

# Theatres and Encyclopedias in Early Modern Europe

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# 1 The space of the encyclopedia

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Wisdom has but one book in which all the sciences are treated and which is taught to all the people. He has had all of the sciences pictured on all of the walls and on the outworks, both inside and out.

—Tommaso Campanella, *The City of the Sun* (1602)<sup>1</sup>

Despite their great historical and cultural range, almost coextensive with that of the European literatures themselves, encyclopedic writings share certain consistencies that are more than merely generic. Fundamentally, they are reference works, compiled and organized to reflect some reality to which by definition they are secondary.<sup>2</sup> All encyclopedias, in this sense, are imagined to be created equal; their form, we believe, should disappear in the shadow cast by the strong light of their object, the whole of the real world. The forms taken by encyclopedic texts have changed from Hesiod to Aristotle, from Martianus Capella to Vincent of Beauvais to Guillaume Budé to Diderot and D’Alembert, to Joyce, Eco, and the most recent web-based edition of the *Britannica*. Insofar, though, as they all tend towards one goal – literal reference, in the sense of *bearing* their users *back* to the substratum of a reality, to things themselves, conceived as univocal – there can be only one encyclopedia and no encyclopedia but *the* encyclopedia. It is thus no error to speak of *the* encyclopedia, because one of the markers that lets us define encyclopedism as a genre is the persistence of the claim that it is a singular entity.<sup>3</sup> In this chapter I will outline some of the consistent features of the encyclopedia that are not definitionally motivated, in particular its irony and spatiality, and conclude with a discussion of how the encyclopedia was related logically to the idea of theatre.

What is an encyclopedia, in particular an early modern one? After a fierce debate conducted in sign language, the hero of *Pantagruel* says of his opponent, a travelling English scholar – whether in praise or abuse is hard to determine – “I can assure you that he has opened for me the true well (*puy*s) and abyss of the encyclopedia.”<sup>4</sup> As perhaps the earliest occurrence of the word “encyclopedia” in French, the passage is a *locus classicus* in the history of the term, although it is not at all clear what object or idea Rabelais meant by it.<sup>5</sup> The word itself poses a series of questions, not the least of which is its intelligibility to readers not

acquainted with its use in Latin, where, by 1535 when *Pantagruel* was published, it had been in use for perhaps a generation.<sup>6</sup> The encyclopedia is, or includes, a “vray puy et abisme,” but *puy*s means either “well” or “hillock,”<sup>7</sup> and so Pantagruel’s encyclopedia is defined in part by a word that means two opposite things. In either case, *puy*s is also opposed to *abisme*: it is either the hill that inverts the bottomless pit just as it does the well, or it is the life-giving fountain of commonplaces as opposed to the swallowing void. Instead of being in a relation of simple inversion, as *hill* and *abyss* are, the two meanings in the second pairing are in one sense identical. What differentiates them is their particular relation to the viewer. Standing on the edge of a water-filled shaft and dipping a bucket into it, one makes use of a well; falling into it, one finds it to be an abyss.

I begin with Rabelais’ allegory of encyclopedism as, alternately, and often in the same form, a spring of truth and a pit of error because one of the functions of the encyclopedia is to combine different fields of analysis and coordinate them – theory and practice, active and passive, subject and object, any number of apparently contradictory categories. Whatever else it is, including an allegory, Pantagruel’s encyclopedia is something that contains and coordinates contraries, both those that are opposite objectively, such as *hill* and *well*, and those that are subjectively opposite, *well* and *abyss*. Just as fictions have had the most interesting things to say in the twentieth century about encyclopedic tendencies as particular practices, the encyclopedic fictions of the Renaissance like those of Rabelais or Robert Burton often express the double functions of encyclopedic texts – culturally bound versus timeless and eternal, serious versus parodic – more openly than traditional reference works, although such works also offer critiques of their own form. Thomas Elyot in *The Book Named the Governour* (1531) likewise combines two unlikely senses in his definition: “a heap of all manner of learning, which of some is called the world of science and of other the circle of doctrine, which is in one word of Greek *Encyclopedia*” (*Governour*, 48v). Is Elyot’s imagined encyclopedia an orderly circle or a messy (but perhaps still circular) heap? In the context of this etymological point of origin, we should also note the fictionality of the two examples from my introduction. Elyot never builds his library and Johannes Serranus never completes his index to Plato and Aristotle; Rabelais is never called upon to expound Pantagruel’s new learning and Burton’s proffered cures for melancholy are also part of its genesis. The concept of the circle of learning, whether encyclopedia, theatre, or something in between, is as problematic as it is attractive.

