

# MAKING THE “ROUND OF KNOWLEDGE” IN BACON’S WAKE: NAUDÉ, COMENIUS, AND BROWNE<sup>1</sup>

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**Abstract.** This paper examines how three of Francis Bacon’s readers, Gabriel Naudé, Jan Amos Comenius, and Thomas Browne, rethink the humanist library, the genre of the *silva*, and Bacon’s call for a new kind of encyclopedism. Naudé adumbrates the organization and contents of the ideal library so that judicious readers may integrate the old and new learning. In calling for a single pansophist book, Comenius heralds Bacon’s inductive method and yet would restore metaphysics to the encyclopedia. And after his own efforts in Baconian encyclopedism in the *Pseudodoxia Epidemica*, Thomas Browne writes a catalogue of books and artifacts that is at once an elegy to the republic of letters and a ludic plea to include *admiratio* in “the round of knowledge.” This diverse reception history emblemizes the rich, often contradictory potential of Bacon’s encyclopedic vision.

**Keywords:** Francis Bacon, Gabriel Naudé, John Evelyn, Jan Amos Comenius, Thomas Browne, library, encyclopedia

## Introduction

When we contemplate Bacon’s largely unacknowledged debts to humanists like Giambattista della Porta and Girolamo Cardano in many of the thousand paragraphs comprising the *Sylva Sylvarum* (1626) questions about what and how Bacon read in order to undertake his natural histories, his *experiments solitary* and *experiments in consort*, rightly come to the fore. These become more urgent still if we seek to understand Bacon’s ambivalent use of humanism’s textual legacy to forge his grand encyclopedic vision, the *Instauratio magna*, or what he calls in the 1605 *Advancement*, “this general Cabynet of knowledge” which would heed “the divisions of the Nature of things” (as opposed to a “secretary of Estate” who, smelling of the lamp, sorts items into the pigeon-holes of his desk).<sup>2</sup> But while scholars eagerly await the forthcoming edition of the *Sylva Sylvarum* in the *Oxford Francis Bacon*, whose commentary and notes promise to amplify the already invaluable annotations by Robert Ellis in the standard edition of the *Sylva* that appeared in *The Works of Francis*

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*Bacon*, other ways of conceiving Bacon's relation to the humanist library might be pursued.

One such way is to consider the reception of Bacon's writings. Readers following immediately in Bacon's wake sought different ways, ranging from the material to the fantastic, to perfect his encyclopedic circle and to square this with the humanist legacy. My aim in this essay, then, is to trace three exemplary attempts to reconstitute the humanist library along Baconian lines. Just why and how Gabriel Naudé (in John Evelyn's translation), Jan Amos Comenius (in Samuel Hartlib's translation), and Thomas Browne were inspired by Bacon's forward-looking program for redrawing the *orbis doctrinae* are fascinating questions, which I shall explore in due course here; but more compelling still to my mind is the various ways these Baconians ignore Bacon's diagnoses as to what ailed learning even as they diversely pursued his progressive vision.<sup>3</sup> More particularly, as we shall see, Naudé and Evelyn would reconcile the entire humanist library with Bacon's program; Comenius and Hartlib reduce that same library to a single pansophist book that would both fulfill and transcend Bacon's *Instauratio*; while Browne, playfully undermining his earlier, considerable efforts in Baconian encyclopedism, welcomes *admiratio* back into the circle of learning and in doing so recalibrates the balance between imagination and reason. And while other figures writing in the generations immediately after Bacon's death might have been profitably adduced here (Robert Burton, for instance), these three figures nicely emblemize how the enormous variety and material abundance of the early modern library, that is, the *silva* that fueled humanism for centuries, could be rearranged to respond both to Bacon's exigencies and to other forms of idealism.<sup>4</sup>

### **Bacon's "Bookes"**

Tellingly absent from "the riches of Salomon's House" imagined by Francis Bacon in the *New Atlantis* (1626) is the humanist library. Instead, aside from the biblical "books" that appeared miraculously from out of the sea and now afford the islanders "salvation and peace," the "books" Bacon mentions serve narrowly pragmatic, instrumental ends: "For the several employments and offices of our fellows; we have twelve that sail into foreign countries, under the names of other nations . . . who bring us the books, and abstracts, and patterns of experiments of all other parts. These we call Merchants of Light."<sup>5</sup> This is to say, it is neither in the empirical *Sylva Sylvarum* nor in the theoretical *Novum Organum*, but rather in the utopic *New Atlantis* that Bacon reconciles somewhat the conflicting claims of reading and experiment, of the imagination and reason.<sup>6</sup> First published posthumously along with the *Sylva*, the *New Atlantis* envisions the neat distillation, ordering, and interpretation of the messy matter that riddles Bacon's natural histories.

Yet for all of Bacon's idealism and corresponding wariness of humanist habits of mind, his plans for the reformation of learning never disdain the material culture of books. On the contrary, they call for the writing of better ones. Books

may last longer than bronze, but in enduring they should cause growth and change: "The Images of men's wits and knowledges remaine in Bookes, exempted from the wrong of time, and capable of perpetuall renovation: Neither are they fitly to be called Images, because they generate still, and cast their seedes in the mindes of others, provoking and causing infinit actions and opinions, in succeeding ages."<sup>7</sup> Undoubtedly, Bacon hopes his own books will accomplish such generation. In the *Advancement*, describing the "Tradition [or transmission] of knowledge," he prescribes five specific scholarly labors ranging from the philological to historicist: 1) "the true Correction and edition of Authors;" 2) "the exposition and explication of Authors, which resteth in Annotations and Commentaries;" 3) the study of "the times, which in many cases give great light to true Interpretations;" 4) "some briefe Censure and iudgment of the Authors; that men therby may make some election unto themselves, what Bookes to reade;" and 5) the study of "the Syntax and disposition of studies, that men may know in what order or pursuite to read."<sup>8</sup>

Each of these tasks of course was central to humanist practices and curricula. Even so, Bacon sees them as instrumental rather than as ends in themselves. Philology and history, that is, have little epistemological or ethical value if they do not serve as "Georgickes of the mind," as Bacon memorably puts it, "to instruct and suborne Action and active life."<sup>9</sup> That Bacon viewed the books he wrote in such a light is confirmed by a letter he wrote to Thomas Bodley, who founded the Bodleian Library at Oxford University in 1602: "I have sent unto you [a copy of the *Advancement*], not only in good affection, but in a kind of congruity, in regard of your great and rare desert of learning. For books are the shrines where the Saint is, or is believed to be; and you having built an Ark to save learning from deluge, deserve propriety in any new instrument or engine, whereby learning should be improved or advanced."<sup>10</sup> But that Bodley did not fully share Bacon's feeling of "congruity" appears not to have lessened Bacon's sense that the material book was an invaluable "help" in advancing his program.<sup>11</sup> Moreover, if in 1605 he is still looking to past examples for his authority, by the 1620's Bacon breaks more confidently with tradition. Now, contemplating his *Instauratio magna*, he would make books, or more properly, his books, solely into instruments or "seeds" for prospective thought. And as the nature of the encyclopedic book is made to adapt to Bacon's exacting vision of how nature should be investigated, by literal and figurative extension, the library also undergoes profound changes.

When it comes to the encyclopedic book Bacon's thinking is structured by a constitutive analogy: just as the book and library are to be transformed, so will nature's disordered *silva*.<sup>12</sup> In "Of Gardens," Bacon sketches a utilitarian, aesthetically-pleasing space where words unproblematically correspond to things. Unlike Thomas Browne's *The Garden of Cyrus, or Quincunciall Lozenge, or Net-work Plantations of the Ancients, Artificially, Naturally, Mystically Considered* (1658), Bacon's garden is neither overrun by humanist authorities nor ornamented by creeping, circling periods. Instead, Bacon designs a future garden as if he were planning *experimenta fructifera* or *lucifera*.

