain and easie" through his adversaries' points. We are not so strict now as to affiliate his piety exclusively with the plain style, for we have seen that his 'plainness' dwells in drawing out the varieties of form that church membership can truly take. The individual baptized in infancy who comes to confess his conversion; the individual baptized in infancy who comes to "own the covenant" by making a historical profession of faith; the unchurched women who does the latter; the children of those mothers who are now fit to be baptized: all these are true members of the church. Recognition of the essential correspondences of these means of church membership redeems *copia*'s claim of unity-in-variety. An exoneration of *copia*'s abundance upholds a more abundant idea of church membership – and so of grace itself.

For the dissenters, in contrast, such proclaimed 'means' of membership were only an assault of so much 'stuff.' Their accumulation at best dimmed men's respect for the hardest aspect of "this high mystery of predestination," that the elect are "particularly and unchangeably designed, and their number is so certain and definite that it cannot be

either increased or diminished.” At worst it threatened to impinge on God’s authority, insofar as it presumed the ability – if not to author one’s own salvation – at least to forge it. In accusing their opponents of being copious, in other words, dissenters could thus move from debates about authorial style to those about the authorship of the self.

Ambiguous confessions

Confession was the genre most explicitly implicated in such will to self-authorship. Amy Morris, for example, has suggested that the statement of historical faith approved by the 1662 Synod reified as literary form the concessions made by policy: “the ‘halfway’ position of the vow of ‘owning the covenant,’ ” she writes, “offers, in certain respects, a useful ecclesiastical analogy for the ‘set form’ of poetry, and epitomizes the ambivalence surrounding language in New England church order” (28-29). The ambivalence Morris speaks to concerns the capacities that human language does or does not have, the transformations it can or cannot incite. Indeed, the Puritans maintained, as E. Brooks Holifield (1974) and Charles Hambrick-Stowe (1982) have emphasized, a very live sacramental culture; but that culture’s paramount feature, I would argue, was the creativity of its resistance to assigning efficacious power to words.

Or things: here, for one, is Cotton in a chapter of the *Magnalia* titled “On the Sacraments.” “There is,” he writes, “in every sacrament a spiritual relation, or sacramental union between the sign and the thing signified; whence it comes to pass that the names and effects of the one are attributed to the other” (2.176-77). Attribution is not the same as embodiment, he means. Belief in the latter underlies Catholicism so fundamentally that Trent had included a scourge within its definition of the rite: “If any one denieth, that, in the sacrament of the most Holy Eucharist, are contained truly, really, and substantially, the body and blood together with the soul and divinity of our Lord Jesus Christ, and consequently the whole Christ; but saith that He is only therein as a sign, or in figure or virtue; let him be anathema” (Sess. 13, Chap. VII, Can. 1). Mather impeccably inverts Trent’s terms. Bread and wine as sign of body and bread of Christ is precisely what the Eucharist is, and the confusion of the sign for the thing it signifies underlies all of Catholicism’s inescapable heresies, because it violates the first and second commandments (the very same to which Hooker, we have seen, demonstrated such fearsome adherence). The Catholic view on transubstantiation “is the cause of manifold superstitions, yea, of gross idolatries” (*Magnalia* 2.178) because to believe that wine is the literal blood of Christ and bread his actual body is to attribute divinity to things – worse, to ‘copies’ – that have none.

As distinct from scholarship that has found the relationship between the Puritans’ theology and their literary artistry best expressed in their poetry, Patricia Caldwell was the first, compellingly, to insist that confession itself was an essentially aesthetic act. The significance of her work resides in this illumination. Listening with great closeness and sensitivity to what her subjects did “believe with all my heart and confesse with my mouth” (Davenport, *Profession* n.p.). Caldwell stands (with Grabo and Bercovitch) as an important forerunner to Stievermann and Breitwieser’s keen analyses of Puritan form.²⁹ Like at least the latter three, however, she also seeks to announce America’s literary origins. The task in her case is especially difficult, because her thesis is at least partially dependent on her tracing, in a more or less fixed line, the transformation of the expressive act that qualified one for church membership. Following Morgan, she finds that earlier

Reformed practice asking one to confess his or her *belief* segued in New England, sometime around 1634, to the requirement that one confess to an *experience* testifying to his or her saving faith.³⁰ When Calvinist prohibition against set form and proclivity for staking authenticity in individual expression were transposed to foreign (and hostile) environs, writes Caldwell, “it was almost inevitable that in New England such a profession of experience would emerge from the profession of faith, even if no one consciously set out to create one” (67). With an urgency very difficult for us to imagine, New England’s men and women rose to the expectation that they “did make their Confession in their own words and way.”³¹ The result is a literary mutation, Caldwell tells us, which existed “in the half-unconscious attempt to evolve a collective expression, and it was new because the experience was new, because the “errand” demanded it. This is not to say that the results were very grand; many of these voices were not so much crying in the wilderness as they were stammering to themselves in the dark. But they did talk, because they had to” (114-15).

However phenomenal her individual readings (and they are), there are two reasons to be dissatisfied with Caldwell’s claim that the Puritan conversion narrative issues “the first faint murmurings of a truly American voice” (41), and these, I think, turn out to be related. First, she takes a somewhat paradoxical stance on confession’s attitude toward formula. On the one hand, New England confessions of saving faith are distinct from the English accent, in part because of their denial of the use of prescriptive models or ‘forms.’ On the other, the ambivalences that distinguish conversion accounts in the New World “echo so insistently that they constitute almost a ceremonial incantation” (31). It is difficult indeed to tell where a resistance to form turns into a recuperation of it. It may be both simpler and truer to say that these men and women did indeed turn to “pervasive conformities,” but that when merged with their intellectual-affective labors to make specific “those peculiar operations of [grace] wrought in them by the Spirit” (Shepard, *Parable* 113), the result was more than the sum of its parts. Well before Wigglesworth’s *Day of Doom* (1662) formalized the “idea that outward forms and conformity were a foil against which true inner piety could emerge” (Morris 109), confession made use of both individual expression and narrative convention, without completely giving over to either. Taken too far, the former marked pride, the second idolatry; the crucial point is that authenticity rather lay in their collation. To say with Stievermann that “orthodox Christianity does not allow for a genuine sense of human innovation” (265) is not the same as saying that one must only recite, speaking as mindlessly as Hooker’s parrot could memorize and repeat. Rather, in the confessions delivered by the men and women in Thomas Shepard’s Cambridge, the blacksmith, the cooper, the shoemaker, and the mason are apt to intersperse personal anecdotes within a fairly established formula for disclosing the work of God on one’s soul. We should by now recognize it as a copious art.

Second, though Caldwell finds the distinctiveness of confession to coalesce around a rhetorical tendency toward ambivalence, the more interesting ambivalence concerns the category of confession itself. A significant irregularity in Caldwell’s analysis is that she often uses confession of one kind to illuminate confession of another. Thus, for instance, Davenport’s insistence that “I believe with all my heart, and confesse with my mouth” occurs not, in fact, in his confession of his conversion experience (which has not come down to us), but in his “*profession of the faith*” – his assent to doctrine. The elision is especially problematic because Caldwell’s analysis ranges from the earliest years of

English settlement to the Restoration. Certainly by that point the genre and its method had become significantly more vexed. There was not merely the transformation from an earlier profession of faith into experimental confession; there was the transformation of experimental confession into an owning of the covenant. (Caldwell is chiefly concerned with the former two; I have been concerned with the two latter.) Taking from each of the three genres to argue for the uniqueness of the second risks conflation in place of specification.³²

But the difficulty is not intrinsic to Caldwell, nor to literary scholars. It may be that the focus on baptism (the sociological fact) obscures the fact that we do not always know what we mean by ‘confession.’ Across the literature, primary as well as secondary, there remains a general indeterminacy as to whether we are speaking of confession as profession or confession as conversion. Go back to Brattle’s ledger of souls. We see that like Sarah Lewis Goody Mullett, another of the group who owned the covenant in order to have their children baptized, “made her confession.” Unlike Sarah, she is counted; but whether her ‘confession’ was the owning of the covenant that enabled her to *be* counted, or an experiential account – something closer to a test of her saving faith – it is hard to tell.

My suggestion is that Mather capitalizes on this generic ambiguity to figure “owning the covenant” within an orthodox Reformed tradition. If individual confession presented such collation as a feature of authentic as opposed to affected piety, Mather uses a similarly copious practice to legitimate a broader meaning of the idea of confession itself: “As to *make a confession of faith*, is a duty wherein all Christians are to be made confessors; and multitudes of ‘em have been made martyrs; thus to *write a confession of faith*, is a work which the faithful in all ages have approved and practised, as most singularly profitable”;

but when many churches do join together in such confessions, the testimony born to the truth of God, is yet more glorious and effectual. How remarkably the confessions of the four general councils, were owned for the suppression of the heresies then spawned, is well known ... and surely the fabulous musick of the spheres, cannot be supposed more delicious than that harmony, which is to be seen in the confessions of the reformed churches, that have therefore been together published. (2.156)³³

What corresponds are not just the ‘confessions’ of Cambridge, Westminster, Scotland, and Savoy, as we saw earlier, but confession as ecclesiastical statement and confession as personal narrative. God was the point from which all these correspondences radiated – personal confession interweaving with ecclesiastical confession; ‘confession’ of a congregational church in, say, Richard’s Dorchester interweaving with that of a Presbyterian church in England; the confession of the mason in Cambridge with Savoy (1658) and Westminster (1646) – in all possible combinations. Confession, Mather tells us, is even the form his history takes: “Our *ecclesiastical history* shall now give a plain and pure *confession of our faith*. May the reader now find an irresistible *power* of God, and of grace irradiating his mind, with all satisfaction in it. ‘Tis composed of things” (*Magnalia* 2.157), he says, before finishing in Greek. *Copia* upholds even a conceptual unity-in-variety: confessions may be of many kinds, but all of them stem from a vast meta-citational matrix at the center of which is God. “The Genuine use of a Confession of Faith,” wrote John

Higginson in his 1665 *Direction for a Publick Profession to the Church Assembly*, “is, that under the same Form of Words they express the same common Salvation or unity of their faith” (n.p.).

Accessing this *copia* is to take very seriously Darren Staloff’s instruction that “it is worth noting” that “one of its [the 1662 Synod’s] central assumptions was articulated in the Cambridge Platform of 1648” (128). When the synods repeat each other, when Mather repeats them, their copious style broadens the term ‘confession’ at the heart of the disputes, and so of the idea of church membership that entertains it. Just as Mather’s defense of his and his father’s style reveals their quaintness not as ostentation but as piety, so the synods and defenders of the Halfway Covenant frame their decisions neither as innovation nor as copy, but as proof that *copia* as a creative activity of recombination was the best way to uphold doctrinal principles as rhetorical exercises.

¹ Wigglesworth delivered this declamation, a required part of the undergraduate curriculum in rhetoric, in his senior year. In his reprinting of the selection, Miller was quite right to note that “Though it nowhere mentions pulpit oratory as the chief end of eloquence, we must keep in mind that Wigglesworth would assume, as well as his listeners, that sermonizing was indeed the chiefest part of oratory” (*The Puritans* 2.673).

² We should not be surprised that the opposite correlation also holds. Thus the Mathers’ combatant, one Oldmixon, fills his own texts with “whole Pages Consecrated unto Long, Long Tiresom Relations” of which it is “Impossible for him to find any Author, but his own *Romantic Brain*” (13; original emphasis). To the extent that Cotton and Increase’s expressiveness, like Hooker’s, testifies to their piety, their accuser’s style is meaningful insofar as it exposes his gracelessness. On Mather’s concept of piety and its place in his theology, see Robert Middlekauff, *The Mathers* (1999), 227-30.

³ By 1701 the Mathers’ power was not what it once was. Increase and Cotton were being overshadowed, as Kenneth Murdock once explained, by “those who seemed to them dangerous innovators within the Congregational fold” (15). Chief among them were William Brattle and John Leverett, whose “‘subversion’ was their advocacy of some changes in ritual and polity which today seem both innocent and ‘liberal.’ The most important of the innovations they sought,” both for Puritan New England’s ecclesiology and for the concerns of this chapter, “was the authorization of ministers to admit to communion and full church membership anyone of ‘visible sanctity’ without a relation of a religious experience proving “conversion” or ‘regeneration’” (15).

⁴ Norman Grabo (2000) was the first fully to identify that there *was* such a thing as literary criticism in New England before the nineteenth century, though to recognize it requires that we expand our view of the forms that contained or constituted it. For the Puritans, whose ministers were “professional analysts” of scripture, such criticism distinguished sermons, debates, and their commentaries. Grabo, who describes five principal motifs underlying “Anglo-American critical consciousness” between 1640 (the *Bay Psalm Book*) and 1680 (Increase’s *The Necessity of Reformation*), notes in particular the “function of prefaces for sometimes literary, mostly rhetorical, criticism” (697, 701). The extracts from *Parentator* with which I began this chapter – and a great many of the citations that follow – are of precisely this genre.