The encyclopedia as an object, or the idea of an object, is first fashioned in the Greek-reading humanist circles surrounding Angelo Poliziano in the 1480s. It derives from mistranscriptions of the Greek phrase *enkuklios paideia* in the Latin manuscripts of Pliny and Quintilian.<sup>8</sup> This origin in error did not prevent attempts in the early modern period to write real encyclopedias as well. Not long after its first appearance as an idea, books were being published using the word as a title.



In 1508, Gregor Reisch's *Margarita Philosophica* used  $\text{Κυκλωπαίδεια}$  as a subtitle, and a few years after Rabelais' reference, Paul Skalich de Lika entitled his text of universal knowledge *Encyclopaedia* (1559), apparently the first book so named. The list of contents of his work seems to support both senses of Pantagruel's description, a universal source and inescapable trap. De Lika's outline for his volume – not a particularly large one – claimed for its contents

the whole Encyclopedia, of sacred as well as of secular studies: of Philosophy, of course, [both] supernatural, which is called Metaphysics and First Philosophy; [and] natural, from which are born Medicine, then the study which treats of the soul, and the four Mathematical sciences, which are also called doctrinal, Arithmetic, Music, Geometry, and Spherics (with their footmen, so to speak, Calculation, Geodesy, Proportion, Astrology, Optics, and Mechanics). Similarly of Morals, Economics, and Politics; of the Rational arts, whence Grammar, History, Dialectic, Rhetoric, and Poetics emerge. Finally, of that holy and inexpressible symbol of sacred letters, which I usually call symbolic Philosophy.<sup>9</sup>

This collection, more heap than circle, is a lot to cover in one volume, even without trying to unify it into an ordered whole, but encyclopedic works consistently make the claim to contain everything that is necessary or knowable, even the “vray puy et abisme.” Pierre Gregoire, a French encyclopedist and another participant in the early modern boom in encyclopedic writings, succinctly articulates this fantasy at the end of a similar swarm of disciplines in *Syntaxes Artis Mirabilis* (1578): “Whoever possesses our labors (*lucubrationes*) will need no other books, or certainly very few, for learning the Encyclopedia of disciplines.”<sup>10</sup>

The capaciousness of the word “encyclopedia” in the sixteenth century and its almost utopian claims for comprehensiveness, compression, and speed of access, similar in tone and content to modern ones for the World Wide Web, are in part a result of its newness; like the word “theatrum,” “encyclopedia” was a sign for which a referent had to be imagined before it could be realized. From its beginnings, the term was unstable, implying a great deal about totality and mastery but difficult to pin down or even to evaluate as serious or satirical. Although composed of Greek elements – *enkuklios* means “general” or “everyday” and derives from the root *kuklos*, “circle,” while *paideia* means “education” or “training” – it is in fact not the product of any Greek-speaking culture, but rather of one that *read* Greek voraciously, early modern humanist Europe. What “encyclopedia” meant by the early sixteenth century is nothing like the original Greek sense of *enkuklios paideia*. *Paideia* was the training a young man received to form him into a citizen of his community. *Enkuklios* means ordinary, common, literally “what is in circulation,” and so the original sense of the phrase was something like “general education.” By Plato's time it meant an elite education in a variety of liberal arts.<sup>11</sup> Before Plato, some intellectual historians have speculated, the circularity of the phrase may have been