Trees I would have none in [the garden's heath] . . . For the main garden, I do not deny but there should be some fair alleys ranged on both sides, with fruit trees; and some pretty tufts of fruit trees, and arbours with seats, set in some decent order; but these to be by no means set too thick; but to leave the main garden so as it be not close, but the air open and free.<sup>13</sup>

In the event, the parts of the *Sylva sylvarum* on botany and arboriculture did inspire more restrained arboreal visions in the next generation, such as Ralph Austen's *Observations upon some parts of Sr Francis Bacon's Naturall History as it concerns Fruit-Trees, Fruits, and Flowers* (Oxford, 1658), later expanded as *A Treatise of Fruit-Trees* (Oxford, 1665), as well as John Evelyn's *Sylva, or, A Discourse of Forest-Trees, and the Propagation of Timber in His Majesties Dominions* (London, 1664), about which Evelyn (1620-1706), curiously, corresponded with Browne.<sup>14</sup> A lecture originally delivered to the Royal Society (founded in 1660), Evelyn, in offering remedies for the destruction of woodlands from the recent Civil War, casts his "*Wooden Edifice*" as breaking with humanist *silvas* even as he tries to distill the Baconian "*Instruction*" he finds there.<sup>15</sup>

### Naudé's library

Evelyn, though, was as interested in libraries as in trees. In 1661 he translated Gabriel Naudé's 1627 *Advis pour dresser une bibliothèque* as *Instructions Concerning Erecting of a Library*.<sup>16</sup> An Ur-text in library science, this detailed tract confirms how material suitable for the late-humanist, Baconian library continues to wildly proliferate, proving, if you will, as difficult to control as "matter" was for Bacon in the *Sylva* and elsewhere.<sup>17</sup> Naudé (1600-1653), in brief, juggles Bacon's prescriptions for advancing learning with an adamant faith in the virtues of philological humanism.<sup>18</sup> A *libertine érudit*, friend of Pierre Gassendi, and thoroughly eclectic thinker, Naudé literally seeks to find a place for the riches of Renaissance humanism within a program for "the progresse and advancement" of his patron's "Library."<sup>19</sup> This library, he urges, should be open to "publick use;"<sup>20</sup> but, more innovatively still, the resources typically spent in purchasing duplicates of rare manuscripts, costly bindings, or ornate decorations for housing the books, should be devoted to the pragmatic business of providing scholars with a suitable place for study. The library should also include "Mathematical Instruments, Globes, Mapps, Spheres, Pictures, Animals, Stones, and other curiosities as well *Artificial* as *Natural*, which are ordinarily collected from time to time, with very little expence."<sup>21</sup> In short, Naudé's library is to be filled with *instrumenta*, not *ornamenta*. It should cultivate *paideia* more than *admiratio*.

Not that Naudé transforms the library into a narrowly Baconian *organum*. His broad rhetoric about the value of discovery and method, especially as Evelyn translates it, owes far more to Bacon than do his actual methods or, for that matter, his views on what subjects are scientifically valuable.<sup>22</sup> Indeed, Bacon is mentioned only twice in the text, and then as one of many authors, ancient and modern, to be

included in the ideal library.<sup>23</sup> Still, the way that Naudé tries to deduce “divers Theorems, and praecautions” to help him pick out, from amidst the “almost infinite” number of books, those that belong in his library, suggests that he, too, sees method as the most crucial step in limiting the dangerous cognitive effects from a confusing mass of particulars.<sup>24</sup> Thus while arguing that Bacon strongly influenced Naudé, Paul Nelles observes that the key difference between Bacon and Naudé is that the former avoids philological historiography.<sup>25</sup> Naudé’s matter, in other words, is not the “literate experience” (*experientia literata*) or “experience that can read and write” that Bacon takes from books, but rather the books themselves.<sup>26</sup>

Refashioning the rhetoric and epistemology of curiosity, Naudé promotes books canonical and obscure, orthodox and suspect. His library would encyclopedically contain “all the chief and principal Authors, as well antient as modern, chosen of the best Editions, in gross, or in parcels, and accompanied with their most learned, and best Interpreters, and Commentators, which are to be found in every Facultie; not forgetting those which are lesse vulgar, and by consequent more curious.”<sup>27</sup> Beginning, then, with “several *Bibles*, the *Fathers*,” and a broad selection of theological authors including a generous selection of scholastic and medieval authorities, Naudé quickly ranges through authors writing on “Civil and Canon Laws,” “Physick” (such as Galen and Avicenna), “Astrologie” (including Ptolemy and Cardano), “Opticks,” “Arithmetick,” and “Dreams” (Cardano is again prescribed). To ensure philological rigor, editions of books in the original languages must be acquired: “The *Bibles* and *Rabbies* in *Hebrew*; the *Fathers* in *Greek* and *Latine*; *Avicenne* in *Arabick*; *Bocacio*, *Dantes*, *Petrarch*, in *Italian*.” And to ensure completeness, the library should include: commentaries (Scaliger on Theophrastus, Ficino on Plato); books dedicated to “any particular subject” (Gilbert on the magnet); books that break new ground (“Reuchlin who first writ of the Hebrew Tongue, and the Cabal”); but even authors “who first wrote of Subjects the least known” (“*Tagliacotius*, how to repair a decayed Nose”).<sup>28</sup> Most tellingly, though, “All curious and not vulgar Authors” are recommended

such as are the books of *Cardan*, *Pomponacius*, *Brunus*, and all those who write concerning the *Caball*, *Artificial Memory*, the *Lullian Art*, the *Philosophers Stone*, *Divinations*, and the like matters. For, though the greatest part of them teach nothing but vain and unprofitable things . . . yet notwithstanding that one may have wherewithall to content the weaker wits, as well as the strong; and at the least satisfie those who desire to see them, to refute them.<sup>29</sup>

Unlike Bacon, then, Naudé trusts that some readers (not the “weaker wits”) in his library are capable of destroying their own idols – if given the proper tools. It is for these, it seems, that he pragmatically provides dictionaries, commonplace books, miscellanies, and compendia, or what Ann Blair calls “early modern reference books.”<sup>30</sup> In this way, the late humanist, Baconian library becomes the material and spatial extension of the encyclopedic ideal:

The knowledge of these Books is so expedient, and fructiferous to him who knows how to make reflection, and draw profit from all that he sees, that it will furnish him with a million of advantages, and new conceptions; which being received in a spirit that is docile, universal, and disingag'd from all interests . . . they make him speak to the purpose upon all subjects, cure the admiration which is a perfect signe of our weaknesse, and enables one to discourse upon whatsoever presents it self with a great deal more judgment, experience, and resolution, then ordinarily many persons of letters and merit are used to do.<sup>31</sup>

Furnished with "these Books" but also cured of mere "admiration," readers can transform themselves and the knowledge traditionally found in the humanist library. Indeed, with these stringencies in mind Naudé envisions what Aby Warburg, a great library-builder himself, calls a *Denkraum* or "thought-space" where conflicting theories and opinions can be considered, and so where truth eventually, dialectically, can be reached.<sup>32</sup>

But again, like many of his contemporaries, Naudé discovered in the Senecan commonplace warning against the folly of "innumerabiles libros & Bibliothecas" a description of his own times.<sup>33</sup> By praising, in turn, books with encyclopedic ambitions, he indicates how readers might avoid getting lost in the forest of learning.<sup>34</sup> Commenting on what he vaguely calls "*Dictionaries*," he writes: "I esteem these Collections extreamely profitable and necessary, considering the brevity of our life, and the multitude of things which we are now obliged to know, e're one can be reckoned amongst the number of learned men, do not permit us to do all of our selves."<sup>35</sup> Nonetheless, noting that many small books have much greater art and value than "those rude, heavy, indigested and ill polished masses," he rails against certain "great and prodigious volumes, which . . . are oftentimes but the *Panspermia*, *Chaos's* and *Abysses* of Confusion."<sup>36</sup> Recalling Ovid's description of the originary cosmic chaos as a "rudis indigestaque moles" ("a rude and indigested mass" in Garth's and Dryden's translation), Naudé views such books as but provisional "Matter" (*matiere préparée*) waiting for proper use.<sup>37</sup> In this respect, he takes the side of the moderns, like Bacon and Gassendi, to damn humanism's superficial syncretism.

In sum, Naudé occupies an ambiguous place in early modern intellectual history. If, for instance, he later makes good on his repeated mention in the *Advis* of Cardano, by urging his doctor, Charles Spon, to edit Cardano's *Opera omnia* (1663), he attaches to it his biography, *Testimonia praecipua de Cardano* (1643), which mixes strong praise and blame of Cardano: praise of his encyclopedism, blame of his credulity. As for Eveyln, his dedicatory epistle to the Earl of Clarendon, then the *Lord High Chancellour of England* and an office formerly held by Bacon, reimagines Naudé's text as belonging to the Royal Society program.<sup>38</sup> Comparing also Naudé's

*Instructions* to the “Design” of Bacon’s “*Solomons House*,” he gives both principal roles in the “Empire” of “knowledge” and the “*Amphitheatre of Wisdom*.”<sup>39</sup>