⁵ For the association between *copia* and *varietas*, see Fitzgerald, esp. 1-83. *Copia*’s constituent parts, these words and thing, *verba* and *res*, have themselves been variously translated. “*Res* may provisionally be paraphrased as ‘subject-matter’ ” (5), explains Terrence Cave in his foundational study of sixteenth-century French literature and thought. Donald King and H. David Rix in their still excellent edition of Erasmus’ 1512 *De Utraque Verborum ac Rerum Copia* (*Copia: Foundations of the Abundant Style*), translate *res* simply as ‘thought.’

⁶ Other critics had drawn attention to the utility of *copia* for Mather's aspiration to harmonize all knowledge; some, such as Manierre (1961) and Galinsky (1979), even underscored the literary quality of Mather's endeavor. Stievermann was the first, however, to recognize the "underlying ideological or theological premises and motivations that make the stylistic ideal of *copia* so central to the entire project of the *Magnalia*" (264). Also see Stievermann, *Prophecy, Piety, and the Problem of Historicity* (2016), 10.

⁷ In this respect Stievermann's article is a counterpart to the critical tendency to remedy the popular view of Mather as a wrist-slapping (or neck-breaking) ego-maniac who fomented the witchcraft hysteria. Stievermann himself, one of the editors now at work on the massive project to publish Mather's *Biblia Americana* is, not coincidentally, at the forefront of the effort. See, for example, his opening essay in *Cotton Mather and Biblia Americana* (2010) – and Winship's review (2011), which suggests that the essays spend somewhat too much energy contending with issues of Mather's reputation.

⁸ Joseph Bellamy coined the term in 1747. See Katherine Gerbner, "Beyond the 'Halfway Covenant'" (2012), 287 (fn. 11). Gerbner's article offers an excellent survey of the Halfway Covenant and its historiography; see esp. 283-89. See also David Hall, "The New England Background" (2007).

⁹ Edmund Morgan (1963) of course gave us the first sustained inquiry into the genesis and development of this test of saving faith; see esp. ch. 3.

¹⁰ Richard, Increase's father and Cotton's grandfather, arrived at Boston in 1635, following John Cotton and Thomas Hooker. He was minister at Dorchester from 1636 until his death in 1662.

¹¹ "Church-members who were admitted in minority, understanding the Doctrine of Faith, and publicly professing their assent thereto; not scandalous in life, and solemnly owning the Covenant before the Church, wherein they give up themselves and their Children to the Lord, and subject themselves to the Government of Christ in the Church, their Children are to be Baptized." Qtd. in Walker 328.

¹² John Davenport popularized these descriptors. See, for example, *Another essay*.

¹³ Walker, *Creeds and Platforms of Congregationalism*, esp. 244-87. "Its effects were on the whole evil," Walker proclaimed of the Halfway Covenant, "not so much from what it encouraged worldly men to do, as from its tendency to satisfy those who might have come out into full Christian experience with an intellectual faith and partial Christian privileges. It made a half-way house between the world and full Christian discipleship, where there should be none, and hence deserved the nickname given by its opponents ... It can scarcely be doubted that it would have been better for the New England churches had they either received all reputable persons to baptism and the Lord's Supper, or rejected all from any membership in the church who could not give evidence of personal Christian character" (250). Perry Miller, *The New England Mind* (1953), esp. chs. 5 and 24. Darrett Rutman, *Winthrop's Boston* (1965) follows suit; see esp. 109. For continued insistence on the declining piety of the second generation, see Roger Thompson, *Cambridge Cameos* (2005). As I have already indicated, scholarship on the Halfway has typically coalesced around contesting this view.

¹⁴ Salem was well on the road to acceptance of a halfway theory in 1652 and 1654, though enough opposition prevented its implementation until 1665. In 1654 Dunster was expelled from the Cambridge congregation for rejecting infant baptism; he resigned from Harvard's presidency months later. Ipswich accepted the measure in 1656; though Dorchester and Chelmsford tentatively did so around the same time, it did not stick until sometime later. Hartford endured a bitter debate on the subject of membership between 1653-59 (following Hooker's death). By 1656-57 it was tearing at the seams. It was this dispute which led to the petition that would summon the 1657 Synod, and another in 1666-70 regarding baptism. June 4, 1671 marked the end of open resistance to the Halfway Covenant.

¹⁵ For a useful summary of that narrative, see Abigail Shinn and Angus Vine, "Theorizing Copiousness" (2014).

¹⁶ Crider in his review of Mack's *History* notes that Mack "too often treats [*copia*] as an assemblage of techniques" (148) and that his volume needs to be supplemented by Plett's, "who realizes why and how Renaissance rhetoric claims to be an art encompassing all other arts and sciences" (148).

¹⁷ See esp. Bozeman 19-25 and 52-56.

¹⁸ Obviously this is a tremendously abbreviated account. For fuller treatment see Mack; for a concise view and contextualization of his innovation, see George Kennedy, *Classical Rhetoric and its Christian and Secular Traditions from Ancient to Modern Times* (80), esp. 245-46.

¹⁹ Davenport had an even more immediate affiliation with the reformer: Frances Bremer's (2012) recent biography places him in a working relationship with Comenius. On linguistic reform in England, see Rhodri Lewis, *Language, Mind, and Nature* (2007).

²⁰ In the catechism he penned with William Hooker, Davenport offers this pithy formula:

Qu. *What is the Divell?*

Ans. That multitude of apostate Angels ..." (14).

²¹ Richard himself "described his own sermons as 'plain stuff,' but insinuated that any other presentation would be hazardous," observes Grabo. "Mather was talking about opinions, but the point also holds for style" ("Running the Gauntlet" 701).

²² Cf. Grabo, "Running the Gauntlet" 703.

²³ When Increase, during his initial opposition to the Halfway Covenant, asks, "*Is Truth bound up to Number?*" (*Preface* n.p.), he manages, quite despite himself, to distill this element of the controversy down to its essence.

²⁴ In one colony's response to the 1657 Synod's decisions, we can feel how urgent was the need to come up on the right side of that line:

A true copy of the Counsells answere to severall questions sent to the Massachusetts from the Generall Court, being p'sented to this Court, signed by the Reverend Mr. Sam. Stone, in the name of the rest of the Counsell, They doe order that copies should goe forth to the sev'all Churches in this Collony as speedily, & if any exceptions bee against any thing therein, by any Church that shall have the consideration thereof, the Court desires they would acquaint the next Gen. Court in Hartford, in October : that so suitable care may bee had for their solution and satisfaction.

The note, recorded in Connecticut's *Records*, gives a very good sense of how *copia*'s notoriety came to inflect colonial anxieties about the terms the synods had authored. See Walker 262. Something of the same imperative will drive Cotton to insist, in 1724, that he is in possession of an authentic version of his father's answer to King Charles' demand that Massachusetts resign its charter: "and This was it," says Cotton, "as I find in his [Increase's] own copy of it" (90) – *this*, in other words, is no forgery.

²⁵ As qtd. in Walker 205-06. Between Mitchel and Brattle's accounting in the *Cambridge Church Records*, there is a letter by Ezra Stiles to Nathaniel Appleton, transcribing Winthrop's report of the gathering of Shepard's church at Cambridge in 1636. At its first gathering Shepard "desired to know of the Churches: assembled, what number were needful to make a Church" (28). Here there is necessary discussion, for "Scripture did not Set down any certain rule for the Number." Settling on 7, they "advized that such as were to join, Should make Confession of their faith & declare what work of Grace the Lord had wrought in them" (29).

²⁶ In a perfect state there would be equanimity between invisible saints and the population of the visible church, but the Puritans knew better than most that so far as they lived in a kingdom of men, such one-to-one correlation between number and kind would never come to pass. Nonetheless, for the first generation the two categories had been nearly collapsible, because the ardency of the faith that had led them to New England was the same that ensured confession. The increasing inability of the second and third generations to produce confessions themselves effectively announced the precariousness of that continuity.

²⁷ Brattle's lists corresponding to these categories appear in Sharples at 36-45; 45-58, 61-63, 67-70; 59-60; and 63-65, respectively.

²⁸ We should not be surprised by Brattle's precision, given his mathematical proclivity – see Rick Kennedy (1989; 1990).

²⁹ The quotation is from Davenport's profession of faith (not his confession of conversion), a point of context I will return to.

³⁰ The first, referred to in the primary literature often as a "profession of faith and repentance," was "merely the candidate's recitation of fundamental Christian doctrine and assent to the discipline of the church" (Caldwell 54). The second was "a matter of the demonstration of inward grace"; or: "The confession of sin was, or became, a conversion narrative, the story of the work of grace to the soul" (65). For early alternatives to or analyses of this genealogy see Raymond Stearns and David Brawner (1965) and Baird Tipson (1975).

³¹ The phrase is Nathaniel Morton's in *New-Englands Memoriall*, qtd. in Caldwell (63).

³² Caldwell herself makes some recognition of the difficulty; at least one critic has pointed it out directly; see Stoeber (1986).

³³ The pattern of collation and quotation in this section of the *Magnalia* is constant. See, for example, 2.203.

Endless Things: The Infinitary Techniques of Jonathan Edwards

I have Enquired of Mr Cutler What Books we should have need of the next Year. He answered he would have me get against yt time Alstid's *Geometry*, and Gassendus's *Astronomy*; with which I would Intreat you to Get A Pair of Dividers or Mathematicians Compasses and a scale which are absolutely necessary in order to Learning Mathematicks; and also the *Art of thinking* which I am Perswaded would be no Less Profitable than the other.

—Edwards, letter to his father, July 24, 1719

The involuntary changes in the succession of our ideas, though the cause may not be observed, have as much a cause, as the changeable motions of the motes that float in the air, or the continual, infinitely various, successive changes of the unevennesses on the surface of the water.

—Edwards, *Freedom of the Will*

Far from being, as is commonly believed, a minor variation on Locke, Edwards' work [*Freedom of the Will*] emerged as a radical resistance to the former's philosophy of thinking and self-identity, as a thinking so different from "old" (European) thought, that it would cause a "great turbulence" of thinking, to become known as the "great awakening."

—Branka Arsic, 2006

All his adult life Jonathan Edwards kept a catalogue of his reading, meticulously, first on quarto leaves, then on double leaves, folded, and stitched into a notebook, as well as on separate letter leaf. He wrote on both sides of each page and later in two columns. It was a serious accounting, which, by the time of his death, ran to seven-hundred-twenty entries. Of these, the twenty-fourth says only, "Mathematicks." This is a curious singularity, in a ledger generally filled with remark, and to it modern editors have affixed annotation still curiuser: "Many possibilities," we read in the gloss supplied by the final volume of *The Works of Jonathan Edwards*, which closes the matter by citing two mathematical texts in Edwards' collection. In truth, there were a great deal more than two. One of the premises of this chapter is that Edwards' "Catalogue of Reading" discloses these "many possibilities" of his mathematical investment, both its general course and its depth. Throughout his Catalogue that interest is consistent; at its end it is

sweeping. The last entry, written shortly before his death, is a request for a volume entitled:

short but yet plain Elements of Geometry, shewing how, by a brief & easy method, most of what is necessary & useful in Euclid, Archimedes, Apollonius, & other excellent ~~Mathematicians~~ Geometricians, both antient & modern may be understood. written in French by F. Ignat. Gaston Pardies & render'd into English by John Harris d.d. & secretary to the Royal society . The Eighth Edition. This advertised at the End of Wards Mathematics— (317-18)¹

This is how the Catalogue ends, in a deluge of mathematical names. Some works on the subject Edwards sought, a great many others were already in his possession; which is but another way of saying that if the final volume Edwards desired failed to reach him before his death, the mathematical preoccupation to which its reference testifies had long since been registered by him in his Catalogue. I will use his investment, in this chapter, to argue that Edwards engages mathematics of a certain kind to explain the ways of God to men. My contention is that in his philosophical theology stretching from his earliest metaphysical speculations in “On Being” (1721) to his discourse on the signs of true religion in *Religious Affections* (1746), Edwards applies the new science of infinity to parse the event central to “experimental religion”: the experience of conversion.