more prominent, referring to the civically supported training in making the strophic motions of the tragic chorus, and the word *enkuklios* may have originally applied to the circle of choral dancers.<sup>12</sup> Still more of a reach into the word's prehistory is the idea that even those circling dances took their shape – and their metaphoric completeness – from the wheeling of the stars in their regular revolutions over the earth. This origin for the word begs the question of the later universality that attaches to it. Even if this origin is based on a false history of the phrase, it carried an indisputable weight in the formation of the ideas that were joined to it, the more so when they are products of reading the Greek phrase and interpreting it to fit different historical circumstances. Whether or not an ancient Athenian would have heard a literal circle in *enkuklios paideia*, a humanist who had laboriously acquired Greek as a dead language certainly did, as countless translations of the phrase as a “circle of doctrine” (Elyot, *Governour*, 48v) or “erudition circulaire” (Budé, *L'institution du prince*),<sup>13</sup> or even Quintilian's *orbis doctrinae* (I, 10. 1), attest. In a discussion of Augustine's intellectual training, Henri Marrou acknowledges that already by Hellenistic times the curriculum was thought of as somehow circular.<sup>14</sup>

The single link that binds this complex of various and often speculative meanings is space, the empty, enclosed arc of the circle. Giuseppe Mazzotta has characterized the medieval encyclopedia as “a logical space, a framework within which the entities of the world are interpreted and classified,” (*Dante's Vision*, 5) but the titles of early encyclopedic works – *hortus*, *thesaurus*, *mansio* (also a term for the “houses” marking particular locations on a medieval or early Renaissance stage), *arca*, even *speculum* and *convivio* – show that the space was more than merely a logical convention. The most common ideal space, however, was circular, a round *speculum* or *theatrum* whose shape echoed that of the world and seemed also to encompass everything within it. The encyclopedia is thus not thought of as a continuous form unrolling in a single line across time, but as a simultaneous juxtaposition of elements in imaginary space. Arranged like courses at a feast in Dante's *Convivio* (c.1295) or jewels in a strongbox in Hugh Plat's *Jewell House of Art and Nature* (1594), the encyclopedia is atemporal and antinarrative.

The word “encyclopedia” itself is in part the product of this spatial conception. Early printed editions of Quintilian and Pliny, where the term originates, show an array of variant readings, ranging from other plausible ones such as *tas idiopaedeias*, “of a private or individual education,” to the farfetched *peripetias chieplocas*, “Aristotelian handtext” (less generously, “crossbraidings of reversal”), to the nonsensical *ciecyclopedias*, until at last finding in *encyclopaedia* a consensus among manuscript readings, etymology, and suitability to the humanist understanding of what the new word represented.<sup>15</sup> The individual tailoring implied by *idiopaedeias* is rapidly replaced by a word which suggests universality, and the speed with which a consensus was established on

*encyclopaedia* once the word emerges suggests that the *kuklos* that is audible within it played a significant role in its formation.<sup>16</sup>

With the fusion of the two words into a single, more apparently objective noun, the “common knowledge” of *enkuklios paideia* becomes the *orbis disciplinarum* of *enkuklopaideia*, and the implication, stressed in early works like Martianus Capella’s *De Nuptiis* (fifth century CE) or later ones like Campanella’s *Città del Sol* (1602) that there is a very literal *universitas scientiarum* – that in some conceptual way the knowledge of things, and the order of things themselves, turn inward to form a complete, interrelated (in the sense of judiciously divided, so that each element has its distinct place), and self-contained circle. The association of the concrete shape of the circle with the encyclopedia predates the name encyclopedia itself. Early encyclopedic works often include a self-representation which is enclosed and circular. In a tenth-century manuscript of the *Hortus Deliciarum* (“Garden of Delights”), the Liberal Arts are represented within a closed circular space.<sup>17</sup> The painted walls surrounding the garden in the *Romance de la Rose*, the garden of Dante’s good pagans, Chaucer’s House of Fame, Campanella’s City of the Sun described in the epigraph, and even Shakespeare’s Globe are literary examples of spatial representations of encyclopedic totalities. This image of a literal circle of learning persists and even increases in frequency during the Renaissance. Erasmus could slide easily from the figurative circle of learning to an actual geometric one:

to complete (*absolvere*) the circle is to offer back a thing perfect in all its measures and all its parts. Whence is said both *cyclopaideia*, which perfects (*absolverit*) as an orb of all the disciplines, and *encyclopaideia*. The metaphor is taken from the mathematicians, among whom the circular figure is judged the most perfect and most absolute (*absolutissima*) . . .<sup>18</sup>

In each of these examples, the encyclopedia is imagined as an empty place in which knowledge is discovered as it plays out a scene detached from its viewer. It is experienced not as a temporally distanced subjective re-enactment, as in a memory, but as something spatially distanced and objective; the perfection that makes the circle of knowledge *absolutissimus* also shuts the viewer outside it, where it can be viewed but not disturbed.

What brought forth this order in the encyclopedia was a knowing looking called *contemplatio*.<sup>19</sup> What was meant by *contemplatio*, though, was not only the detached and passive observation implied by its English cognate, “contemplation.” According to the Roman etymologist Varro, the word *contemplatio* comes from the ritual practice of demarcating a space in the world within which the ordinary rules of action are suspended and replaced by observation and interpretation:

Whatever place the eyes had gazed on (*intuiti*) was originally called a *templum*, from “to gaze” (*tuere*). . . . On the earth, *templum* is the name given to a place delimited by certain formulaic words for the purposes of augury or the taking of the auspices . . .

Varro then describes how the augur would specify the boundaries of his *templum*. Once these were established, a bird flying outside the boundary could be safely ignored; within the *templum*, though, anything that appeared had to be interpreted as a sign:

In making this *templum*, it is evident that the trees are set as boundaries, and that within them the regions are set where the eyes are to view, that is, we are to gaze (*tueamur*), from which was said *templum* and *contemplare* . . .<sup>20</sup>

Necessarily prior to any passive scrutiny that “contemplation” suggests, in fact what makes the scrutiny possible at all, is an active delimitation of a space in which the observation will take place and which will allow it to be meaningful. In Varro’s etymology, *templum*, derived from *tueri*, “to gaze,” becomes a Latin calque of the Greek *theatron*, “a place of seeing.” This tradition linking the two begins to explain the frequent appearance in medieval literature of altars in descriptions of theatres and of visual displays in temples, like the fifteenth-century illustrated edition of Vergil which shows the temple of Juno in Carthage with Aeneas and Achates standing outside it. The composition echoes an image of a theatre in an earlier work by the same printer. With its hexagonal sides and faces peering out of windows, the encyclopedic Tower of Learning in Reisch’s *Margarita Philosophica* mimics both these earlier illustrations (Figures 1 and 2; see also Figure 4).

What links *templum* and *theatrum* and the act designated as *contemplatio* is not only the centrality of vision to all three, but the importance of the viewer’s prior intervention into what he will later view in order to set aside a space in which signs can appear – a space which, in fact, *allows* these signs to be meaningful when they are observed passively and interpreted or understood. To *contemplate* nature is to delimit a restricted space, within which the whole of nature can then reappear and reveal its secret logic. This, in essence, is the project of the encyclopedia – to re-present every thing that exists in a (more) manageable form for detached study and manipulation. The sensual display of exotic objects in an early modern museum or cabinet of curiosities presents the viewer with what Steven Mullaney calls “things on holiday,” detaching them from their context and setting them into a neutrally valent space in which any virtual context can be produced, or none.<sup>21</sup> The encyclopedia posed as a similarly empty space in which its wonderful things, released from the contexts in which they had been produced, were free and available to the viewer’s gaze. Like theatres, encyclopedias rely on a border of some kind that distances them from the world they refer to, while simultaneously making that reference possible. For Varro, the ritual that establishes the space of the *templum* does not determine what appears inside it, but designates it so that what appears within it becomes worthy of attention and significant. As Varro’s account suggests, and as the historical development of theatres in Italy and England confirms, it was construction of the circle and the delimitation of