### Comenius’ book

Another Baconian librarian or, better yet, anti-librarian is the Czech pansophist, educational reformer, and mentor to Samuel Hartlib, Jan Amos Comenius (1592-1670). Published in England by Hartlib, Comenius’ 1639 *Pansophiae prodromus* [The Forerunner of Pansophy], contemplates only to disdain the “*rerum cognitarum silva*” [*the medley of knowable things*] for want of a proper, Baconian method to arrange and convey such motley learning.<sup>40</sup> But Comenius also explicitly spurns Bacon’s exclusion of divine matters from the encyclopedic program outlined in the *Instauratio magna*; instead, he invokes the Biblical commonplace that God ordered the world according to number, measure, and weight to herald a pansophist encyclopedia, which would unite natural philosophy and theology.<sup>41</sup> While he proposes “a new Anatomie of the Universe, and truer than any hath hitherto beene seene,” he hopes that his “booke might also prove a dore into the Holy Scriptures,” one whose metaphysics “even children of eight years of age” might apprehend.<sup>42</sup> Given the shortness of human life and the “greatnesse” of the humanist library, Comenius would make a compendium of all human learning, and thereby reduce the monstrous multiplicity and variety of books into a single tome.<sup>43</sup> “Good God!,” he exclaims, “what vast volumes are compiled almost of every matter, which if they were laid together, would raise such heapes, that many millions of years would be required to peruse them?”<sup>44</sup> And though he sometimes prefers the “mirrou”-metaphor to describe how his “booke” would represent “things themselves,” his emphasis on a method that would permit only the essential to fill the pages of his pansophy, confirms that rather than collecting particulars or balancing different opinions and theories, they will pursue just analysis. His pansophist encyclopedia would begin after the Baconian work of inducing particulars is complete.<sup>45</sup> Indeed, like Descartes and Spinoza, Comenius urges pansophists to follow a *more geometrico*.<sup>46</sup> And yet Comenius, who in 1642 met with Descartes in Leyden, reports that they both agreed on just how different the scope of their two projects were. Descartes had read and admired the *Prodromus*, but felt that Comenius “had confused philosophy with theology,” adding: “Beyond the things that appertain to philosophy I go not; mine therefore is that only in part, whereof yours is the whole.”<sup>47</sup>

Howard Hotson has shown how the “educational revolution” of the post-Ramist movement, to which Comenius uneasily belongs, changed pedagogy from directly teaching texts from the humanist library to conveying necessary learning through compendia or textbooks.<sup>48</sup> A student at Herborn University of J. H. Alsted (1588-1638) and a close reader of Bartholomäus Keckermann (~1571-1609), both of whom tried and failed to limit the *copia* and chaos of the humanist encyclopedia by adopting thoroughly eclectic methods, Comenius promotes a radically new encyclopedic vision:

The most exact Encyclopaedias, or sums of art, which I could ever lay my eyes upon, seemed to me like a chaine neatly framed of many linkes, but nothing comparable to a perpetuall mover, so artificially made with wheeles, that it turnes it selfe [*Quas adhuc vidi Encyclopaedias, etiam ordinatissimas, similiores visae sunt catenae anulis multis eleganter contextae, quam automato rotulis artificiose ad motum composito et se ipsum circumagente*]: or, like a pile of wood, very neatly laid out in order, with great care, and which by its inbred vertue [*spiritus innati virtute*] spreads it selfe into boughs, and leaves, and yieldeth fruit. But that which we desire, is to have a living tree, with living roots, and living fruits of all the Arts, and Sciences, I meane Pansophy, which is a lively image of the Universe, every way closing, and agreeing with it selfe, every where quickening it selfe, and covering it selfe with fruit.<sup>49</sup>

Mixing his metaphors in typical fashion, Comenius discards the humanist library and, arguably, the great chain of being for a self-generating “pile of wood” (the encyclopedia as automaton!), which would transform nature (“a living tree”) into the pansophist book. He shares indeed Bacon’s attachment to circle and tree metaphors – an attachment that may have derived from common roots in the Lullian tradition.<sup>50</sup> Thus however different their final aims, both Comenius and Bacon hope to bring light and order to the forest of learning, to thin it, if you will, of sickly and superfluous trees. And, as was the case with Bacon’s eighteenth-century imitators, Diderot and D’Alembert, this encyclopedic “tree” is meant to symbolize method more than content per se.

Comenius’ *ratio* for discovering “the nature of things” is explicitly indebted to Bacon’s. In a section called *Progressus non contemnendi*, Comenius writes:

Wee have already great store of provision hereto, those bookes and monuments of mens diligence, compiled with great care and industry. Can we thinke that all these have done nothing? That cannot be in regard . . . of the supreme governour of all things, who will not suffer any thing, even errors themselves to be in vaine . . . Now it is manifest, that many things are already found out, and why should we not hope, that the rest will follow? It is no matter that *Euclides*, *Archimedes*, and others have brought the knowledge of Quantities to such evidence, and perfection, that even miracles may be effected by numbers, measures, and weights. It not a thing of nothing, that Hermetick Physitians, and others have by means of Chymistry found how to extract the qualities out of naturall bodies, and to separate even the very essences of things. It is a matter of moment, which the Lord Verulam hath effected in his excellent *Novum Organum*, where he shewes the infallible way of making a narrow search into the natures of things [*quod Verulamius mirabili suo Organo rerum naturas intime scrutandi modum infallibilem detexit*]. . . Why should I adde any more? as one pinne [*clavus*] drives out another, so doth one invention thrust another forward, especially



in this age so fruitfull of wits: and why should wee not hope for some invention of inventions, whereby the severall inventions, and endeavours of so many wits, may not onely in their matter, but even in their manner of discovery be united into one [*sed et modus rerum veritatem eruendi ex omnibus confiat unus*], and made common to mankind? It would surely be an excellent thing.<sup>51</sup>

Even as he shows himself here more open to quantification and the hermetic sciences than was Bacon, Comenius does not completely condemn the *silvas* of past authors.<sup>52</sup> He does insist throughout the *Prodromus*, though, that his pansophy will treat “the things themselves” and ignore the eloquent *verba* and endless commentaries of the humanists. Thus the trivium, for example, neglects the “uses of our life”; instead, he would have philosophy “be the lively images of things.”<sup>53</sup> Moreover, his belief in progress depends not only on finding the proper method, but on applying it as well. “Onely let us presse forward unto the utmost bounds of Method, and of things themselves.”<sup>54</sup> Even more than Bacon, who famously asserts in the *Advancement* that “the art of invention grows through inventions,” Comenius treats his method as having universal validity. In outstripping Bacon’s methodological ambitions, he would compass all matters, from the erroneous to the mystical as he spirals through the many towards the one.

For again, “our end” in the “studies of learning” is “God.” To achieve this Comenius diagnoses, like Bacon, the ills of learning in his day. He regrets the parochiality and “Prolixity of Studies,” and urges in the absolutest of terms that “[t]he Remedy thereof is to frame such a booke, wherein by a true Anatomy of the universe, all things that can be thought of may be reduced to their generall kinds and species: and so, that whatsoever is to be said of any thing, may at once be said of all things.”<sup>55</sup> As such, he regrets the “Difficulty” of humanist natural philosophy and recommends appealing sometimes to the senses rather than always depending on *copia verborum*, e.g., showing a picture of an elephant is more effective than verbally describing one, thus anticipating his own *Orbis Sensualium Pictus*, a 1658 Latin primer-encyclopedia written for children.<sup>56</sup> In short, he rues that “those bookes, which are extant” do not follow an inductive method. His diagnosis of the “Want of Truth” then yields a critique of previous encyclopedias:

That as yet in all the bookes that ever I saw, I could never find any thing answerable unto the amplitude of things; or which would fetch in the whole universality of them within its compasse: whatsoever some *Encyclopaedias*, or *Syntaxes*, or books of *Pansophy*, have pretended in their titles [*quidquid tandem libri nonnulli pansophiarum, aut encyclopaediarum, aut syntaxeon artis mirabilis et quoscunque titulos praeferant*]. Much lesse could I ever see the whole provision of humane understanding so raised upon its certain and eternal principles, that all things were chained and linked together, from the beginning to the end, without any rent, or chink of truth. And perhaps no man ever aimed

hereat as yet, so to square and proportion the universall principles of things, that there might be the certain limits to bound in that every-way-streaming variety of things [*quaquaversus diffluentem rerum varietatem*]: that so invincible, and unchangeable Truth might discover its universall, and proportionate harmony in all things.<sup>57</sup>

Plato, Aristotle, Copernicus, and Gilbert thought their philosophies “compleat,” but history has proven them wrong. More urgently, the increasing disharmony between the old and new learning needs to be rectified: “*Campanella* triumphs almost in the principles of the ancient philosopher *Parmenides*, which he had reassumed to himselfe in his naturall Philosophy, but is quite confounded by one Optick glasse of *Galileus Galilaei*.”<sup>58</sup> And yet—and this is the rub—Comenius’ first and last aim, he repeatedly asserts, is ‘sapientia’ and not *scientia*. Thus when he gestures at the Baconian *organum* and the many books that were to accompany it, he promises to transform them into a single mystical instrument or *via*. A passage marked *Methodi huius laus* offers this remarkable, constitutive musical metaphor to describe his novel claims:

Now betweene this booke of Pansophy (if it be once perfected) and other bookes of continuall use amongst us, there would be as great difference, as there is between a musicall instrument exactly framed for a full harmony [*ad plenam harmoniam aptissime concinnatum*], and many others that are bounded in compasse of a few notes, and out of tune: or as there is betweene a tune accurately set, or prickt . . . and those Sets of Musicall bookes in parts [*dispertitos illos symphoniarum libros*], which can onely be made use of by many together, and perhaps many times are full of discords.<sup>59</sup>

Just as the new and old learning are out of “tune,” so, too, are the Comenian pansophic book and the humanist encyclopedia or library. Nonetheless, in explaining why and how he has decided to “make triall” of such a book, he recounts how he has been influenced by Andreae, Campanella, and Bacon in such reform efforts and recalls the success of his 1631 *Janus linguarum referata*. If language teaching was perfectible there, he wonders, why not philosophic instruction now. Ironically, then, for all his insistence on *res ipsae*, it is his famous Latin primer the serves as his encyclopedic paradigm. In theory, however, Comenius’ method is inductive and based on finding the means to move from a limited number of particulars to higher axioms. Thus he invokes Bacon again and the commonplace associated with Pliny the Elder: “The Lord Verulam saith very well, that the divers opinions of men concerning the nature of things, are like divers glosses upon the same Text, whereof one is more exact in one part, another in another, each them helping you to something observable. Let it therefore be agreed: That here is no booke so bad, wherein some good thing or other may not be found.”<sup>60</sup> Since God allows nothing to be written in vain, all authorities must be consulted in the writing

of a pansophist tome. Moreover, the “opened path” [*reclusa via*] to God cannot stop with the investigation of nature. As Comenius writes in a section entitled, *Norma philosophandi Verulamiana*, the promise of Bacon’s method of induction of nature is too small. Rejecting “despaire,” he turns to “Art” and (Baconian) “helps, and instruments” (*Instrumentis . . . et auxiliis*):

Such a kind of rule, for the searching out of nature, seemeth to have beene found out by the famous Lord VERULAM: A certaine artificiall induction, which indeed is the onely way to pierce through into the most abstruse secrets of Nature [*qua revera in naturae abdita penetrandi reclusa via est*]. But because this requireth the continuall industry of many men, and ages, and so is not onely laborious, but seemeth also to be uncertaine in the event and successe thereof; hence it comes to passe, that though it be a most excellent invention, yet the most part of men neglect it as unprofitable. Yet notwithstanding it is of no great use, or advantage towards our designe of Pansophy, because . . . it is onely intended for the discovery of the secrets of Nature [*ad naturae solum arcana*], but wee drive and aime at the whole universality of things [*rerum universitas*]. It will be therefore requisite for us to search out some more universall Rule, which perhaps God of his great mercy will upon our diligent endeavour vouchsafe to reveale unto us.<sup>61</sup>

In this manner, the impatient, mystic encyclopedist both embraces and disdains Bacon’s method, to say nothing of Bacon’s call for collaboration.<sup>62</sup> As Comenius’ 1639 *Dilucidatio* insists, pansophy requires grace because it includes not just “the most abstruse secrets of Nature” but also the most universal, that is, divine truths. By refusing to limit himself to natural philosophy, but rather keeping his eye on “*rerum universitas*,” Comenius expands the Baconian encyclopedia to include the means whereby humanity can attain lasting *sapientia*.

Throughout the *Prodromus*, Comenius refers to his pansophist “booke” as already in the works. The *Dilucidatio* clarifies that this refers to the *Janua rerum referata, hoc est Sapientia prima*.<sup>63</sup> A section of this apparently circulated as early as 1640, but was only published posthumously in 1681.<sup>64</sup> In other words, unlike his teacher Alsted, but like his future admirer, Leibniz, Comenius produced more encyclopedic *Praeludiums* than finished encyclopedias.<sup>65</sup> His encyclopedic ambitions also ultimately could not deflect the vicissitudes of fortune. In 1656 the Polish army sacked Leszno, where Comenius and other Protestant exiles lived, destroying his “entire library, the manuscript of the Czech-Latin dictionary on which he had worked for over four decades. . . his refutations of Descartes and Copernicus, and all the drafts of his pansophic writings, many of which were nearing completion. ‘Had God only spared me the *Sylvae Pansophiae*,’ he cried, ‘all else would have been easier to bear but even this was destroyed.’”<sup>66</sup>

### Browne's "hidden library"

Finally, there is the curious case of Thomas Browne (1605-1682), whose brief, late text, *Musæum Clausum, or, Bibliotheca Abscondita*, offers an elaborate spoof of antiquarianism and the culture of the virtuoso.<sup>67</sup> It also toys, however, with the Baconian hopes and method that earlier helped propel Browne's own encyclopedia of vulgar errors, the *Pseudodoxia Epidemica*. Composed in 1674 and addressed to a member of the Royal Society, Browne's catalogue of curiosities and impossibilities, "containing some remarkable Books, Antiquities, Pictures and Rarities of several kinds, scarce or never seen by any man now living," turns the Baconian forest of learning into a genial fantasy that would generate laughter, admiration, but, arguably, the earnest realization that *scientia* and *sapientia* are to be found in the same encyclopedic pursuits.

As Robin Robbins' Introduction to the *Pseudodoxia* (first edition, 1646) decisively demonstrates, its method and structure are thoroughly indebted not just to the inveterate use of commonplace books, but also to a reading of a 1640 edition of the *Advancement*.<sup>68</sup> Less skeptical here that certain knowledge of nature is possible than he was in the earlier *Religio Medici* (first version written around 1635), Browne in the six, ever larger editions of the *Pseudodoxia* mediates between his library and a European-wide readership eager to see learning new and old, empiricist and humanist, in conversation.<sup>69</sup> In "To the Reader" of the 1672 edition, Browne offers a moving analogy between the encyclopedic book and the Book of the World (or Nature) to underscore the difference between what is "true and assured" and what remains in doubt:

Our tender Enquiries taking up Learning at large, and together with true and assured notions, receiving many, wherein our reviewing judgements doe finde no satisfaction; and therefore in this Encyclopaedie and round of knowledge, like the great exemplary wheels of heaven, wee must observe two Circles: that while we are daily carried about, and whirled on by the swindge and rapt of the one, we may maintaine a naturall and proper course, in the slow and sober wheele of the other.<sup>70</sup>

Yet for all the promise of "this Encyclopaedie and round of knowledge," Browne begins his epistemological *cursus* by revisiting the Fall, "[t]he first and father-cause of common Error" and the "common infirmity of humane nature."<sup>71</sup> He constructs, that is, a theological narrative for his encyclopedic efforts, but without, I would add, embracing the kind of millenarianism fostered by Comenius. More attached, on the one hand, to the knitty-gritty of empirical labors and, on the other, to the humanist legacy than was Comenius and the Hartlib Circle, Browne doggedly resists "the swindge and rapt" of "common Errour" even as it captivates him (and, truth be told, us).

With the *Musæum Clausum*, however, it is as if Browne resurrects the *silva*, if only as a fantastic catalogue, to comment on humanism's demise in an increasingly

Baconian world. As ludic as it is wry, Browne's learned catalogue offers a disconnected sequence of items, a series of learned inside jokes, for those, in their folly and wisdom, interested in repairing the broken (or finding the lost) circle of humanist learning. The text begins by pointing to celebrated collections of curiosities and natural historical artifacts that had in fact become sites of profane pilgrimage, as well as laboratories for experiment, for Europe's gentlemen and aspiring *virtuosi*:

There are many Collections of this kind in Europe. And, besides the printed accounts of the *Musæum Aldrovandi*, *Calceolarianum Moscardi*, *Wormianum*, the *Casa Abbellita at Loretto*, and *Treasure of S. Dennis*, the *Repository* of the Duke of Tuscany, that of the Duke of Saxony, and that noble one of the Emperour at *Vienna*, and many more are of singular note.<sup>72</sup>

Such wonder-provoking collections, Paula Findlen and others have shown, provided part of the material basis for the culture of the new sciences.<sup>73</sup> With this said, Browne's museum, for all the *admiratio* it solicits, betrays no interested in attracting patronage or promoting experiment; instead, it aims for a ludic species of novelty ironically forged from familiar and apocryphal fragments of humanist natural history, antiquarianism, and philology. It provokes, in short, the imagination more than empirical curiosity.