The time was nevermore urgent. Between 1734 -35 and again in 1740-43 revivalism ‘awakened’ the Connecticut valley.² Beginning with such ‘harvests’ as distinguished earlier revivals under Edwards’ grandfather, Solomon Stoddard, they quickly veered toward the profligate, the fallacious, and the insane.³ One Thomas Stebbin attempted suicide on March 23. On June 1, beset by the hopelessness of his estate, Edwards’ uncle Joseph Hawley slit his throat. Three generations earlier Hooker had warned that “When God hath opened your eyes, and the wrath of God first began to pursue you; then you could have been content to fall into a river, and to make away yourselves” (*Humiliation* 184), but Hawley’s death lit a new fuse. “After this,” says Edwards, “multitudes in this and other towns seemed to have it strongly suggested to ’em, and pressed upon ’em, to do as this person had done” (*Faithful Narrative* 85). Critics such as Charles Chauncy spoke of “a sort of *extatic violence*” (*Enthusiasm Described* 234; original emphasis) and bewailed the revivals as the overthrow of the rational mind by emotion, judgment by imagination. “Satan works upon the reason by the passion; the Spirit upon the passion by the reason” (Chauncy, *Seasonable Thoughts* 111). The power and the complexity of Edwards’ defense of revivalism sprang from an idea of conversion that belied any such dichotomy. Religion for Edwards consisted in holy affections, affections being “no other, than the more vigorous and sensible exercises of the inclination.” Other definitions are necessary to complete the sketch: inclination is a faculty that entails judgment and a corresponding disposition, in contrast to the understanding, which judges only. The inclined soul “does not behold things, as an indifferent unaffected spectator,” says Edwards, “but either as liking or disliking, pleased or displeased, approving or rejecting” (*Religious Affections* 96). If inclinations are strong enough, they carry us past indifference. At their most fearsome, they take the form of conversion; or, conversion is the holy and highest plane to which inclinations might lift us. And yet what is “almost invariably missed,” John Smith wrote quite rightly in his 1959 introduction to *Religious*

Affections, “is that in Edwards’ view of the *inclination* (the faculty initially distinguished from the understanding) involves *both* the will and the mind” (13; original emphasis). Religious affections are emphatically not ‘passions,’ Edwards explains, since “great effects on the body” (131) say nothing as to what has caused them, whether temporal or spiritual things. No more, however, are gracious affections to be found in bare reasoning. Edwards has equally little patience for those who “make philosophy instead of Holy Scriptures their rule of judging this work [of true affections]”: for “the informing of the understanding is all in vain,” he writes in *Some Thoughts Concerning the Revival* (1743) “any farther than it affects the heart; or, which is the same thing, has influence on the affections” (298).

This chapter dwells in the exceedingly fine line Edwards’ idea of religious affections permits, by suggesting that in infinitary mathematics Edwards found a model for walking it. “It may be well expected,” he writes in Miscellany 1340, “Reason and Revelation,” that “a revelation of truth concerning an infinite Being should be attended with mystery”:

We find that the reasonings and conclusions of the best metaphysicians and mathematicians concerning infinities are attended with paradoxes and seeming inconsistencies. Thus it is concerning infinite lines, surfaces and solids, which are things eternal. But much more may this be expected in spiritual things, such as infinite thought and idea, infinite apprehension, infinite reason, infinite will, love, and joy, infinite spiritual power, agency, etc.” (371)

Neither reason nor revelation are here subordinated. Instead Edwards reconceives them within a mathematical paradigm that is remarkable for its ability to accommodate epistemological failure. “Reasonings” are “paradoxes,” “inconsistencies” are only “seeming.” This is not wordplay; it is a statement of the condition late-seventeenth-century mathematical theory and practice found themselves in. By this time mathematicians had with great agility applied infinitary considerations to the operations of the natural world. But while infinitesimal calculus could determine velocities and geometric areas, these operations could not fully rationalize themselves. Not until the nineteenth century did mathematicians led by Bolzano, Cauchy, and Weierstrass succeed in truly defining such concepts as limit, derivative, and integral. For the first hundred-fifty years after calculus’ introduction, mathematicians understood its procedures largely insofar as they understood them to work.⁴ My argument is that Edwards recruited mathematics’ ambiguous epistemology to broker an infinitary cognitive style that fought on two fronts: against the deist challenge to revelation; and against the radical contingents of a revivalism in which people lost their heads.

The philosophers and mathematicians who appear throughout Edwards’ Catalogue – including Berkeley; Bernard Nieuwentijt, the Dutch theologian involved in the foundations of infinitesimal calculus; and Newton himself (with all his many disciples and adversaries) – tried either to resolve what infinitesimals were and how they operated, or to use the difficulty as proof that infinitary techniques stood on no firmer ground than religion. Edwards’ relationship to several of these figures has been traced along many lines, but not this one. It is an absence this chapter aims to rectify, by tracing how Edwards plied a mathematical practice that subscribed to a meticulous process of articulating proofs, even as the concepts in which those proofs increasingly dealt – we can

call them impossible proportions and impossible quantities – could not be testified to by any standard of sense.

Of course “sense” was by this time a term with a distinct empirical bent, and one that, as Sarah Rivett has gorgeously shown, left an epistemological mark on colonial New England divinity. Evangelism as a category of experience itself came out of this tradition, a mixture of Lockean sensationalism and Baconian experimentalism. Simultaneously, however, revivalism threatened to skew that inheritance, insofar as it did away with ‘reasonable’ or ‘sensible’ proofs in favor of purely sensational ones. Edwards, we have already seen, denied that one’s falling into such “convulsions and distortions, into quakings [*sic*] and tremblings” (Chauncy, *Enthusiasm Described* 231-32) was in itself a sign of devotion – denied, in fact, that any form of external expression could be. This was true not merely for “uncommon bodily motions” (Chauncy 234) or outpourings of voice, but for any human exertion witnessed in the world. The authenticity of conversion, like the reality of the infinite in the form of the infinitesimal, wanted proof that observation could not give. Simultaneously, however, in the case of “experimental religion” one could not do without the idea of a test itself. This was the other great inheritance from Baconian science.

Both Philip Gura (2005) and Rivett (2009) have suggested that epistemology was crucial to Edwards’ reconciliation of science and religion, reason and revelation.⁵ For Edwards as (we will see) for the geometricians, arithmeticians, and encyclopedists who fill his Catalogue, I argue, the truth of supernatural things required an epistemology that meant and meted out reappraisal of three chief terms: the *sensible*, allied as we know with empiricism, speaking to truths gleaned from the senses; the *reasonable*, designating a threshold of general consent, based not on observation but on common sense; and the *rational*, less a technique of knowledge production than the legitimizing texture of its reception. At the center of Edwards’ theory of religious affections is an idea that both disaggregates these notions and orchestrates their imbrication. This is what Edwards calls a ‘new sense,’ or a ‘sense of the heart,’ and it distinguishes the sudden apprehension of God one experiences in conversion. In *A Divine and Supernatural Light* (1734) he describes it thus:

there is a difference between having an opinion that God is holy and gracious, and having a sense of the loveliness and beauty of that holiness and grace. There is a difference between having a rational judgment that honey is sweet, and having a sense of its sweetness. A man may have the former, that knows not how honey tastes; but a man can’t have the latter, unless he has an idea of the taste of honey in his mind. (112)

Like knowing the sweetness of honey as only one who has tasted it can know, or sunlight (Edwards will elsewhere say) as only one who has sight can know, the new sense is an experiential event.⁶ Unlike the other two, however, it occurs not on the tongue or with the eyes but in the heart and mind. God “may indeed act upon the mind of a natural man; but he acts in the mind of a saint as an indwelling vital principle” (108). In the former there “is exercised *merely* the speculative faculty, or the understanding strictly so-called, or as spoken of in distinction from the will or disposition of the soul” (111; my italics). That difference strains the limits of analogy. Edwards must make use of the language of sensation because that is the only language we have for experience. And yet

the new sense also constantly resists that application: "'Tis no impression upon the mind, as though one saw anything with the bodily eyes: 'tis no imagination or idea of an outward light or glory, or any beauty of form or countenance, or a visible luster or brightness of an object" (109). The experience of grace is more properly an *emotion*: it is that emotion which is the event. The crucial point, and I think it is a specification still often missed, is that true religious affections are not 'reasonable' because they incorporate, transpose, or anticipate what E. Brooks Holifield (2003) has called a "Baconian style," but because they reconceive rational reception as existing on the bound between sense and imagination.

In a mathematics of the infinite in the form of the infinitesimal Edwards found a model of this cognitive style, impacted as it was, or because it was. The "nicest mathematicians," Edwards repeatedly notes, are "rationally convinced" of many truths "concerning which they have no clear ideas" (*Miscellany m*, "Demerit of Sin" 188). He was not alone in paying respect to this paradoxical epistemology, though the figures in his Catalogue are more apt to touch on it very lightly, as when Jacques Rohault in the preface to his *System of Natural Philosophy* (1723) instructs that we must not "discard Reason, and yield all up to Sense": for "they who study Mathematicks find themselves perpetually convinced by such Arguments as it is impossible to resist, and learn insensibly to know Truth and to yield to Reason" (n.p.). Edwards rather craves and courts the paradox, as I will show by pausing on two sites of Edwards' recruitment of mathematics for his theology. One is his reckoning with Euclid's geometry, first as the ratification of Aristotle's dictum against proportion between the finite and infinite, and then as a casualty of the mathematical innovations that overrode that proscription. The other is his awareness of the new science of infinitesimals that peaked, in Britain, with Newton's calculus. Both innovations were crucial contributions to a widening of thought in seventeenth-century philosophy of mathematics and mathematical practice, the net effect of which was to sustain paradox as truth. Thus *Miscellany No. 1100*, "Mysteries," reads in its entirety:

'Tis not necessary that persons should have clear ideas of the things that are the subject of a proposition, in order to being rationally convinced of the truth of the proposition. There are many truths of which mathematicians are convinced by strict demonstration, concerning many kinds of quantities, as surd quantities and fluxions, concerning which they have no clear ideas. (485).

A 'surd' is an irrational number, a designation Edwards read, for one, in *Cocker's Decimal Arithmetic* (1684): "All Quantities or Numbers whatsoever, whether Integral, or Fractional, are called Rational, but when the Root of any Power cannot be exactly extracted, such Root is called Irrational or Surd" (399). A 'fluxion' is Newton's term for the instantaneous rate of change of a quantity (a 'fluent'). It is synonymous with Leibniz's 'differential,' as Edwards would have read in Ephraim Chambers' acclaimed *Cyclopædia* (1728):

Now Infinitesimals are call'd *Differentials*, or differential Quantities, when they are consider'd as the Differences of two Quantities. Sir *Isaac Newton* calls 'em Fluxions; considering them as the momentary Increments of Quantities; *v.g.* of a Line generated by the Flux of a Point; or of a Surface by the Flux of a Line; &c. The

differential Calculus, therefore, and the Doctrine of *Fluxions* are the same thing under different Names: the former, given by M. *Leibniz*, and the latter by Sir *Isaac Newton*; each of whom lay claim to the Discovery. (141)⁷

By a set of rules for the manipulation of infinitesimals, calculus could describe the whole of temporal as well as celestial events, with particular regard for their changes in motion over time. It reconstructed, as the historian of science Michel Blay has written, “the phenomena of nature within the domain of mathematical intelligibility in such a way that these phenomena find themselves governed by quantitative laws which can be exploited for the purpose of predicting the course of nature by means of mathematical reason” (3). And yet, though infinitesimals could be manipulated to predict natural phenomena with untold accuracy, mathematics could not give proper account of their idea. “Infinitesimals have had a troubled life of emergence and submergence, sums Gabrielle Lolli: “mathematicians were always attracted to infinitesimals but unable to give precise rules to handle them” (n.p.). There was this specific difficulty: at one point in its operations, calculus had to assume that an infinitesimal was different from zero; at another, that an infinitesimal was equal to zero. This is what Chambers, below, references in “the error accruing”:

The foundation, then, of this *Calculus*, is an infinitely small Quantity, or an Infinitesimal, which is a Portion of a Quantity, incomparable to that Quantity; or that is less than any assignable one, and therefore accounted as nothing: the error accruing by omitting it being less than any assignable one, *i.e.* less than nothing. Hence two Quantities, only differing by an Infinitesimal, are equal. (141)

Correct calculations depended on these adjustments (and eighteenth-century mathematicians had an excellent sense of when to use which). Edwards, I argue, uses the powers and the inexplicabilities of this mathematics to underwrite a new conception of sensibleness, one which liberates the experience of conversion from the polity of strict empiricism while protecting it from delusion. (Even when we do not “have clear ideas” of infinite things such as “surd quantities and fluxions,” we remember, we may yet be “rationally convinced” of their truth.)