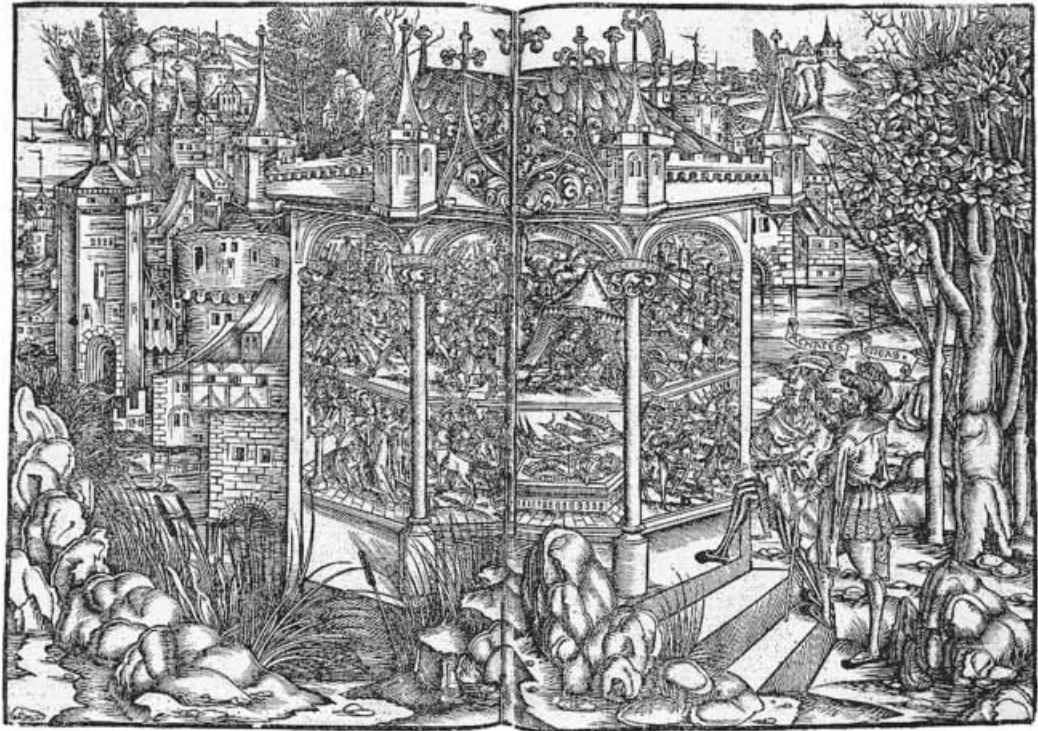


Fig. 1 Temple of Juno, from Vergil, *Opera*, ed. Sebastian Brant (Strassburg: Iohannis Grieninger, 1502).