The seventy-nine items in this "hidden library" fall into three categories, the textual, the visual, and the material: "Rare and generally unknown Books"; "Rarities in Pictures"; and "Antiquities and Rarities of several sorts." All pretend to fill real lacunae or solve imagined cruxes in knowledge about nature, the past, and distant cultures. Some items are almost verisimilar; others are frankly paradoxical. Among the books we find: "Some Manuscripts and Rarities brought from the Libraries of Aethiopia, by Zaga Zaba, and afterward transported to *Rome*, and scattered by the Souldiers of the Duke of *Bourbon*, when they barbarously sacked that City."<sup>74</sup> Also there is "Epicurus *de Pietate*" and "A Commentary of Galen upon the Plague of Athens described by Thucydides." Intriguingly, listed as well is "the Prophecy of Enoch, which Aegidius Lochiensis, a learned Eastern Traveller, told Peireschius that he found in an old Library at Alexandria containing eight thousand volumes."<sup>75</sup> This precious item Browne, always keen to keep up with the latest installments of continental thought, apparently takes from Gassendi's life of the great seventeenth-century scholar Nicolas Fabri de Peiresc – though Gassendi makes no mention of the Library of Alexandria.<sup>76</sup>

Other items are as fantastic as they are recondite. Among the pictures, Browne lists: "Draughts of three passionate Looks: of Thyestes when he was told at the Table that he had eaten a piece of his own Son; of Bajazet when he went into the Iron Cage; of Oedipus when he first came to know that he had killed his Father, and married his own Mother."<sup>77</sup> Included in the miscellaneous rarities is: "Some ancient Ivory and Copper Crosses found with many others in China; conceived to

have been brought and left there by the Greek Souldiers who served under Tamerlane in his Expedition and Conquest of that Country.”<sup>78</sup> From a natural-historical perspective many of these items are quite plausible, even prophetic. For instance, there is: “A Snow Piece, of Land and Trees covered with Snow and Ice, and Mountains of Ice floating in the Sea, with Bears, Seals, Foxes, and variety of rare Fowls upon them.”<sup>79</sup> Alternately, we find “An extract of the Inck of Cuttle Fishes reviving the old remedy of *Hippocrates* in Hysterical Passions.”<sup>80</sup> And whereas an *experiment solitary* in Bacon’s *Sylva* notes that it is “somewhat strange” that the cuttlefish’s blood is “black as ink” and ascribes the cause to “high concoction” of the blood as in “ordinary puddings,” Doctor Browne conflates nature and art, the old and new, to imagine a cure for hysteria.<sup>81</sup>

In sum, the *Musæum Clausum* stands in uneasy relation to Browne’s life-long efforts in Baconian or perhaps pseudo-Baconian encyclopedism. These include not only the six editions of the *Pseudodoxia* (which, as its publishing and translation history attests, were read by natural historians throughout Europe), but also *The Garden of Cyrus* and its twin-treatise, the *Hydriotaphia, or Urne-Buriall*. If the *Pseudodoxia* systematically tries to combat error and bury epistemological idols even as it lovingly, digressively dallies with them, then the latter treatises are overgrown with recondite humanist learning and epistemological ambiguities, such that Browne’s stylistic and spiritual epiphanies tend to usurp the place of scientific certainty.<sup>82</sup> The *Urne-Buriall* and *The Garden of Cyrus* mirror each other with copious amounts of what Bacon would call “civic” and “natural” history in order, ultimately, to sketch a chiaroscuro vision of first and last things.<sup>83</sup> Like Comenius, then, Browne insists that divinity be included in any Baconian attempt to compass the “round of knowledge.” As the complete title of *The Garden of Cyrus* promises and as the treatise’s contents confirm, Browne’s arboreal paradigm is tested in so many ways, with such learning and ingenuity, that in the end it leaves him (and us) exhausted, expecting that perfection will come from other hands:

A large field is yet left unto sharper discerners to enlarge upon this order, to search out the *quarternio*’s and figured draughts of this nature, and moderating the study of names, and meer nomenclature of plants, to erect generalities, disclose unobserved proprieties, not only in the vegetable shop, but the whole volume of nature; affording delightful Truths, confirmable by sense and ocular Observation, which seems to me the surest path, to trace the Labyrinth of Truth. For though discursive enquiry and rationall conjecture, may leave handsome gashes and flesh-wounds; yet without conjunction of this expect no mortal or dispatching blows unto error.<sup>84</sup>

Browne’s inimitable prose aside, the sentiment here is perfectly Baconian. In his next breath, however, he hurriedly takes leave of his *Garden* by hinting at the “dream of Paradise it self” and gesturing at God’s “mystical Mathematicks.”<sup>85</sup>

At first glance this transcendent vision hardly compares with that promoted by Browne's "hidden library," rooted as it is in the "spoof-tradition" of the mock catalogue as cultivated by François Rabelais, John Donne, and others.<sup>86</sup> But as Claire Preston contends in her invaluable book on Browne and early modern science, while the *Musæum Clausum* may be read as a kind of "comedy," it conveys "images and ideas of scattering, fragmentation, loss, dissolution, and forgetfulness," creating an affect of "distress and melancholy."<sup>87</sup> In the light of Browne's encyclopedic, "recursive," ultimately Baconian efforts in the *Pseudodoxia*, the *Musæum Clausum* ostentatiously fails to order the motley matter available to human *scientia*.<sup>88</sup> As such, Browne makes paradox serve critique: "A regrouped anthology of precious, formerly lost things is being proposed as *itself* now lost. *Musæum Clausum*, cataloguing what either no longer exists or never existed, is ultimately a tract on the lovely but false materiality of the world under heaven, a materiality perhaps naively celebrated by the cabinet and the museum."<sup>89</sup>

My own reading of the *Musæum* would supplement rather than quibble with Preston's. Browne seems delighted to let the imagination participate in the critique of encyclopedism as well as his own intellectual habits. In Browne's hands, the genre of the satiric catalogue becomes a form of self-reflection, a *satura* or miscellany chasing a disappearing target. As in other mock-humanist catalogues, *phantasia* is allowed to thrive; but here it does so within the broken circle of Bacon's *Instauratio magna*. Browne indulges his antiquarianism and imagination, but also subtly demonstrates their folly. In thus restoring a significant role to the imagination in the Baconian encyclopedia, Browne breaks the latter further apart. In the very real shadows of civil and confessional strife, and the speculative shadows of the Fall of Man and Tower of Babel, Browne writes an elegy to the republic of letters. What Preston underscores as the *civilitie* informing Browne's vision of natural science might just as easily be thought of as his eclecticism, a syncretic, humanist generosity that seems purposefully to confuse Bacon's methodological directives. So when in the *Religio Medici* Browne writes of imitating *Solomon* and "goe[ing] to Schoole to the wisdom of Bees, Aunts, and Spiders," because "the civilitie of these little Citizens . . . neatly sets forth the wisdom of their Maker," he is remaking and confounding Bacon's insistence that the natural historian only imitate the bees in gathering and digesting material.<sup>90</sup> Alternately, Browne's encyclopedism often indulges in the rhetorical figure of *omissio*, or when a topic is named, even amplified, but then the speaker declares it unworthy of discussion (which is a way of including far more content than might be allowed by decorum or method). Browne writes that he, too, "could shew a catalogue of doubts never yet imagined nor questioned, as I know, which are not resolved at the first hearing, not fantastick Quere's, or objections of ayre." But after listing some such doubts, he stops and declares: "There are a bundle of curiosities, not onely in Philosophy but in Divinity, proposed and discussed by men of most supposed abilities, which indeed are not worthy our vacant houres, much lesse our serious studies; Pieces onely fit to be placed in *Pantagruels* Library, or bound up with *Tartaretus de modo Cacandi*."<sup>91</sup> This last book, which is indeed taken

from Rabelais' *Librairie de Saint Victor*, might also have made good reading in John Harington's *jakes*, but it certainly would not belong in Bacon's library.

Indeed, in so far as Browne's catalogue resembles Rabelais' in chapter seven of *Pantagruel* one suspects a farce. But as Dirk Werle has expansively shown Renaissance catalogues for imaginary libraries were also vehicles for epistemological critique.<sup>92</sup> Rabelais uses his to satirize scholasticism, whereas Rabelais' late sixteenth century German translator, Johann Fischart, converts this into, among other things, a warning against the excesses of the polyhistor. Fischart's *Catalogus Catalogorum perpetuo durabilis* describes "der wild Walt der Buecher," an image that surely would have pleased Bacon and Comenius.<sup>93</sup> And when Rabelais elsewhere mocks "le vrays puy et abisme de encyclopédie" he anticipates Browne's ambivalence about his own encyclopedic labors.<sup>94</sup> Thus while many of the items in Browne's "concealed library" verge on the fantastic and absurd, there may be an earnest, not at all melancholic proposition lurking there. In this respect, the catalogue's last item is telling: "A Glass of Spirits made of AEthereal Salt, Hermetically sealed up, kept continually in Quick-silver; of so volatile a nature that it will scarce endure the Light, and therefore onely to be shown in Winter, or by the light of a Carbuncle, or Bononian Stone."<sup>95</sup> Now Bacon considers bioluminescence in the *Sylva*, while Browne verifies the natural fluorescence of the so-called Bolognian Stone in the *Pseudodoxia*.<sup>96</sup> But that such a natural phenomenon could illuminate, however precariously, a "Glass of Spirits" made of salt suspended in ether suggests a tenuous unity of visible and invisible things indicative of Browne's desire to syncretize the new and old learning with metaphysics.