To look at Edwards’ theology in this regard is to continue to dispel a binary projected onto his thought that his thought instead obviates. As recent works on secularism and its aftermath have made clear (Asad, Taylor, Warner), we are not now in the habit of equating knowledge with belief; but for the inheritors of the Reformed tradition these were inextricable concepts. Edwards realigned these two terms in the moment the Enlightenment was distinguishing knowledge as an epistemological issue and belief as a matter of conviction – or what we commonly call faith. For Perry Miller, the only way to fathom how Edwards brokered such a novel, radically heterogeneous model of certainty was to insist that he was more modern than the moderns. Famously, Edwards needed only “about an hour’s reading in William James, and two hours in Freud, to catch up completely” (183).⁸ I follow Sang Hyun Lee’s assessment that Edwards was “actually more radically creative than Miller himself might have realized” (3). That radicalness, I am proposing, lies in Edwards’ application of a field close to home. So far from grafting revelation onto reason – from using the new science to subordinate the former to the latter in the way, for example, of Samuel Clarke or the deists – the mystery intrinsic to

infinitary mathematics allowed Edwards to argue for the necessity of revelation. “Edwards tried to disable the deist attack on revelation,” as Gerald McDermott has written, “by proposing that its definition of reason was narrow and finally unreasonable” (7). It is *but* reasonable, in Edwards’ explanation, that “God should reveal many doctrines that are above human reason: for it would be strange if God should know nothing about himself but what man is capable of knowing by his own natural reason; and therefore if a revelation of God has some doctrines in it that are above the discovery of reason, it would be the more agreeable to reason for that” (*Sermons and Discourses: 1723-1729*, 231). It is this *reasonableness*, or a rationalized form of supposing that may or must proceed from the seemingly irrational – which underlines how one holds revelation among – and not against – the purview of rational thought. In a long 1740 Miscellany, to which I will return:

as many of the affairs of adult persons are incomprehensible, and appear inexplicably strange, to the understandings of little children, many of the affairs of learned men and great philosophers and mathematicians, things which they are conversant in and well acquainted with, are far above the reach of the vulgar, and appear to them not only unintelligible but absurd and impossible and full of inconsistencies. (Miscl. no. 1340, “Reason and Revelation” 370)

We would crawl out of our nonage, Edwards says, in a proto-Kantian turn, by exchanging imaginable for intelligible things, those which are capable of being apprehended by the mind alone. Of all things, Edwards continues, the most intelligible is the idea of God, which we are least able to explain by our sensory faculties, and to which we are most able to consent as rational beings. “But God has given reason to the common to be as much their guide and rule as he has to mathematicians and philosophers” (Miscl. no. 1340, 363). As it is for mathematicians’ understanding of infinites, so it must be for our understanding of revelation. The infinite is the route by which Edwards expands mathematical certainty and method to a Calvinist knowledge of God, one which persists in taking form as a leap between the sensible, the province of experimental or experiential fields, and the intelligible, which is purified of either. The total effect of the corollary is a new understanding of what is common, rendered here, finally, as a measure of our consent to the paradoxes we find ourselves in.

First truths

Mathematics writ large – the disciplines of geometry and arithmetic as they came out of the Greek tradition – provided a method of demonstration effected on the basis of self-evidence. This was the legacy of Euclid: “A point is that which has no part,” the *Elements* begins (Book 1, Def. 1), the first in a series of definitions that establish consensus with respect to the meaning of geometric forms. Thereafter, axioms (or common notions) establish consensus regarding the rules of the geometric system at large, “relating to first principles, which cannot fail to secure immediate, ungrudging assent and approval” (Frankland 26).⁹ Both classes, Definitions and Axioms, belong to what one early-twentieth-century editor of Euclid has called “the category of the obvious”: consent to their truth is freely given, because it requires no proof. From them alone, consequences (Propositions) follow: “And so, from a certain small number of primary truths,

acknowledged-real and conceded-real (Axioms and Postulates), the whole science comes to be deduced by the exercise (not of the faculties of experience, but) of the faculty of reason” (Frankland 27). The rigor of Euclid’s system lies in this. Every induction proceeds from, and every deduction may be run back to, underlying principles that are the irreproachable province of common sense.

Euclidean geometry, then, is a closed system, a status paramount insofar as it makes impermissible knowledge gleaned from the senses. “It may be here observed, once and for all,” wrote Dionysius Lardner in 1848, of a view hardly exclusive to the nineteenth century, “that the terms used in geometrical science, are not designed to signify any real, material or physical existence. They signify certain abstracted notions or conceptions of the mind, derived, without doubt, originally from material objects by the senses, but subsequently corrected, modified, and, as it were, purified by the operations of the understanding” (1). Let us be clear that we cannot observe in nature or draw with our own hand anything that conforms to the geometrical idea of a right line. The very purchase of Euclidean geometry is that it obviates the “experimental life.”¹⁰ All we know is what we can come to mentally; it is this reason that purifies sense.

The persistence and specificity of Edwards’ Euclidean interest in his Catalogue suggests that he lay the *Elements* with a particular charge. Its methodology underwrites, for one, his famous early essay, “Of Being.” The essay is twelve paragraphs, it was written between 1721 and 1732, and it stands, in its entirety, as one of Edwards’ earliest attempts to provide a reasonable account for the necessity of God. Historically, scholarship has identified it as a statement of Edwards’ commitment to Berkeley’s metaphysical idealism.¹¹ But “On Being,” I propose, is as notable for its recovery of a philosophy of mathematics, with which that idealism profoundly intersects. It has taken contemporary philosophers of mathematics to remind us that Berkeley’s insistence that things do not exist, only our ideas of them – his famous issuance that being is perceiving, *esse est percipi* – is a natural consequent of his atomistic theory of mathematics.¹² In a word, atomism requires minimum non-zero elements. There can be no notion of infinite divisibility; there can be no point as that which has no part. Early in his career, this anti-abstractionism positioned Berkeley against many of the tenets of geometry – for example, that lines are “breadthless length” (*Elements* Book 1, Def. 2). (The view resulted, famously, in his arch critique of the calculus in *The Analyst* (1734) – Florian Cajori named it “the most spectacular event of the century in the history of British mathematics” (230) – which announced that infinitesimals were nothing but “the ghosts of departed quantities” (89)).¹³ Conceivability of magnitude, of proportion, and of all other things besides, he held, is tied either to mental imagery or to actual perception. This is a very emphatic empiricism. “I shan’t argue about whether there are such ideas in the mind of God, and whether they may be called ‘matter,’” Berkeley announces.

But if you stick to the notion of an unthinking substance, or support of extension, motion, and other perceptible qualities, then to me it is most evidently impossible there should be any such thing, because it is a plain contradiction that those qualities should exist in or be supported by an unperceiving substance.” (§ 76)

Contrary to Euclid, if you cannot perceive something – as you cannot perceive something that has no part – it does not exist; and all that exists is what is perceived.

The exception, says the Bishop, is God, who is the perceiver that can maintain things in being; a spiritual being that is able to perceive. Everything else is ideas. The radicalness of Berkeley's philosophy, as it pertains to mathematics, is that it cut against the common wisdom that traveled from Aristotle, through Aquinas and Clavius, that "mathematics was a science of abstractions." Berkeley endeavored to bring it to ground, "treat[ing] mathematics as a science concerned with objects of sense" (Jesseph, "Berkeley's Philosophy" 268). In this view, as Douglas Jesseph has explained, the "theorems of geometry must answer to the facts of perception (because perceivable extension is its object)" (277). There can be no notion of infinite divisibility; there can be no point as that which has no part. Instead there is what Berkeley calls *minima sensibilia*, minimum thresholds for perception, below which you cannot go. In vision they are called *minima visibilia*, and they form the razor's edge of the visible world. Jesseph has outlined how Berkeley did come, of necessity, to reconcile his philosophy of mathematics with classical geometry, by proposing that particular ideas can represent abstract ideas. In *Alciphron, or The Minute Philosopher* (1731): "[w]e substitute Things imaginable for Things intelligible, . . . and greater things for such as are too small to be discerned distinctly" (II.179); emphasis added). Particular objects, or objects of sense, thus carry the theoretical burden typically owned by abstractions. "In the geometric case," Jesseph explains, "perceived lines or figures, and the theorems proved of them can be applied generally to the class of things they represent, without supposing that the theorems deal either with abstract ideas or only the perceived geometric objects" ("Berkeley's Philosophy" 282). What for my purpose is more crucial is that this accommodation does not obviate, but rather extends, Berkeley's argument for God's existence. God, being still the repository for sensible things, is also the cause of the abstract ideas they particularize. "The phrase 'the laws of nature' names the set rules or established methods whereby the mind we depend on — that is, God — arouses in us the ideas of sense." (§ 30). Neither "primary qualities" (as Locke supposed) nor ideas themselves could be the origin of our ideas, Berkeley had demonstrated in his *Principles of Human Knowledge* (1710). The cause of any idea — including, for example, the idea of a mathematical point — must be a mind; and that mind, showed the Bishop, must be God's, "that eternal invisible mind that produces and sustains all thing" (§ 94).

Edwards' similar proof for the being and necessity of a Calvinist God takes fullest form in *Freedom of the Will* (1754), his refutation of the Arminian position that one has some say in his or her salvation. Here I am concerned only with one feature of that argument: Edwards' recourse of the idea of infinite regression. That use itself rests on Edwards' demonstration, in Paul Ramsey's words, "that the principle of universal causation, or, if this be granted and a distinction made, of universal *necessary* causation, applies to acts of will" (24; original emphasis). Through an exceedingly tight logic Edwards shows that a free act of will must be determined by a preceding free act of will. It is beyond my scope go through his steps, though a general picture may suffice. Let us grant the Arminian claim, says Edwards, that the will is sovereign, that it determines freely which way to incline: then even the will must have freely willed its own freedom to will. "Whatsoever the will commands, it commands by an act of will":

So that if the freedom of the will consists in this, that it has itself and its own actions under its command and direction, and its own volitions are determined by itself, it will follow, that every free volition arises from another antecedent volition . . . If we

suppose there are five acts in the train, the fifth and last determined by the fourth, and the fourth by the third, the third by the second, and the second by the first; if the first is not determined by the will, and so not free, then none of them are truly determined by the will ... The case is just the same, if instead of a chain of five acts of the will, we should suppose a succession of ten, or an hundred, or ten thousand. If the first act be not free, being determined by something out of the will, and this determines the next. (173)

We find ourselves then in a bizarre state of affairs. In order to uphold the Arminian conceit of self-determination, a first free act of will must arise out of nothing – which of course is a *reductio ad absurdum*. The only possibility left to us is that there is a cause outside the series, from which every act springs. That cause, concludes Edwards (sounding much like the Bishop indeed), is God. Edwards deduces the necessity of God and his will (ergo, predestination) from the impossibility of our conceiving a moment of ‘nothing’ – that is, ‘nothing’ in the context of time.

I would argue that “Of Being” prefigures Edwards’ infinitary technique in the realm of space. Suppose absolute bareness, Edwards says – imagine “all figure and magnitude and proportion immediately ceases,” could we imagine it – and “the case would stand thus with the world”:

There would be neither white nor black, neither blue nor brown, bright nor shaded, pellucid nor opaque; no noise or sound, neither heat nor cold, neither fluid nor wet nor dry, hard nor soft, nor solidity, nor extension, nor figure, nor magnitude, nor proportion; nor body, nor spirit. (205-06)

When Edwards resumes the essay in the summer of 1723, it is to specify his meaning according to Euclid. “Absolute nothing is the aggregate of all the absurd contradictions in the world,” he says; in which state there would be:

neither little nor great, narrow nor broad, neither infinitely great space nor finite space, nor a mathematical point...When we go about to form an idea of perfect nothing we must shut out all these things. We must shut out of our minds both space that has something in it, and space that has nothing in it. We must not allow ourselves to think of the least part of space, never so small, nor must we suffer our thoughts to take sanctuary in a mathematical point. (206)

Edwards is speaking here (as he does throughout his whole corpus), to the Euclidean position that geometrical magnitudes are generated in time by the spatial extension of their elements: solids consisting of an infinitude of surfaces, surfaces an infinitude of lines, lines an infinitude of points. A great many writers in Edwards’ Catalogue adhered to this schema, Newton not least of all. Edwards himself references it explicitly: “there are an infinite number of infinite planes in an infinite solid, as there are an infinite number of infinite lines in an infinite plane, and an infinite number of points in an infinite line” (Miscl. no. 880, “Being of a God” 130). Beyond these last we can go no further; and so:

A state of nothing is a state wherein every proposition in Euclid is not true,

nor any of those self-evident maxims by which they are demonstrated; and all other eternal truths are neither true nor false. When we go to inquire whether or no there can be absolutely nothing we speak nonsense...because we make a disjunction where there is none. “Either being or absolute nothing” is no disjunction, no more than whether a triangle is a triangle or not a triangle. (206-07).

“Of Being” essentially ends here. With “every proposition in Euclid,” particularly with the definition that opens the *Elements* – “A point is that which has no part” – we come as near to an idea of ‘nothing’ as we are able. Having found, then, that a conception of ‘nothing’ must extinguish all the registers of perception, Edwards sees that it must also purge the mind’s own abstractions – even the very smallest “modes of quantity,” as Locke called them in his *Essay Concerning Human Understanding* (1689) in his chapter “Of Infinity” (Book II, Ch. 17), by which we come to an idea of infinity: by “repeating, without end, our own ideas ... that are considered as having parts” (space, duration, and number). What before were apprehended qualities of body, such as color, shape, and solidity are here minimized to their constituent parts, “I mean mathematical points or lines” (“Of Atoms” 212) – even if, per Berkeley, those parts are only ideas. “We immediately perceive nothing else but the ideas which are this moment extant in our minds” (183), says Edwards in *Freedom of the Will*. No less than our sensations are our ideas caused and kept in existence by God.