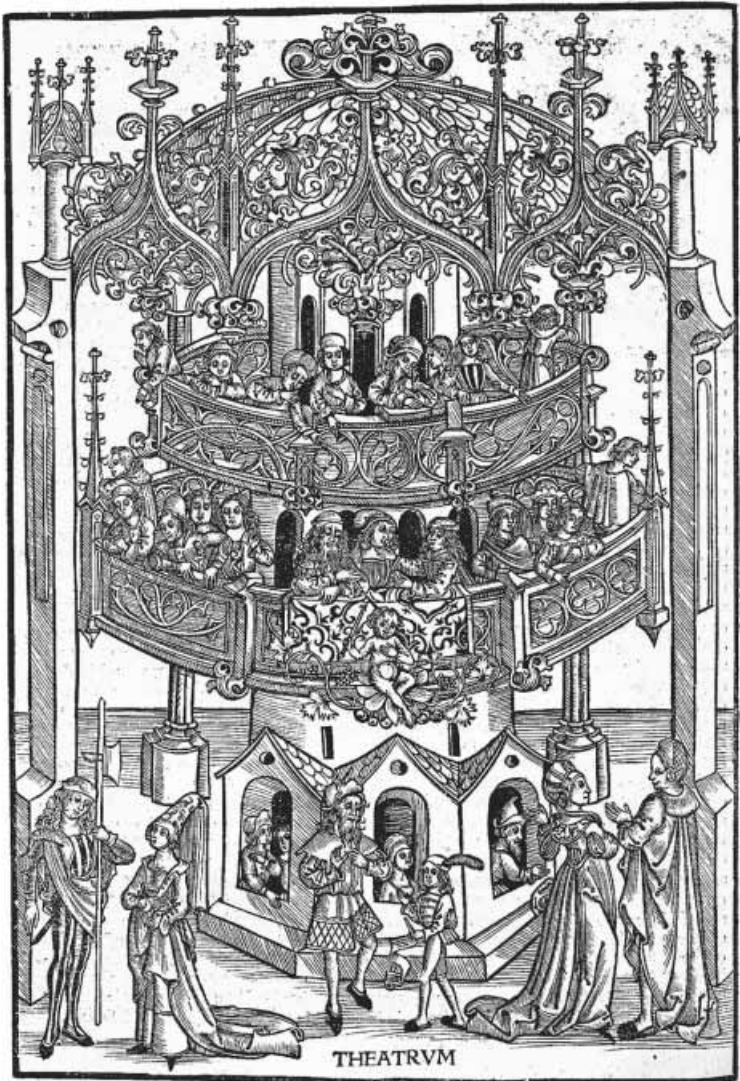


Fig. 2 “Theatrum,” from Terence, [*Comoediae*], ed. Sebastian Brant (Strassburg: J. Grüninger, 1496).

space, real or mental, that made possible the spectacular encyclopedic show within it, in fact what made it spectacular at all. What is produced in the encyclopedia is space itself, as Varro describes the establishment of a *templum*, a neutral space that is devoid of all the physical and social features that mark the spaces of the real

world. Once the space is established, according to the encyclopedist's logic, the things within it will manifest their own order – invisible in the realm of actuality because of the confusion that it exists in – to the experience of the viewer.

The encyclopedia as it was imagined in early modern Europe was thus not a space where knowledge was produced, but where it was preserved or discovered – the library as the resting place of truth rather than the laboratory as its delivery room.<sup>22</sup> Gian Biagio Conte discusses Pliny's *Natural History* as a work of consolidation, in which already established knowledge can be arranged and ordered.<sup>23</sup> Conte's remark captures the detached, referential character of encyclopedic texts – they do not create, but instead seek to reflect a reality that can be fully perceived only in their uniquely neutral textual space. In the neutral space of the encyclopedia, knowledge can be found, rehearsed, authorized, but not made; its origin lies outside it.<sup>24</sup> It brackets the parts played by economics, personal authority, and other tactical and accidental considerations and takes as its object science ready-made<sup>25</sup> – complete, atemporal, authorized by a truth outside it rather than by those things that we, from within that viewpoint, call contingent. In an encyclopedic text, rule precedes action; furthermore, action must be completely reducible to a finite set of rules that can then be externalized. Encyclopedias do not deny the existence of action under mental structures such as knack, *habitus*, or *empeiria*, but they recognize it as alien to their own function, which is to record the unchanging and timeless. Hugh of St. Victor distinguishes the properly encyclopedic topic of *ratio* from the *actus* that it supports and makes possible: “the theory (*ratio*) of agriculture is for the philosopher, its management (*administratio*) for the rustic . . .” This division means that the world of practice is exactly reproduced in a realm of theory that is distinct from it but mirrors it: “now you see for what reason we determine that philosophy is diffused through all human acts, so that it is necessary that there be as many parts of philosophy as there are varieties of things to which it must pertain.”<sup>26</sup>