Alternately, the thirty-three books catalogued by Browne touch, however tangentially, most of the "round of knowledge" – poetry, ethnography, botany, biography, history, philology, cosmography, bibliography, philosophy, medicine, and theology all find a place. Among these we find: "A learned Comment upon the Periplus of Hanno the Carthaginian, or his Navigation upon the Western Coast of Africa, with the several places he landed at; what Colonies he settled, what Ships were scattered from his Fleet near the Aequinocitial Line, which were not afterward heard of, and which probably fell into the Trade Winds, and were carried over into the Coast of America;" "A *Sub Marine* Herbal, describing the several Vegetables found on the Rocks, Hills, Valleys, Meadows at the bottom of the Sea, with many sorts of *Alga*, *Fucus*, *Quercus*, *Polygonum*, *Gramens* and others not yet described;"<sup>97</sup> "The Works of Confutius the famous Philosopher of China, translated into Spanish;" and the last book: "A wondrous Collection of some Writings of Ludovica Saracenica, Daughter of Philibertus Saracenicus a Physician of Lyons, who at eight years of age had made a good progress in the Hebrew, Greek and Latin Tongues."<sup>98</sup> Commentary, natural history, philosophical treatise, and anthology – all genres allowed in Bacon's *Advancement*, though here given a decidedly philological, antiquarian flavor. As such, with these items and indeed throughout Browne's imagined museum, a cognitive challenge is posed: Browne would have wonder, however "broken" a knowledge it is for Bacon, flourish again within the *orbis*



*doctrinae*. While Aristotle and Descartes place *admiratio* at the beginning of the philosophic experience, Browne makes it the ultimate *affectus* that accompanies the contemplation of its ruins. Further, his museum makes more universalist claims than the specificity of its sundry items would at first suggest. Browne hopes that books from the Library of Alexandria will be recovered, that Confucius can be read and understood (by an Englishman reading Spanish), that at least one of the ships that went through Hercules' Pillars will be heard from again, that women, Jews, and Moors will be welcomed into the republic of letters, and that "helps" will be found to investigate the depths of the sea.

If Browne's catalogue is fueled by nostalgia for lost or never realized texts, if it finds, lists, and orders fragments of what has been, might have been, or could be in the future, then he uses art (the arts of invention, memory, selection, note-taking, compilation, and arrangement) to scrutinize the change and loss marking nature and history. In this manner, a belated humanist cultivates a pseudo-Baconian *silva*. But even the forward-looking, sanguine Comenius regrets the "many famous monuments of learning . . . utterly lost, among which are the histories of living creatures, and plants compiled by SOLOMON."<sup>99</sup> Then again, like Bacon's *New Atlantis*, the *Musæum Clausum* is a utopian attempt to conceive an increasingly large, overloaded, chaotic world of words and things. Yet by giving the books and other material objects it contains such a paradoxical status – they are both hidden and revealed, impossible but tangible – Browne expresses the more absurd aspects of the encyclopedic vision as well. Unlike the material library described by Naudé and Evelyn or, for that matter, the nearly realized pansophist book composed by Comenius in his exile, his *Bibliotheca Abscondita* exists literally and figuratively in 'no-place.' And as with the lost, submerged island of Atlantis, one needs more credulity and imagination than reason to find it.

## Conclusion

This essay has traced an undulating line that begins with Bacon's ideal of how "Bookes" should transmit and advance knowledge, next turns to Naudé's and Evelyn's attempt to reconstitute the humanist library on more Baconian lines, then tracks how Comenius would condense and integrate the Baconian encyclopedia into a single pansophist book, and finally contemplates Browne's ludic, post-encyclopedic catalogue of imagined artifacts extracted from the humanist legacy and his own Baconian efforts. That Browne's vision is at once retrospective and prospective, earnest and satiric, confirms just how remarkably complicated reading the "round of knowledge" had become.

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## References

<sup>1</sup> My thanks to Dana Jalobeanu, Oana Matei, and to the anonymous reader who suggested several ways of improving this essay.

<sup>2</sup> Bacon, F., *The Advancement of Learning*, ed. M. Kiernan, *The Oxford Francis Bacon IV* (Oxford: Clarendon Press, 2000), 133 (hereafter OFB).

<sup>3</sup> I am using the term "Baconian" here and throughout in a looser manner than does Antonio Pérez-Ramos in his invaluable second chapter of *Francis Bacon's Idea of Science and the Maker's Knowledge Tradition* (Oxford: Clarendon Press, 1988), 7-31, where he distinguishes six main strands of Baconianism. Though Evelyn belonged to the third strand associated with the Royal Society, Pérez-Ramos places Comenius in the second strand amongst the 'Low Baconians.' As for Browne, as in most other matters, his position in the period's intellectual history defies categorization.

<sup>4</sup> As for Burton, see especially, in the *Anatomy of Melancholy* (1621, first edition), *Ayre Rectified. With a Digression of the Ayre* [2.2.3.1], whose compass or *cento* of the humanist library reads like a prophetic parody of Bacon's *Historia venturum* (1622).

<sup>5</sup> Bacon, F., *New Atlantis*, in *The Major Works*, ed. B. Vickers (Oxford: Oxford University Press, 2002), 486. The gatherers of books are dubbed "depredators."

<sup>6</sup> On this and the tensions between nature and art in Bacon, see Grafton, A., "Renaissance Histories of Art and Nature", in *The Artificial and the Natural: An Evolving Polarity*, ed. B. B.-Vincent and W. R. Newman (Cambridge: The MIT Press, 2007), 185-210.

<sup>7</sup> Bacon, F., *The Advancement of Learning*, OFB IV, 53.

<sup>8</sup> Bacon, F., *The Advancement of Learning*, OFB IV, 131.

<sup>9</sup> Bacon, F., *The Advancement of Learning*, OFB IV, 135.

<sup>10</sup> Quoted by Kiernan, M., in Bacon, F., *The Advancement of Learning*, OFB IV, 251.

<sup>11</sup> On Bodley's response to Bacon, see Kiernan's Introduction, Bacon, F., *The Advancement of Learning*, OFB IV, xxxiii.

<sup>12</sup> See Wegmann, N., *Bücherlabyrinth. Suchen und Finden im Alexandrinischen Zeitalter* (Köln: Böhlau, 2000). Wegmann discusses the origins of the *sypha* as *topos*.

<sup>13</sup> Bacon, F., *The Major Works*, 433-34.

<sup>14</sup> See Browne, T., *The Works of Sir Thomas Browne*, ed. G. Keynes (London: Faber & Faber, 1928), 4 vols., vol. 4, 281.

<sup>15</sup> Evelyn writes in "To the Reader", in *Instructions Concerning Erecting of a Library* (London, 1661): "I will not exasperate the *Adorers* of our ancient and late *Naturalists*, by repeating of what our *Verulam* has justly pronounc'd concerning their *Rhapsodies* (because I likewise honor their painful *Endeavours* and am oblig'd to them for much that I know) nor will I (with some) reproach *Pliny*, *Porta*, *Cardan*, *Mizaldus*, *Cursius*, and many other great *Names* (whose writings I have diligently consulted) for the *Knowledge* they have imparted to me on this Occasion; but I must deplore the time which is (for the most part) so miserably lost in pursuit of their *Speculations*, where they treat upon this *Argument*: But the *World* is now advis'd, and . . . infinitely redeem'd from that base and servile submission of our noblest *Faculties* to their blind *Traditions*" (C2v).

<sup>16</sup> Naudé wrote the *Advis* as librarian to Henri de Mesme, President of the Paris Parlement. He later organized the Bibliothèque Mazarine, the oldest public library in France.

<sup>17</sup> In *De sapientia veterum* Bacon figures « matter » as Proteus.

<sup>18</sup> Naudé, G., *Advis pour dresser une bibliothèque*, 2<sup>nd</sup> ed. (Paris, 1644). See also Keynes, G., "John Evelyn as Bibliophil", *Transactions of the Bibliographical Society* 12.2 (1931): 175-93. One of Naudé's chief predecessors is A. F. Doni's *La Libreria del Doni Fiorentino, divisa en tre trattati* (1557).

<sup>19</sup> Evelyn, J., *Instructions Concerning Erecting of a Library*. (London, 1661) 13; Naudé, G., *Advis*, 21.

<sup>20</sup> Evelyn, J., *Instructions*, 87; Naudé, G., *Advis*, 151.

<sup>21</sup> Evelyn, J., *Instructions*, 85; Naudé, G., *Advis*, 148.