Ramsey wrote in his introduction to *Freedom of the Will* that “[t]he soul cannot choose without choosing or prefer without preference” (17). He was emphasizing, with Edwards, that wherever there is will, there is inclination, since to be in a state of indifference would be to incline in no way whatsoever. With regard to Edwards’ position in “On Being” we might say, in parallel, that the mind cannot think without thought. Even the idea of a Euclidean point is still a thought, the last in the train of our ideas of smallness, explained – we might say – “by whatever explains the successive changes in the mind’s ideas” (Ramsey, *Freedom* 19) about smallness. We cannot conceive nothing because to think “nothing” requires that we do not think. The contradiction runs in a direction equal and opposite to the *reductio ad absurdum* that Edwards employs in *Freedom of the Will*: just as it is impossible that something (a free act of will) should come out of nothing, so it is impossible that an idea of ‘nothing’ should come out of the ‘something’ responsible for the train of our ideas. What the inextinguishability of Euclid’s mathematical point teaches us is the same as what the absurdity of infinite regression teaches us: there can be ‘nothing’ and no perceiving subjects and no ideas and no God; or there can be something and perceiving subjects and the ideas, both of the natural world and the moral one, which God causes and at every moment keeps in existence.

The Euclidean inheritance

Proportion, to which I now turn, is the mechanism of that maintenance. Euclid’s Book V codified its classical theory. Of all the *Elements’* thirteen books, one of Edwards’ editions issues, this fifth “ ‘tis the Foundation of the principal Parts of Mathematicks” (Ozanam 175). This “Element,” determines another, “depends on none of the foregoing, but stands alone as a *universal Mathesis*” (Scarburgh 176). A third explains, “The Doctrine which it containeth is almost in continual Use” (Tacquet 100), and a fourth, succinctly

enough: “This Fifth Book is absolutely necessary” (Dechales 206). If this seems quite a number of editions of the *Elements* to possess, that is precisely my point: Edwards’ Catalogue abounds with them.¹⁴ The volume’s worth, as it was commonly articulated in the eighteenth century, lay in its elucidation of a method of comparing magnitudes of the same class: points with points, lines with lines, planes with planes.¹⁵ This is “a way of arguing by Proportion”:

which is most subtle, solid, and Brief. So that all Treatises which are founded on Proportions, cannot be without this Mathematical Logick. Geometry, Arithmetick, Musick, Astronomy, Staticks, and to say in one word all the Treatises of the Sciences are demonstrated by the Propositions of this Book. (Dechales 206)

For Edwards, I want to suggest, this style or “way of arguing by Proportion” serves no less than his argument for providence – his “argument from design,” as it was called, where design at once refers to the perceptible nature of the world and affirms the predestination of the human soul.

The novelty of this argument lies in its resistance to Roland Delattre’s position that there is no continuum between primary and secondary beauty; “that the primary model of beauty for Edwards is being’s consent to being rather than proportion or harmony. The latter is real beauty, but it does not provide the primary model of beauty for his philosophical theology or for his interpretation of the moral and religious life” (23). To the contrary, Edwards’ invokes the proportional laws of nature to show how we may move by virtue of the order of nature to an understanding of the order of grace. Not any idea of proportion but proportion as a mathematical concept allows for this leap from the one (primary beauty, or nature) to the other (secondary beauty, or morality). To understand how he uses that idea to broker a relation between the two fields, we must understand what proportion is, both what it required and, as crucially, the strictures that – at least until the late-sixteenth century – it entailed.

What proportion *is* can best be explained via an early entry in “The Mind” (1723).¹⁶ Delattre (1968) has shown proportion as key to Edwards’ aesthetics, and Sang Lee (2000) that in Edwards’ ontology proportion orders the visible world. But neither emphasis should obviate the fact – which neither Delattre nor Lee acknowledge – that Edwards first introduces proportion and its gradations as part of a patently Euclidean field. “Thus, if we suppose that there are two points, *A* [and] *B*,” he writes:

placed at two inches’ distance, and the next, *C*, one inch farther (Fig. 4), it is requisite, in order to regularity and beauty, if there be another, *D*, that it should be at half an inch distance (otherwise there is no regularity, and the last, *D*, would stand out of its proper place), because now the relation that the space *CD* bears to *BC* is equal to the relation that *BC* bears to *AB*, so that *BCD* is exactly similar to *ABC*. (333-34)

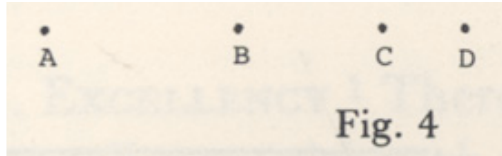


Image 1. Points at regular distances, Fig. 4 from “The Mind” (1723).

All regularity, beauty, and excellency consist in such a *regularity* of relation: *CD* is pleasing because it is exactly one half the distance of *BC*, which is itself one half the distance of *AB*. *CD* might be folded twice into *BC*, and *BC* twice into *AB*, which is equal to four times *CD*. This is why, “One alone, without any reference to any more, cannot be excellent; for in such as case there can be no manner of relation no way” (337). Proportion, or what Edwards frequently calls ‘equality,’ fixes these “manner[s] of relation” into increasingly complex forms. If ‘ratio’ is a relation between two magnitudes according to quantity, ‘proportion’ is a relation of equivalence between two *pairs* of magnitudes: the ratio between *AB* and *BC*, above, is *equal to* the ratio between *BC* and *CD*.

On the subject of creation, Edwards is quite clear that God formalizes proportion as natural law. “And so in every case,” Edwards had already concluded by the time he began “The Mind”: “all the natural motions and tendencies and figures of bodies in the universe are done according to proportion, and therein is their beauty” (335). Particularly, proportion as a underlines two laws, the law of gravity and the law of solidity, which in Edwards’s ontology assume special place. They turn out to be very closely related, as we will see by turning our eye to the first: gravity, or what Edwards’ otherwise calls “attraction.” Where bodies are resident of the visible world, gravity is the proportional means by which God makes visible form (solidity) itself. From Newton and the disseminators of Newton’s thought, chiefly William Whiston, Edwards knew that the smallest particle of matter – what Newton called point mass and Edwards (after Berkeley) “an atom, or a *minimum physicum*” – attracts every other with a force directly proportional to the product of their masses and inversely proportional to the square of their distance.

It was one of Edwards’ remarkable insights to see that solidity is thus a necessary consequence of the proportionality that distinguishes the law of gravity. In articulating that law, Edwards does more than enumerate, as Lee has posed, that all perceived entities are but relations made into rule. For relation is not an essentially mathematical aesthetic. But proportion, Edwards knew, is, as he notes in his Long Series (LS) of “Things to be Considered and Written fully about”: “the parts of the atom *ab* tend to the corresponding parts of the atom *cd*, according to the squares of the distance.” In what is perhaps the only direct scholarly reference to Edwards’ understanding of solidity as proportion – what I have called a mathematical aesthetic and which we might now term a mathematical style – Anderson explained:

[Edwards] gives a good indication of the extent to which he comprehended the specific points of Newton's mathematical formulation and application of the laws of force. He supposes two atoms, equal in size and shape and touching along a common surface, are each divided *ad infinitum* in the same manner into parts in a continued proportion. Each part of one of the atoms, he argues, will attract a corresponding and equal part of the other. (*Scientific and Philosophical Writings* 46)

Edwards' 1721 essay, "Of Atoms," provides the clearest articulation of the process. Here he determines that an atom (alternately called a 'perfect solid' or 'solid body') is an impenetrable continuum of parts, formed when two atoms exactly coincide in every point along one surface. "As, suppose the perfect solid AB and the perfect solid CD [Fig. 5] to be precisely like to the halves of the perfect solid AD , to wit, Af and eD ; and then suppose the atom AB to move up to the body CD , so that the surface gB shall touch in every point of the surface Ch ... they must make up a body every way precisely like the body AD , as if it were the same; and consequently must be a perfect solid as the body AD is" (213).

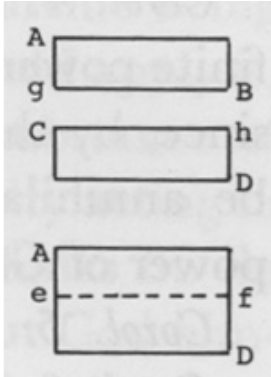


Image 2. Two atoms combining, Fig. 5 from "Of Atoms" (1721).

AB and CD cohere because they tend to each other with precisely the same force. Likewise in his Long Series, Edwards shows that the gravity exerted by two atoms of equal mass, one on the other, is the same. The effect of this gravity is their solidity: the two become one atom. In fact, the causal relationship between the two terms is so absolute that terms can be said to be synonymous: "Solidity is gravity; so that, in some sense, the essence of bodies is gravity" (234).

It is by the rule of this equanimity that we come to Edwards' second infinitary technique for proving God's necessity. To begin, we must remember that Cartesian mechanism had held that the physical universe was composed of nothing but indefinite extension (matter). That expansion permitted no empty space, therefore, no gravity. Newton (and More), by contrast, subscribed to an atomism wherein the world was made of an infinite number of indivisible particles moving *through* space. Edwards' own account of solidity placed a premium on Newton's concept of indivisibility. Consider two atoms ab and cd , he says. We may split ab into two, and then divide each half, "and again the half of that and so on *in infinitum*. In like manner let the atom cd be divided. It is evident that I may so go on *in infinitum*, because if I go but halfway at a time, I shall never come to the end" (233). Composed of an infinite number of parts, with every one exerting its own gravity, we must reasonably conclude (says Edwards), "that the gravity of the whole put together is actually infinite. For certainly, any small quantity of attraction, let [it] be never so small—if it be a millionth or a million millionth—an infinite number of times repeated, will amount to an infinite gravity. Wherefore, the atoms $a[b]$ and cd tend to each other with an infinite force of gravity" (234).

The solidity of, let us say, a book or a chair or a planet in our universe is infinite, because the force of gravity that coheres the infinite number of atoms that compose those bodies must itself be infinite. (“For certainly, any small quantity of attraction, let [it] be never so small—if it be a millionth or a million millionth—an infinite number of times repeated, will amount to an infinite gravity.”) We see the momentous end of Edwards’ reasoning when he notes that only an infinite force might separate bodies so joined together. (So it is for the atom *AD*, above: by no finite power can it “be torn asunder” (214)).¹⁷ It must then be, Edwards explains, that it is an infinite power that keeps atoms together; but such an infinite power can in no way issue from the atoms themselves. There is no such power but God.

Corol. 3. We have already as much as [proved] that it is God himself, or the immediate exercise of his power, that keeps the parts of atoms or two bodies touching, as aforesaid, together. For it is self-evident that barely two atoms being together, and that alone, is no power at all, much less an infinite power.

Corol. 4. Since, by the foregoing corollary, the exercising of the infinite power of God is necessary to keep the parts of atoms together ... it follows that *the constant exercise of the infinite power of God is necessary to preserve bodies in being.* (“Of Atoms” 214; emphasis added)

What we call solidity is our apprehensions of the relations maintained at every moment by God, “according to the nicest rules of proportion,” says Edwards: “according to such laws of gravity and motion” (Misc. no. gg, “Religion” 185). Everyone knows, says Edwards, following the logic of Richard Bentley and William Whiston, “that gravity depends immediately on the divine influence” (“The Mind” 234).¹⁸ When Edwards says, therefore, that “all body is nothing but what immediately results from the exercise of divine power in such a particular manner” (“Of Atoms” 215) he means that the divine exercise of proportion is responsible not just for form, but for form’s persistence.

And so the Almighty did not, Edwards insists against the deists, set the world in motion as some kind of clock, run according to the mechanical procedures of its parts – only bodies acting on bodies. Edwards protests, finding in the cohesion of solid objects *rational* proof of God’s constant sovereign influence, because he replaces mechanism with the reasonableness of God’s maintenance of the immaculate proportions he institutes among properties of matter. “Again, solidity or impenetrability is as much action or the immediate result of action as gravity,” he writes in “The Mind” No. 61, “For we get the idea and apprehension of solidity only and entirely from the observation we make of that ceasing of motion, at the limits of some parts of space, that already is, and that beginning of motion that till now was not, according to a certain constant manner” (377-78). Given that sensible truth, Edwards asks:

why is it not every whit as reasonable that we should attribute this action or effect to the influence of some agent, as that other action or effect which we call gravity, which is likewise derived from our observation of the beginning and ceasing of motion according to a certain method? In either case there is nothing observed but the beginning, increasing, directing, diminishing and ceasing of motion. And why is it not as reasonable to seek a reason beside that

general one, that it is something—which is no reason at all? I say, why is it not as reasonable to seek a reason or cause of these actions as well in one as in the other case? (378)

Edwards here plays at the Euclidean method of proof, beginning with an effect and running it back to its cause, because, as he will affirm, “the only medium we have to prove the being of God” is that “doctrine of necessity, which supposes a necessary connection of all events, on some antecedent ground and reason of their existence” (*Freedom* 420). There is nothing so essential to Edwards’ thought as this principle of cause and effect, we have seen, other than God’s necessary exemption from it. It is the nature of a “series of successive events to all eternity” (*Freedom* 240) to demand a first principle outside the series, itself of no external cause and distinct from the causal relations it impels. In sum, God is under no contract to no thing, causally or otherwise. Above all, as we can now come to, he is under no contract with respect to the dispensation of grace we call predestination. “In grace not only consists the highest perfection and excellency, but the happiness of the creature,” says Edwards in one of his earliest Miscellanies: “this has God reserved to be bestowed by himself, according to his arbitrary will and pleasure, without any stated connection, according to fixed laws, with previous voluntary acts of men, or events in the series of natural things” (Misc. no. 481, “Spirit’s Operation,” 523).

This distinction between the creature (bound as he is to the laws of nature) and God (bound to nothing) speaks to an incommensurability that the classical theory of proportion authorized. Here we come to Euclid’s strictures. Book V, Definition 3, the most famous, is in this regard also the most germane. As Paolo Mancosu neatly summarizes: “Definition 3 calls for homogeneity between the magnitudes under consideration ... In the seventeenth century this state of affairs was denoted by the slogan: There is no proportion between the finite and the infinite” (29) Relations can only exist among quantities of the same kind: points with points, lines with lines, solids with solids. What we find is that Edwards figures the possibility or impossibility of the relation between God and man in just these Euclidean terms. Writing in 1714: “It is more grating to see much being dissent from being than to see little, and his greatness, or the quantity of being he partakes of, does nothing towards bettering his dissent from being in general, *because there is no proportion between finite being, however great, and universal being*” (“The Mind” 381). Edwards’ ‘consent’ and ‘dissent’ are versions of the activities he identifies with the will, namely (as we read in *Religious Affections* and *Freedom of the Will*), liking or disliking, inclining or disinclining, preferring or not preferring (which is itself a version of preferring). ‘Being’ refers to the nature of a God that both is perfect and also always constantly becoming in his perfection through his displays in human space and time. Lee has gorgeously characterized it as emanationist or dispositional, insofar divinity “exercises itself externally in time and space by creating the world. The world, in other words, is meant to be the spatio-temporal repetition of the prior actuality of the divine being, an everlasting process of God’s self-enlargement of what he already is” (6). The highest aim and end of man is to participate in that Being through his own ‘being,’ understood as the sum of his preferences and his preferences’ actualizations in word, deed, feeling, and thought – in sum, in his cognitive-creative processes: “The focal point in the creation through which God’s own temporal self-enlargement and also the life of history and nature come together and reach their goal is the imaginative activity of the divinely

transformed human mind and heart,” Lee teaches us. “In this way the finite mind is enabled to know and love the world as the temporal repetition of the divine glory” (9).¹⁹

I argue that Euclid’s dictum, “There is no proportion between the finite and the infinite,” grounds both that imperative and its impossibility. “I think, it is manifest,” Edwards writes in a dissertation that Norman Fiering found remarkable for its absence of Scripture, “that no affection limited to any private system, not dependent on, nor subordinate to Being in general can be of the nature of true virtue ... so long as it contains *an infinitely little part* of universal existence, and so *bears no proportion* to the great all-comprehending system.” (*True Virtue* 556-57). To entertain relations among individuals as “a private system” is to attempt exemption from the relational order of the world, and so to refuse, as Edwards puts it, consent to Being itself: for “being, if we examine narrowly, is nothing else but proportion” (“The Mind” 336). The paradox, we might say, that for Edwards Euclid’s theory of proportion also codified the commonness that is necessary to consent: thus, merging Edwards’ terminology with Euclid’s, points can consent only to points, lines to lines, solids to solids, finite things to finite things, and the infinite only to itself. Edwards returns again and again to the rule, often as a way to announce a predestinarian system by reiterating the utter uselessness of man’s own endeavors. And yet, Edwards’ application of the rule of proportion is even more provoking for its inconsistency. Critics who have overlooked its mathematical origin have seemed more to mime the ambiguity than explain it. “[T]here is no absolute disjunction between the being of God and the finite,” Lee says, “both [are] relations of ‘proportion,’” before equivocating: “But there is a discontinuity as well” (267). This is true even for those who should know better. Don Schweitzer, for example, in his contribution to a selection of essays in honor of Lee, takes note, with respect to one of Edwards’ analogies, only to say: “as Edwards’ comparison of a drop of water to the ocean indicates, there is still some continuity between them. The finite has no proportion to the infinite. It is as nothing to it because the infinite is so immense. But the infinite is an immense quantity of something that can appear in finite amounts” (51).

In place of Schweitzer’s rather lumbering observation, we would offer that in Edwards’ corpus the possibilities for communication between the infinite and finite coalesce around two aspects vital to his understanding of design. The first is that God is inclined to communicate via these proportionate laws, because they emanate the nature of his own being in the Trinity. “[W]e have shown that one alone cannot be excellent,” Edwards repeats in Miscellany No. 117, “The Trinity.” “Therefore,” he continues, “if God is excellent, there must be a plurality in God” (284). The second is that we display our love to God by participation in such relations. Again, Edwards’ word for this reverent participation in relations is consent, and it applies both to the organization of the natural world and to the dispositions of the individual spirit. “When we spake of excellence in bodies we were obliged to borrow the word “consent” from spiritual things. But excellence in and among spirits is, in its prime and proper sense, being’s consent to being” (“The Mind” 362).

This is why Edwards adored three-part harmony, wherein “the notes are so conformed and have such proportion one to another that they seem to have respect one to another, as if they loved one another” (“The Mind” 380). We love what it like, the statement suggests. Proportion, as it exists here among three musical notes (or, Edwards will also say, among the three sides of a triangle; or, climatically, the three persons of the Trinity), is an identification so complete that it translates similitude into self.²⁰ One such

harmony will summon the last: when Edwards' congregation during the Great Awakening sang "well three parts of music," the women to one part and two groups of men to the others, "Christ was to be heard of and seen in the midst of them" ("Letter to Benjamin Colman" n.p.). In harmonizing our voice we sing proportionally in reverence for proportion itself, as it exists both in God's being, and in his continual making of the world.

I have said that Euclid's dictum justifies both the necessity and the difficulty, in Edwards' terms, of "being's consent to Being." As I will now argue, the overturning of the proscription in the sixteenth and seventeenth centuries granted Edwards' imperative new possibility – exactly the prospect that his writing on musical harmony introduces. Most important, the achievement by relaxing the difference between God and man, but by finding in contemporary philosophy of mathematics and mathematical practice an epistemological model capable of vaulting it. Following allusions scattered throughout his writing, I show that Edwards recruited a mathematical object that, preempting the calculus, proved the finite and infinite could be put into a relation. The total effect of his invocations is to discover – *contra* Fiering's eschewal of theology in favor of "serious discourse about man and his relations to other men" (8) – that in his thinking about relations, doctrine was for Edwards never a secondary proposition, either with respect to moral philosophy or anything else.²¹

Proportion in the new age

When Aristotelian metaphysics lost favor with university curricula in New England as in western Europe, the effects were principally felt, Norman Fiering tells us, "in natural philosophy, in logic, and in moral philosophy" (4). Fiering has famously tended to Jonathan Edwards with respect to the last: "despite his essentially theological interests," he explains, "Edwards was thrust into a dialogue with some of the major voices of early eighteenth-century British moral thought" (8). Without following Fiering's impulse "to avoid or evade entanglement with his more strictly theological views" (11) we can now entertain the question of Edwards' affiliation in new dress: not Edwards with British moral philosophers, but with mathematicians. By the mid-to-late seventeenth century they too had become unruly inheritors of Aristotle, rebellious particularly of his dictum that "there is no proportion between the finite and the infinite" (*On the Heavens* I.6.274a).

Edwards, we have already seen, had an explicit relationship with this prohibition. It appears with most force in his direct discussions of the new sense or new light or sense of the heart, as when in *Religious Affections* true grace reveals itself in a terrible internal voicing of the slogan:

And the more a person has of true grace and spiritual light, the more will it appear thus to him: the more will he appear to himself infinitely deformed by reason of sin, and the less will the goodness that is in in his grace, or good experience, appear in proportion to it. For indeed it is nothing to it. It is less than a drop to the ocean: *for finite bears no proportion at all to that which is infinite.* (327; emphasis added)

It is worth reiterating why proportion here poses a problem for Edwards, one not so easily done away with such critical prevarication as we have seen. The infinite, per Euclid, was exactly that which could come into no relationship with perceived quantities. For this reason, irrational numbers were the great impermissible of Greek mathematics – numbers such as π or $\sqrt{2}$, which are inexpressible as finite fractions. (The seventeenth and eighteenth centuries called them surds, we remember.) Take a wider view, and it becomes apparent that the true subject of the injunction against irrationals is the infinite writ large. “In Greek thought,” Paolo Zellini explains, “references to infinity meant resorting to a term whose meaning is clearly not synonymous with the connotations of our word ‘infinite’” (2). This was *apeiron*, meaning ‘without limits,’ and indicating in its nature not only the “divine and incorruptible” but also what is “ambiguous and defies analogies and analysis” (3). The concept of *apeiron* was for Aristotle a decidedly negative proposition, connected to the idea of *steresis*, or privation, and in theology to the conviction that “God can only be defined as an undefinable being” (4). In the work of “Archimedes, Apollonius, & other excellent” classical geometers, methods of approximation did away with the issue, if only superficially. In an effort to square the circle, for example,²² Antiphon argued that it was possible to increase the number of sides of a regular polygon, inscribed within a circle, to become commensurate with the arcs of its circumference – an attempt that nicely exemplifies that Greek mathematics was two things above all: geometric through and through, and utterly finitistic.

And then, in the seventeenth and eighteenth century, there was a counterintuitive excitement: mathematics found it could dispense with the injunction against irrationals. “Whereas Classical mathematics affirms appearances, Western mathematics denies them,” writes Sal Restivo:

thus the opposition of the fear of the irrational in Classical mathematics, and the central role of the analysis of the infinite in Western mathematics. In Classical mathematics, the straight line is the measurable edge; in Western mathematics it is an infinite continuum of points: and indeed the core unit of Western mathematics is the “abstract space-element of the point,” and the main theoretical objective is the interpretation of *space* (a “great and wholly religious symbol,” according to [Otto Spengler] (214; original emphasis).

One way of parsing this history, as Amir Alexander (2012) has done is to say that in the movement from geometry to arithmetic to algebra (analysis), mathematics ascended to higher degrees of abstraction. In the seventeenth century, mathematics was the first field able to sustain infinity as a viable subject of rational thought. Infinitary mathematics conceived we could, *contra* the ancients, have some positive understanding of infinity. The innovation was all the more startling for deriving, in part, from a recouping of the Greek tradition: a stretching rather than a severance, for example, of the concept of proportion and a revision of the idea of the indivisible into that of the infinitesimal. Far from flouting the prescriptions of classical geometry, seventeenth- and early-eighteenth-century mathematicians respected them, demonstrating their findings with respect to infinity using both classical and contemporary methods of proof. The quantifications of the infinite that resulted belied all sensible access; but the proofs were correct. If Euclidean mathematics banished the infinite because *apeiron* could not, by its very definition, be

comprehended by finite strategies of thought, its failures gave way to a method whose expansiveness lay, not least of all, in its courtship of failure itself.

We know that Euclid's dictum, "There is no proportion between the finite and the infinite," had for some time been unimpeachable; but by the middle of the seventeenth century a peculiar mathematical object had made it reproachable. This was the "acute solid infinitely long," as Gassendi called it, in a famous anti-Cartesian colloquy brought to Yale in 1718.²³ In Gassendi Edwards would read:

And these are the suppositions from which Mathematicians, within the gates of pure and abstract Geometry and almost constituting a kingdom of their own, weave those famous demonstrations, some so extraordinary that they even exceed credibility, like what the famous Cavalieri and Torricelli showed of a certain acute solid infinitely long which nevertheless is equal to a parallelepiped or to a finite cylinder. (256-57)

Alternately called the hyperbolic solid, the infinitely long solid, or simply Torricelli's solid, Edwards would have accessed this paradoxical figure as well in his several editions of Chambers' *Cyclopædia*, in Bayle, and in Harris, and read, therein, something of its history. In 1642 Torricelli succeeded Galileo as the chair of mathematics in Florence. In 1644 his proofs appeared in his *Opera geometrica*, demonstrating that the indivisibles of the infinitely long solid are equal to the indivisibles of a certain finite cylinder.²⁴ The integrity of the analysis – Torricelli gave his proof by the Greek method of exhaustion as well as by indivisibles – amplified its stakes. These were theological as well as philosophical, for the acute hyperbolic solid established that there could be a relation between the finite and the infinite, heretofore reserved for God.