<sup>22</sup> Naudé, G., *Advis*, 19; Evelyn, J., *Instructions*, 12.

<sup>23</sup> Evelyn, J., *Instructions*, 42, 77; Naudé, G., *Advis*, 71, 133.

<sup>24</sup> Evelyn, J., *Instructions*, 23; Naudé, G., *Advis*, 37-38. However, always aware of the library's potential to create fame for his patron, the pragmatic Naudé wants to have it both ways. Thus while offering his precepts to insure the "quality" of the library's books, he also concedes that "as the quality of Books does extreamly augment the esteem of a Library amongst those who have the means, and the leasure to understand it; so must it needs be acknowledged, that the sole quantity of them brings it into lustre, and reputation, as well amongst Strangers and Travellers, as amongst many others, who have neither the time, nor the conveniency of exactly turning them over in particular" (22).

<sup>25</sup> Nelles, P., "The Library as the Instrument of Discovery: Gabriel Naudé and the Uses of History", in *History and the Disciplines: The Reclassification of Knowledge in Early Modern Europe*, ed. D. R. Kelley (Rochester, NY: University of Rochester Press, 1997), 41-57; 42. Nelles argues that Naudé's is a "cognitive . . . undertaking" that "shared, too, Bacon's methodological scepticism as well as Bacon's final rejection of radical sceptical conclusions." I think, though, that Nelles overstates Bacon's antipathy towards books when he states that Bacon only allows the "book of nature and his own notebook of aphorisms" (43).

<sup>26</sup> See Bacon F., *Novum Organum*, 1.101, 1.103, OFB XI, 159-161.

<sup>27</sup> Evelyn, J., *Instructions*, 23-24; Naudé, G., *Advis*, 38-39.

<sup>28</sup> Evelyn, J., *Instructions*, 23-31; Naudé, G., *Advis*, 39-51.

<sup>29</sup> Evelyn, J., *Instructions*, 31; Naudé, G., *Advis*, 51.

<sup>30</sup> Evelyn, J., *Instructions*, 35-36; Naudé, G., *Advis*, 60-61; Blair, A., *Too Much to Know: Managing Scholarly Information before the Modern Age* (New Haven: Yale University Press, 2010), esp. 119-20.

<sup>31</sup> Evelyn, J., *Instructions*, 28-29; Naudé, G., *Advis*, 47-48.

<sup>32</sup> See also the sixth precept in chapter four, *Of what Quality and Condition Books ought to be* (27).

<sup>33</sup> Evelyn, J., *Instructions*, 16, 18; Naudé, G., *Advis*, 27, 29.

<sup>34</sup> Nelles views Naudé as much friendlier than Bacon to the encyclopedic and philological traditions and to the need to slake his readers' (and patrons') "curiosity" (45).

<sup>35</sup> Evelyn, J., *Instructions*, 37; Naudé, G., *Advis*, 62.

<sup>36</sup> Evelyn, J., *Instructions*, 44; Naudé, G., *Advis*, 74. In Joachim von Ringelberg's encyclopedic *De ratione studii* (1531), "Chaos" is a rubric under which all miscellaneous materials are put.

<sup>37</sup> Evelyn, J., *Instructions*, 36; Naudé, G., *Advis*, 60.

<sup>38</sup> Evelyn, J., *Instructions*, A3r.

<sup>39</sup> Evelyn, J., *Instructions*, A5v.

<sup>40</sup> Comenius, J. A., *Pansophiae Prodromus, In quo admirandi illius & vere incomparabilis Operis, Necessitas, Possibilitas, Utilitas, solide, perspicue, & eleganter demonstratur* (London, 1639). A modern edition is the *Vorspiele. Prodromus Pansophiae*, trans. H. Hornstein (Düsseldorf: Pädagogischer Verlag Schwann, 1963), from which I take the Latin. As a result of the *Prodromus*, Comenius was accused of Socinianism and Pelagianism. In his own defense, he pens the *Conatuum pansophicorum dilucidatio* (1639), which leans on theological and scriptural arguments, as well as drawing more on the humanist tradition. I cite from the English edition containing both treatises, translated by Hartlib, titled *A Reformation of Schooles, Designed in two excellent Treatises: The first whereof Summarily sheweth, The great necessity of a general Reformation*

of *Common Learning*. What grounds of hope there are for such a Reformation. How it may be brought to passe (London, 1642).

<sup>41</sup> See sec. 40, *Pansophia omnia debet ad numeros, mensuras et pondera redigere*.

<sup>42</sup> Comenius, J. A., *Reformation*, 50-51.

<sup>43</sup> Regretting the "looseness of Method" that produces "monsters in stead of things themselves" and "the fastidious multiplication of, and confused *Chaos* of bookes," Comenius envisions a single book that will led men out of the "labyrinth" (*Reformation*, 17-19). Though Keatinge in *The Great Didactic of John Amos Comenius* (London: A. and C. Blacke, 1896), notes: "Under the title of *A general deliberation for the improvement of the human race* were comprised six parts, named respectively, *Panegersia*, *Panaugia*, *Pantaxia* or *Pansophia*, *Panpaedia*, *Panglottia*, and *Panorthosia*, concluded by a seventh consisting of a general exhortation. If the first two were published during Comenius' lifetime, the editions must have been limited to a few copies" (95). Not content ultimately with a single, forward-looking book, Comenius in 1652 edited and introduced Ringelberg's *De Ratione studii*.

<sup>44</sup> Comenius, J. A., *Reformation*, 6.

<sup>45</sup> Inquiry, he insists, must start with "naturall things" (*Reformation*, 42). It is here that "we must search for these Idea's;" likewise, "our Pansophy" is based on rules borrowed from "Nature, and Scripture." To this end, he recommends seven precepts, the first being "an accurate Anatomizing of the whole Universe."

<sup>46</sup> Comenius, J. A., *Reformation*, 44.

<sup>47</sup> See Murphy, D., *Comenius: A Critical Reassessment of his Life and Work* (Dublin: Irish Academic Press, 1995), 21, 30.

<sup>48</sup> Hotson, H., *Commonplace Learning. Ramism and its German Ramifications, 1543-1630* (Oxford: Oxford University Press, 2007), 291.

<sup>49</sup> Comenius, J. A., *Reformation*, 24; *Prodromus*, sec. 39. His encyclopedia, Comenius goes on to note, would have five aspects: "I. Universae eruditionis breviarium solidum. II. Intellectus humani fax lucida. III. Veritatis rerum norma stabilis. IV. Negotiorum vitae tabulatura certa. V. Ad Deum ipsum scala beata."

<sup>50</sup> See Rossi, P., *Logic and the Art of Memory*, trans. S. Clucas (Chicago: University of Chicago Press, 2000). On the *Prodromus*, Rossi writes: "Through a total vision, reading the great book of the universe, and by means of a gradual progression from the encyclopaedia of sensible species (*orbis sensualis*) one could attain the encyclopaedia of intellectual species (*orbis intellectualis*), a unitary vision which was the highest aim of knowledge, which could never be achieved through the accumulation of partial accounts" (135).

<sup>51</sup> Comenius, J. A., *Reformation*, 28; *Prodromus*, sec. 47.

<sup>52</sup> See Comenius, J. A., *Prodromus*, sec. 48; *Reformation*, 28.

<sup>53</sup> Comenius, J. A., *Reformation*, 20.

<sup>54</sup> Comenius, J. A., *Reformation*, 29.

<sup>55</sup> Comenius, J. A., *Reformation*, 10-13.

<sup>56</sup> Comenius, J. A., *Reformation*, 13-14.

<sup>57</sup> Comenius, J. A., *Reformation*, 15; *Prodromus*, sec. 26.

<sup>58</sup> Comenius, J. A., *Reformation*, 16.

<sup>59</sup> Comenius, J. A., *Reformation*, 45; *Prodromus*, sec. 94.

<sup>60</sup> Comenius, J. A., *Reformation*, 31. Likewise, the passage above this finds the "spirit of Wisedome" inspiring pagan and Christian authors alike.

<sup>61</sup> Comenius, J. A., *Reformation*, 35; *Prodromus*, sec. 63 (100).

<sup>62</sup> See Clucas, S., “In search of ‘The True Logick’: methodological eclecticism among the ‘Baconian reformers’”, in *Samuel Hartlib and Universal Reformation: Studies in Intellectual Communication*, eds. M. Greengrass, M. Leslie, and T. Raylor (Cambridge: Cambridge University Press, 1994), 51-74. Clucas recounts that since Hartlib “did not feel confident that [the pansophic project] was safe to be entrusted to Comenius alone,” he had in mind specific English collaborators (53).

<sup>63</sup> Comenius, J. A., *Reformation*, 65.

<sup>64</sup> See Keatinge, M. W., *The Great Didactic of John Amos Comenius* (London: A. and C. Blackie, 1896), 464.