Why all this talk about Torricelli's solid? I find Edwards that Edwards composes it: "suppose a cylinder infinitely long, it can't be greater in that respect" (Miscel. no. 713, 344), he considers in the brief yet capaciously titled 1731 Miscellany, "Infinite evil of sin. Worthlessness of our holiness. Free grace. Justification." In 1740 he expands, "suppose a solid cylinder, infinitely long, with one end near to us, but protracted to an infinite length from us" (Miscel. no 880, 125). Beyond my supposition that even the genius of Edwards was unlikely to have fashioned the image of "such a cylinder infinitely long, as we supposed" (125) out of thin air, proof that Edwards refers to the acute hyperbolic solid in practice lies in the evidence that he was wise to the media surrounding it. Those who would maintain Aristotle's dictum were left either to deny the paradox or incorporate it. Hobbes, one of Edwards' great antagonists, tried the first, unsuccessfully. The English Christian theologian and mathematician Isaac Barrow, to whom Edwards was sympathetic, did the second.²⁵ Crucial to Torricelli's result, as Paolo Mancosu explains, is that "the notion of actually infinite length is present in the very statement of the theorem" (136). While I cannot pause with Mancosu to explain how "the proofs themselves, as they stand, make sense only if the acute hyperbolic solid is given as infinitely long *in actu*," I will emphasize with him that "the proof is correct" (148).²⁶ So rigorously obtained, its fortune was to become a mantle for epistemologies based in reason, whether for mathematical or theological demonstration – or, as I conclude in Edwards' case, of a style that uses one in the service of the other.

This dual application was not unique to Edwards. It was for example part and parcel of the fideistic education administered by Pascal and Arnauld, both of whom Edwards read, and whose positions with respect to Torricelli's solid we might usefully compare with his own. "Incomprehensible. All that is incomprehensible does not cease to be. The infinite number. An infinite space equal to a finite one," Pascal wrote – very likely in response, Jean Itard (1975) has explained, to the Torricellian position that we could have some positive knowledge of infinity.²⁷ Pascal appears in Edwards' Catalogue at no. 362, the entry affixed with the telltale crosshatch by which Edwards denoted he had read the volume. Antoine Arnauld and Pierre Nicole's decisively titled *The Art of Thinking* (1662), Catalogue no. 16, has no such sign, but it has no need: Edwards' penmarks grace the volume, in which the author concludes that mathematicians' knowledge of a proportion between finite and infinite elucidates nothing so much as the poverty of our mind: Pascal is even plainer: "What is Finite, vanishes before that which is Infinite, and becomes pure nothing," he issues, in the 1727 translation of the *Pensées* Edwards had by Basil Kennett:

Nay, the Disproportion between Unity and Infinity, in general, is not so vast as that between Man's Righteousness, and the Righteousness of God.

* We know that there is an Infinite; but we are ignorant of its Nature. For instance; we know it to be false, that Numbers are finite: There must, therefore, be an Infinity in Number. But what this is we know not? It can neither be equal or unequal, because Unity added to it, varies not its Condition. Thus we may very well know that there is a God, without comprehending what God is; and you ought by no Means to conclude against the Existence of God from your imperfect Conceptions of his Essence. (50-51).

God obviates arithmetic, Pascal is saying. No more can we extract God's nature from our limited understanding than we can grasp the meaning of "Infinity in Number" by playing at addition, arriving now at an even or "equal" number, now at an odd or "unequal." That we can always add to a number, no matter how large, is a given; the point is that increase itself means nothing to the infinite. Counting fails, in other words, not because infinity outruns it so much as because infinity renders its operation insignificant: what is "added to it, varies not its Condition," as Pascal has observed.

Or, as Edwards delivers in a 1731 Miscellany, four years after Kennett's translation: "God—as he is infinite, and the being whence all are derived, and from whom every thing is given—does comprehend the entity of all his creatures; and their entity is not be added to his, as not comprehended in it." Then he specifies:

'Tis true, mathematicians conceive of greater than infinite in some respects, and of several infinities being added one to another; but 'tis because they are in some respect finite: as a thing conceived infinitely long may not be infinitely thick, and so its thickness may be added to; or if it be conceived infinitely long one way, yet it may be conceived having bounds, or an end, another. But God is in no respect limited, and therefore can in no respect be added to. (Misl. no. 697, 282).

Edwards in his invocation of Torricelli's solid – this “thing conceived infinitely long” – does something far more interesting than concede the imperviousness of the infinite to all the volleys of our thought. He is equally clear that mathematicians *do* conceive of the infinite and that their conceiving maintains rather than violates the difference between God and man as – to return to *copia*'s terms – one of kind rather than degree, quality rather than quantity. Edwards' rhetoric around the infinitely-long solid is, in fact, so perfectly suited to his religious stakes because its virtuosity still insists on its own finiteness. We have seen expression of this finiteness earlier and elsewhere: in Chapter 2 it went by the name plainness. Mather and the synodalsists, I have shown, link *copia* to the aims of the plain style by demonstrating that *varietas* is never multiplicity in fact. In its way this chapter, too, is about *copia*: Edwards can use mathematicians' positive understanding of infinity to reassert man's finiteness and fallenness because that understanding, while legitimated by rigorous mathematical proof, is also so inexplicable that it must be completed in the imagination. So it is for the idea of numbers, or circles, or angles: “there is a great absurdity,” says Edwards:

in supposing that there should be no God, or in denying being in general, and supposing an eternal, absolute, universal nothing ... if we had strength and comprehension of mind sufficient, to have a clear idea of general and universal being, or, which is the same thing, of the infinite, eternal, most perfect divine Nature and Essence ... we should see it, as we see other things that are necessary in themselves, the contraries of which are in their own nature absurd and contradictory; as we see that twice two is four and as we see that a circle has no angles. If we had as clear an idea of universal infinite entity, as we have of these other things, I suppose we should most intuitively see the absurdity of supposing such being not to be. (*Freedom* 182)

The passage is a clear return to the issue of “Of Being,” though the proof is in this case positive. That for mathematicians the idea of the infinite must be completed in the mind is, as Torricelli's solid made clear, no objection to its truth.

Edwards is fond of saying that the true infinite – the infinite that exists, for example, in the infinitely-long solid – justifies mystery, not because it can be clearly reasoned with, but because despite its attendant paradoxes it can be “reasonably received.” Thus there are “many things that are recorded in the *Philosophical Transactions of the Royal Society*,” he explains, whose “mysteriousness is no manner of objection against my belief of the accounts” – no more, he continues, than it may be objected to by men “born without eyes or optic nerves...who have no ideas of any such things as length, breadth and limits and figure of extension, but only certain ideas they have by touch” (Miscel. no. 1340, “Reason and Revelation” 369), that there is such a thing as sight. For “in such a case, the most rational persons would give full credit to things that they knew not by reason, but only by the revelation of the word of them that see...to the united testimony of the seeing world” (370). The faculty of sight is thus figured as a goad to belief in a visible world, even if one has not the eyes to see it. The corollary, of course, is that we are all like blind men when it comes to providing reasonable account of the existence of God. Torricelli's solid teaches us that reason alone cannot broach the infinite; reason cannot approach God; but it knows when it ‘sees’ true. This solid, inspiring such a complexly

cognitive rather than purely affective leap into the field of the divine, procures an epistemology that, as I now conclude, grounds Edwards' theory of conversion.

Infinitesimal senses of the heart

One of the most salient aspects of this theory of conversion is that it occurs in the instant. "When God appeared to me," relates Nathan Cole, "everything vanished and was gone in the twinkling of an Eye, as quick as A flash of lightning" (70). Immediately this rhythm is set:

then I began to pray and to praise God again, and I could say Oh my God and then I could not find words good enough to speak to his praise; then I fell into a muse and look'd back on my past life; and saw what an abominable unbeliever I had been, O now I could weep for joy and Sorrow, now I had true mourning for sin and never before now I saw sin to be right against God; now my heart and Soul were filled as full as they Could hold with Joy and sorrow; now my heart talked with God; now everything praised God; the trees, the stone, the walls of the house... (70)

In this gorgeous staccato, Cole's narrative, like many others to have come out of the Great Awakening, recounts a series that bears little resemblance to preparation. The difference is largely temporal. Preparation, as we have seen, was not merely gradualist, it was memorial, and the labor of recollection it entailed was the work of moving through the sermon, the words on the page, the length of time it took to read and hear them. If that movement only mimed what was truly a logical rather than temporal sequence (because one's election was determined before the beginning of time), and if the power of that movement cohered in its ability, after all, to exchange incremental process for total apprehension, it nonetheless occurred in experiential time. The Halfway Covenant too made use of a gradualist conception of time, insofar as one's baptism was hoped (if no longer expected) to segue to full membership in adulthood. During the Awakening conversion was more apt to explode it: as Cole's example testifies, conversion caught one unaware.

My final suggestion is that in Edwards' philosophical theology grace is an event, or motion, for which calculus provides the rule. Thus in a most stunning example, Edwards in his posthumously-published *A Dissertation Concerning the End for which God Created the World* (1765) describes the experience of the elect, the "saints":

Let the most perfect union with God be represented by something at an infinite height above us; and the eternally increasing union of the saints with God, by something that is ascending constantly towards that infinite height, moving upwards with a given velocity; and that it is to continue thus to move to all eternity. God who views the whole of this eternally increasing height views it as an infinite height. And if he has respect to it, and makes it his end, as in the whole of it, he has respect to it as an infinite height, though the time will never come when it can be said it has already arrived at this infinite height. (534)

Before quipping with Ramsey's (somewhat paradoxical) insistence that Edwards' "powerful vision was not a product of calculus ... although this mathematics supplied the image Jonathan Edwards uses, plotting infinite converging lines that never meet or come to a resting point" (534), we do well to emphasize *with* him that Edwards is at first concerned in *Freedom of the Will* with the experience of the will, not its cause. "He seeks to catch the agent in the very act of willing or choosing, and to give an accurate report of what goes on in the soul or mind in the state of willing and time of willing" (Ramsey, *Freedom* 16). As for this experience: we must grant, says Edwards, that "in every act there is an act of choice; that in every volition there is a preference, or a prevailing inclination of the soul, whereby the soul, at that instant, is out of a state of perfect indifference" (140). Ramsey parses it thus:

there can be no contradiction among inclinations when the soul gets to the point of actually inclining one way. It may be that the mind is torn between competing motives until it comes to a decision, but the least interval of time that separates such a state of indecision from an act of choice is of no more importance for what happens in the choosing than if the mind had ceased to be subject to competing motives twenty years before the volition began. (17)

The negligibility of any moment before the will chooses – let it be even the smallest amount of time – telescopes the moment of willing itself. What Edwards endeavors to catch is this instant. We can be even more particular, for in *Religious Affections* above all Edwards is after what happens in that moment of inclination – conversion – which most dramatically illuminates that our will is not our own.

Now, the calculus is itself a set of rules for calculating moments of instantaneous change; or, where the infinitely long solid was an infinite largeness of size, calculus used the infinitely small, infinitesimals, to apprehend the infinite in motion. Newton's calculus determined a general relationship between fluxions (a varying quantity's instantaneous rate of change) and fluents (the varying quantity) by which one could calculate tangents and areas. "[F]rom the time of Torricelli and Barrow," Carl Boyer once explained, "mathematicians had in a sense known of such a relationship, but Newton was the first man to give a generally applicable procedure for determining an instantaneous rate of change and to invert this in the case of problems involving [areas] (Merzbach and Boyer 191-92)." Here it is worth emphasizing that Newton was himself wary of infinitesimal techniques. His calculus initially represented infinitely small quantities geometrically, understanding figures as generated in time through the movement of points, lines, and planes, rather than as "aggregates of infinitesimal elements" (Boyer 193). Ultimately, he tried to excise infinitesimals altogether, regarding mathematical quantities not as punctuated moments, but as continuous motion, using what he called the "method of first and last ratios." (Leibniz, for his part, ultimately called them useful fictions). The immediate problem, as I have said, was that infinitesimals were constantly shifting their denotations, at one point something, at another nothing. At an essential level neither definition was hospitable, because an infinitesimal understood as less than any assignable quantity ensured that it could be neither grasped nor perceived. What is equally true, however, is that the impossibility of the idea of the infinitesimal in no way diminished its capacity to explain the empirical world (even Berkeley, for instance, could not deny that infinitesimal calculus was producing results).