<sup>65</sup> In his entry on Comenius in the *Dictionnaire historique et critique* (Amsterdam, 1740), Pierre Bayle labels the *Prodromus* “un échantillon” (203). Bayle also dismisses Comenius’ 1657 *Opera didactica omnia* as having “aucun profit” for the Republic of Letters (203). Finally, he condemns Comenius’ millenarianism (204).

<sup>66</sup> Murphy, D., *Comenius: A Critical Reassessment of his Life and Work* (Dublin: Irish Academic Press, 1995), 40. The source of this anecdote is Comenius’ *Opera didactica omnia*, IV.5.

<sup>67</sup> Browne, Th., *Musæum Clausum, or, Bibliotheca Abscondita*, in *The Works of Sir Thomas Browne*, 3.109-119.

<sup>68</sup> Browne, Th., *Pseudodoxia Epidemica*, ed. R. Robbins (Oxford: Clarendon Press, 1981), 2 vols., vol. 1, xxviii-xxxiv (hereafter *PE*). The 1640 edition of the *Advancement* is a translation from the Latin by Gilbert Wats of *De augmentis scientiarum* (1623). In the *Advancement*, Bacon adumbrates several encyclopedic genres including the “Kalender of doubts or problems” and “Kalender of popular Errors” (91). Meant to be provisional, they were to be discarded when solutions had been found. Such catalogues loosely correspond to the genre of the *quaestio* or *problemata*—indeed, the pseudo-Aristotelian *Problemata* is one of Bacon’s primary sources for material in the *Sylva*.

<sup>69</sup> Robbins traces how the books found in the sale-catalogue of Browne’s (and his son’s) library were instrumental in the writing of the *Pseudodoxia* (1.xxii).

<sup>70</sup> Browne, Th., *PE*, 1.1. The *OED* glosses “swindge” as “impetus” and “rapt” as “sweep, force, current.” Robbins notes (2.642) that Browne’s opening sentence directly echoes *The Advancement*. Moreover, the opening paragraph ends by stressing how “experience and reason” will guide the “timely survey of our knowledge.”

<sup>71</sup> Browne, Th., *PE*, 1.5.

<sup>72</sup> Browne, Th., *Musæum Clausum*, 3.109.

<sup>73</sup> Findlen, P., *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy* (Berkeley: University of California Press, 1996); Bredekamp, H., *The Lure of Antiquity and the Cult of the Machine: The Kunstkammer and the Evolution of Nature, Art, and Technology*, trans. A. Brown (Princeton: Marcus Weiner, 1995); *Collection, Laboratory, Theater: Scenes of Knowledge in the 17th Century*, ed. H. Schramm, et al. (Berlin: Walter de Gruyter, 2005).

<sup>74</sup> Browne, Th., *Musæum Clausum*, 3.111. Compare the *Musæum*’s “Pictures” with the *Pseudodoxia*, Bk. V, *Of many things questionable as they are commonly described in Pictures*.

<sup>75</sup> Browne, Th., *Musæum Clausum*, 3.112.

<sup>76</sup> Browne’s reading ranged from Descartes to Kircher, Aldrovandi to Nieremberg. On Peiresc, whose fame rested almost entirely on his correspondence with other members of the *respublica litterarum*, see Miller, P. N., *Peiresc’s Europe: Learning and Virtue in the Seventeenth Century* (New Haven: Yale University Press, 2000).

<sup>77</sup> Browne, Th., *Musæum Clausum*, 3.114.

<sup>78</sup> Browne, Th., *Musæum Clausum*, 3.117.

<sup>79</sup> Browne, Th., *Musæum Clausum*, 3.113.

<sup>80</sup> Browne, Th., *Musæum Clausum*, 3.118.

<sup>81</sup> *The Works of Francis Bacon*, ed. J. Spedding, R. L. Ellis, and D. D. Heath (Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1986), 14 vols., vol. 2, 578-79 (hereafter SEH).

<sup>82</sup> For a nuanced account of the knowledge produced by Browne's encyclopedism, see West, W. N., "Brownean Motion: Conversation within *Pseudodoxia Epidemica's* 'Sober Circumference of Knowledge'", in *Sir Thomas Browne: The World Proposed*, ed. R. Barbour and C. Preston (Oxford: Oxford University Press, 2008), 168-87.

<sup>83</sup> The still unrivaled study of the structural and thematic ways the two treatises converge is Frank L. Huntley's chapter, "Urn Burial and *The Garden of Cyrus*", in *Sir Thomas Browne: A Biographical and Critical Study* (Ann Arbor: University of Michigan Press, 1968).

<sup>84</sup> Browne, Th., *The Garden of Cyrus*, in *Religio Medici and Other Works*, ed. L. C. Martin (Oxford: Clarendon Press, 1964), 174.

<sup>85</sup> Browne, Th., *The Garden of Cyrus*, 174.

<sup>86</sup> I will discuss Rabelais below. Donne's *The Courtier's Library*, which contains 34 items, was written around 1604 and revised probably around 1611. It begins by stressing the impossibility of "full knowledge," the insufficiency of the "use of epitomes or abridgements compiled by such writers as 'Lullius, Gemma, Sebundus, Empiricus, Trithemius, Agrippa, Erasmus, Ramus.'" But then he mocks the haste and superficiality of courtiers by recommending to them absurd, invented works which are ascribed to real authors (including Bacon). See Simpson, E., "Catalogus Librorum Aulicorum", in *A Study of the Prose Works of John Donne* (Oxford: Clarendon Press, 1924); also Brown, P., "'Hac ex consilio meo via progredieris': Courtly Reading and Secretarial Mediation in Donne's *The Courtier's Library*", *Renaissance Quarterly* 61.3 (2008): 833-66.

<sup>87</sup> Preston, C., *Thomas Browne and the Writing of Early Modern Science* (Cambridge: Cambridge University Press, 2005), 171, 156. Preston detects moments in *Urne-Buriall* and *Musæum Clausum* "where the absurdity and the inefficiency of certain aspects of Baconian investigation and compilation and their associated practices stand in his thought as the emblem of failed enquiry, of the futility of recuperative assemblage" (156). See also Preston's "In the Wilderness of Forms: Ideas and Things in Thomas Browne's Cabinets of Curiosity", in *The Renaissance Computer: Knowledge Technology in the First Age of Print*, ed. N. Rhodes and J. Sawday (London: Routledge, 2000), 170-83.

<sup>88</sup> For Preston's view of the "encyclopaedic character of *Pseudodoxia*," see Preston, C., (2005), 116-17.

<sup>89</sup> Preston, C., (2005), 172.

<sup>90</sup> Browne, Th., *Religio Medici and Other Works*, 15.

<sup>91</sup> Browne, Th., *Religio Medici and Other Works*, 22.

<sup>92</sup> Werle, D., *Copia librorum. Problemgeschichte imaginierter Bibliotheken 1580-1630* (Tübingen: Max Niemeyer Verlag, 2007). "*Bibliothecae* sind, im Unterschied zu anderen frühneuzeitlichen Speicherformen des Wissens wie Lexika, Enzyklopädien, Exempla-Sammlungen, Epitomen, Anthologien und Florilegien, nicht als Ersatz von Bibliotheken gedacht, sondern als Hilfsmittel zu ihrer Erschließung" (173-74). The genre serves as a "Wissenspeicher zweiter Ordnung." The *Bibliothecae* in short was a fluid genre that could range from Fischart's satiric catalogue to Conrad Gessner's massive, earnest *Bibliotheca universalis* (1545). Fischart also loosely translated *Gargantua*, entitling it the *Geschichtsklitterung* (1575) and interpolating a six-page *Lobgedicht* on books into Rabelais' brief description of the library's content at the Abbey of Thélème in chapter 53.

<sup>93</sup> Cited by Werle, D., 191.

<sup>94</sup> See ch. 20 of *Pantagruel* where Thaumaste offers a mock encomium of Pantagruel's learning.

<sup>95</sup> Browne, Th., *Musæum Clausum*, 3.119.

<sup>96</sup> Bacon, F., *Sylva Sylvarum*, SEH II, 456-457; Browne, Th., *PE*, 1.138.

<sup>97</sup> This is complemented in the *Rarities in Pictures* by: "Large Submarine Pieces, well delineating the bottom of the Mediterranean Sea, the Prerie or large Sea-meadow upon the Coast of Provence, the Coral Fishing, the gathering of Sponges, the Mountains, Valleys and Desarts, the Subterraneous Vents and Passages at the bottom of that Sea; the passage of Kircherus in his *Iter Submarinus* when he went down about Egypt, and rose again in the Red Sea" (3.113).

<sup>98</sup> Browne, Th., *Musæum Clausum*, 3.111-12.

<sup>99</sup> Comenius, J. A., *Reformation*, 30.