The seventeenth century found that infinitesimals could not be perceived; but they could make sense of those things that were: the patterns of the tides, the laws of motion; and, as I conclude, the internal tides of our coming to grace. “The involuntary changes in the succession of our ideas,” Edwards writes in *Freedom of the Will*, “though the cause may not be observed, have as much a cause, as the changeable motions of the motes that float in the air, or the continual, infinitely various, successive changes of the unevennesses on the surface of the water” (200). God’s infinitude is no longer expressed in a notion of absolute space, in the tradition of Cambridge Platonists such as Henry More, but as a series of infinitesimal displays generated through absolute time. Their shadow can be discerned not merely in air currents or hydraulics, but in the fluctuating ‘tides’ of human thought – the patterns that distinguish our ‘art of thinking.’ That cognition itself should be figured in the language of the calculus – again, this mathematics that predicts change over time – suggests that although we recognize *Freedom of the Will* as a treatise that makes use of infinite regression, it is as vital to dwell in the infinitesimal movements that occur within it. Just as the mathematical point was the nearest Edwards to come to “nothing,” the infinitesimal signals his finest understanding of the notion of the instant. If conversion sacralizes instantaneity, the calculus is a condescension God provides to man for conceiving it.

If Euclidean geometry permitted Edwards to understand God positively, through the irreproachable route of first truths, infinitesimals as *changeable* quantities had a more ambiguous provenance: they were capable of explaining all natural laws sensibly observed, simultaneously as they themselves violated causal necessity. In trying to run a series of instants backward we come up against the same infinite regression as we did with acts of free will as the Arminian understood them: either the series has sprung from ‘nothing’ or it has come from the only power capable of issuing infinitesimals – which is the infinite itself. Subscription to the first option would mean that the universe is nothing but disorder, for

If there be no absurdity or difficulty in supposing one thing to start out of nonexistence, into being, of itself without a cause; then there is no absurdity or difficulty in supposing the same of millions of millions . . . stones, or stars, or beasts, or angels, or human bodies, or souls, or only some new motion or figure in natural bodies, or some new sensations in animals, or new ideas in the human understanding, or new volitions in the will; or anything else of all the infinite number of possibles (*sic*) (*Freedom* 184).

Now this is a manifest absurdity: the regularity of the natural world, as we have seen, shows otherwise. In a mathematics circulating around the infinite in the form of the infinitesimal, Edwards could thus stake the reasonableness both of displays in the natural world and of the ineffable divine power that permits them.

Which brings us back to the image of the calculus at the conclusion of Edwards’ *Dissertation Concerning the End for which God Created the World*. The passage illuminates the instantaneous movement from the sensible to the supersensible that constitutes, for Edwards, the cognitive field of grace. The moments of change that the calculus thus permits and plots offers Edwards a model for conversion as an instantaneous affective event that yet operates within an infinite field. “We justly admire that saying of the

philosopher,” Edwards scribbled into a notebook sometime around 1740, quoting Nicholas of Cusa (as Hooker, we might remember, followed him a century earlier):

that ‘God is a Being whose center is everywhere, and circumference nowhere,’ as one of the noblest and most exalted flights of human understanding, and yet not only the terms are absurd and contradictory, but the very ideas that constitute it, when considered attentively, are repugnant to one another. Space and duration are mysterious abysses, in which our thoughts are confounded with demonstrable propositions, to all sense and reason, flatly contradictory to one another. (Miscl. no. 1234, “Mysteries. The Mystery of the Trinity” 168).

Newton referred to this infinite field by the concept of absolute space and time. Edwards, like Hooker and Mather before him, knew it as predestination. Specifically, his vision in the *Dissertation* allows for movement within a scheme that simultaneously makes movement useless. Within this mystery, religious affections do not require that we dispense with the erratic, if electric, experiences of a sensory self, anymore than Newtonian mechanics asks that we dismiss relative space and time. For the new sense has visible manifestation no less do natural laws: an infusion of grace may cause one to tremble as surely as gravity causes a stone to fall. But if divinity in either case lies not in those manifestation but in their cause, Edwards is equally clear that its expression exists in the movement between them. This is how proof of grace operates in Edwards’ negative theology, as moments of instantaneous change that take their cue, complicatedly, from the science of motion.

¹ Prior to Thuesen’s edition, the only publication with express regard for Edwards’ reading practice was Thomas Johnson, “Jonathan Edwards’ Background of Reading” (1931). See Thusen’s Introduction to *Catalogues of Books* for an account of this article, and of the other analyses of Edwards’ reading history that followed it.

² Writing on the revivals is of course enormous. Prominent works include Alan Heimert, *Religion and the American Mind* (1966) and Bercovitch, *The Rites of Assent* (1993). Ann Taves, *Fits and Trances* (1999), traces three traditions of involuntary religious experience in America. Frank Lambert, *Inventing the “Great Awakening”* (1999), offers an important departure from traditional historiography of the revivals by placing them within capitalist modes of distribution and production. Susan Juster, *Doomsayers* (2003), is particularly good for addressing the outmodedness of the spiritual/secular binary with which this chapter is also concerned; and Rivett, *The Science of the Soul* (2011), provides a complementary account of the revivals’ incorporation of Enlightenment thought.

³ The 1734-35 revival was set off by the conversion of a previously feckless young woman in the fall of 1734; by spring 1735 Northampton had witnessed over 300 conversions.

⁴ The classic, comprehensive guides to this history, which I can speak of in only the most general terms, remain Carl Boyer, *A History of Mathematics* ([1968] 2011) and Morris Kline, *Mathematical Thought from Ancient to Modern Times* (1972).

⁵ This specific epistemological interest, it should be said, owes a great deal to Edwards scholarship in the 1990s and early 2000s (Lukasik, “Feeling the Force of Certainty” (2002); Knight, “Learning the Language of God” (1991)) that corrected the earlier tendency – itself a reaction to Miller’s empiricist reading – “to conceive of Edwards’s immaterialism and his interest in scientific

atomism as somehow opposed to each other within the confines of his larger religious project” (Lukasik 224).

⁶ Hooker, in the very passage he introduces his ‘parrat,’ notes that we cannot attain a true sight of our sin “unless the Lord put a new Light into our minds” (38).

⁷ At present this chapter deals only with Edwards’ relation to Newton’s calculus, though it should be said that Edwards’ Catalogue does contain a number of volumes that are or whose authors are affiliated with Leibniz. Christian Wolff (Catalogue no. 429), for example, author of *Elementa matheseos universae* (1713-15), was Leibniz’s man, printing and circulating copies of his *Charta Volans* (1713) – Leibniz’s response to a collection, the *Commercium Epistolicum* (1712), which affirmed Newton’s priority in “the calculus wars” (printed by the Royal Society, it was known to be authored by Newton himself). For an accessible history of that conflict, see Bardi, *The Calculus Wars* (2006).

⁸ A handful of earlier work had earlier emphasized Edwards’ relation to Enlightenment science. See Theodore Hornberger, “The Effects of the New Science upon the Thought of Jonathan Edwards” (1937); James Tufts, “Edwards and Newton” (1940); and Rufus Suter, “An American Pascal: Jonathan Edwards” (1949).

⁹ Here I am doing without Postulates, which have been taken to be somewhat less than self-evident (particularly the infamous Fifth), while nonetheless remaining involved in laying the groundwork for Euclid’s system. The splicing has no bearing on the parameters of my argument.

¹⁰ The term, of course, is Steven Shapin and Simon Schaffer’s; see *Leviathan and the Air-Pump* (1985), classic account of the rise of the experimental method and its attendant epistemologies.

¹¹ Wallace Anderson called it ‘immaterialism,’ but the meaning was much the same. See “Immaterialism in Jonathan Edwards’s Early Philosophical Notes” (1964). For a very good summary of Edwards’ affiliation with Berkeley, see Jasper Reid, “Jonathan Edwards on Space and God” (2003).

¹² Douglass Jesseph (1993; 2005) has been crucial in this regard. See also Robert Baum, “The Instrumentalist and Formalist Elements in Berkeley’s Philosophy of Mathematics” (1972), and David Sherry, “Don’t Take Me Half the Way” (1993).

¹³ Berkeley himself came to reconcile his philosophy of mathematics with classical geometry, by proposing that particular ideas can represent abstract ideas. Particular objects, or objects of sense, thus carry the theoretical burden typically owned by abstractions. “In the geometric case, perceived lines or figures can be taken as representative of all similar lines or figures, and the theorems proved of them can be applied generally to the class of things they represent, without supposing that the theorems deal either with abstract ideas or only the immediately perceived geometric objects” (Jesseph, “Berkeley’s Philosophy of Mathematics” 282).

¹⁴ Certainly Edwards read Euclid during his undergraduate studies at Yale (only a few years before Harvard’s newly established Hollis professorship of mathematics codified instruction in “the Elements of Geometry together with the doctrine of Proportions”) – though under the tutelage of his precocious cousin Elisha Williams, Edwards’ instruction in Euclid very likely came a good deal earlier than that. At Yale as at Harvard, geometrical instruction necessarily underpinned the program in natural philosophy, particularly astronomy, which was the principal study of the third year. On Edwards’ education see Anderson, “Editor’s Introduction” 4-26, and William Morris, *The Young Jonathan Edwards* (1991), esp. chap. 2.

¹⁵ See Thomas Heath, *A History of Greek Mathematics* (1921), 325-27 and 384-91, of which 386-91 are technical. See also Uta Merzbach and Carl Boyer, *A History of Mathematics* (2011): “Of the thirteen books of the Elements,” they write, “those most admired have been the fifth and the tenth—the one on the general theory of proportion and the other on the classification of incommensurables” (101).

¹⁶ On the difficult issue of dating “The Mind,” see Anderson, “Editor’s Introduction” 313-29.

¹⁷ For this “body that is absolutely plenum, or that has every part of space included within its surface impenetrable, is indivisible” (208).

¹⁸ Newton himself refrained from positing – publicly, at least – a cause of gravity. “I have not as yet been able to discover the reason for these properties of gravity from phenomena, and I do not feign hypotheses” (943), he wrote, famously, in his General Scholium appended to the second edition of the *Principia* (1713). See, similarly, Whiston, *Astronomical Principles of Religion, Natural and Revel’d* (1717) 45–46, at Edwards’ Catalogue no. 216.

¹⁹ On this subject see esp. Lee chap. 5.

²⁰ In “The Mind”:

if we suppose three “circles between two parallel lines, and near to a perpendicular line run between them (Fig. 3), the most beautiful form, perhaps, that they could be placed in, is in an equilateral triangle with the cross line, because there are the most equalities: the distance of the two next to the cross line is equal from that, and also equal from the parallel lines. The distance of the third from each parallel is equal, and its distance from each of the other two circles is equal, and is also equal to their distance from one another, and likewise equal to their distance from each end of the cross line. There are two equilateral triangles, one made by the three circles, and the other made by the cross line and two of the sides of the first protracted till they meet that line.” (333)

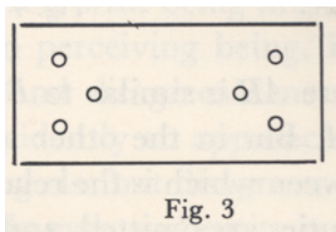


Image 3. Equilateral triangles formed out of circles, Fig. 3 in “The Mind” (1723).

It is a tantalizing possibility that Edwards’ views on mathematical proportion might lend insight into his complex Trinitarian theology, though one that the present chapter cannot, unfortunately, take up.

²¹ The historian is well aware of this preeminence; but it is not his object. To it he now and again pays tribute, by reframing Edwards’ moral philosophy as moral theology: “To return revealed religion to the central role it had held in Western thought for so many centuries, it would be necessary to construct a new philosophical anthropology that would meet naturalism on its own ground and serve as a foundation for thought about man in both secular life and religion without inconsistency” (9). See McDermott, *Jonathan Edwards Confronts the Gods*, Parts I and II, on the deist inversion of the fields of morality and theology.

²² This was, with doubling the cube and trisecting the angle, one of the three great problems to have come down from antiquity. It extended Euclid’s rules for the making of curvilinear figures to ask whether it was possible to construct, in a finite number of steps, a square with an area equal to that of a circle. In the seventeenth century the topic launched a decades-long and vociferous battle between John Wallis, mathematician and theologian of Puritan bent, and Thomas Hobbes. Their debate covered, as Jesseph emphasizes, “issues that went well beyond mathematical and methodological concerns. Questions of political loyalty, church government, theology, and classical philology were all raised and debated as the two traded vituperative pamphlets” (10). Jesseph’s volume provides the most thorough treatment of the affair to date; see 10-16 for an overview.

²³ See Anne Stokely Pratt, “The Books Sent from England by Jeremiah Dummer to Yale College,” and Louise May Bryant and Mary Patterson, “The List of Books Sent by Jeremiah

Dummer” (1938). The entry for Gassendi’s *Metaphysica disquisito contra Meditationes Cartesians* occurs on 482.

²⁴ I am glossing over these proofs, the intricacies of which are not important for my argument. Nor, as we will see, were they necessary for Edwards (who would not have understood them to begin with). See Mancosu and Vailati 55-57 for their fuller explication.

²⁵ See Mancosu and Vailati 63.

²⁶ For detailed review of Torricelli’s proof by indivisibles and by exhaustion, see Mancosu 133-35.

²⁷ See also Mancosu, 142.

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