The physical delimitation of things into spaces as a way of ordering and managing them does not address how these limits are to be placed nor what can be contained within them. The claim made by texts like Hugh of St. Victor's or Pliny's, even if it was immediately called into question by ironizing compilers like Burton or Rabelais, was that the encyclopedic order reflected reality in some way. From another perspective, though – one not alien to premodern encyclopedists themselves – this claim was simply bad faith. Within the traceless, mutable area of the encyclopedia, the compiler can re-establish the strictures he desires, consciously or not; the encyclopedia allows him the pleasure of finding what he assumed would be there anyway. The principal shift between the earlier and later spatializations is less the change from a vocal to a visual conception, as Walter Ong has suggested, than a progressive blurring of the activity by which that space is established.<sup>27</sup> Jürgen Henningsen argues that the encyclopedia is an attempt to reconcile the objective demands of a field of

study – its own rules, as it were – with subjective demands for order, symmetry, totality, and so on (“Enzyklopädie,” 297, 303). In a similar vein, Gian Biagio Conte argues that Pliny the Elder’s work is doubly organized: first and explicitly as an account of the order of things as they are in themselves, but also implicitly in conformity with an anthropocentric final cause, human usefulness.<sup>28</sup> The possibility of an encyclopedia relies on a conception of knowledge that locates it in a space external to any user, or use, of it – a knowledge because the form the encyclopedic text takes demands that knowledge be broken into its elements, although the goal of humanist encyclopedic texts is precisely the non-fragmented, unformalized wisdom of *prudentialia*, which cannot be divided from an acting subject. When narrativity and temporality are represented in such texts as spatial extension, the ethical poles of human action reverse, making the encyclopedia the Barthesian readerly text *par excellence*.<sup>29</sup> *Habitus est dispositio* – what is internal and the result of accommodation and habit over time is represented as external posture; what derives from a context is taken out of its dialogic relation with that context and established as an autonomous object. Active, passive; subjective, objective – like the words *contemplatio* or *puyis*, encyclopedias must balance contradictions within themselves. To do so, they tend to hide the contradictions by embracing them within a shared imaginary or real space.

This duplicity of origin holds true for most Renaissance versions of the encyclopedia, which often conflate their order with the naturally given order (even the label “the natural order” belies some of the prejudices of these works). But that is part of the encyclopedic text’s function as a reference work – it is meant to reproduce the world without becoming involved in it, hence its delimitation of a separate space, hence its emphasis on vision, the noblest sense both because it is both the most accurate and because it requires no physical contact. World and encyclopedia are distinguished so that the world can be approached again with sureness in interpreting signs or any other action. This opening between an object and its meaning is necessary to allow the encyclopedia to emerge as a volume of text in which the signs correspond to things in the world referentially without being confused with them, but this opening also swallows the encyclopedic text into a theatrical practice, no longer as a mere metaphor but as an active staging that shapes the world by holding itself in part aloof from it. Robert Burton describes himself as “myself a theatre” (“*ipse mihi theatrum*”), but then clarifies that he is not the performer but the audience, “a mere spectator of other men’s fortunes and adventures, and how they act their parts, which methinks are as diversely presented unto me, as from a common theatre or scene.”<sup>30</sup> The encyclopedic space is effective because it insists on no perspective; it is Nagel’s “view from nowhere,” instantly and completely visible to its external spectator. What allows for this perfect reproduction is its perfect separation from the world that contains it.<sup>31</sup>

This separation is the encyclopedia’s advantage over reality; possibilities can be scrutinized without their possible ill effects spilling into the world, because



in this ideology action follows contemplation rather than being concurrent with it. In the space of the encyclopedia action *becomes* contemplation. Action can be perilous, and the spectation of nature provides a safe space for working out right courses of action by setting up a buffer of theory around that of practice. Pierre Gregoire in part explains the usefulness of his abstract encyclopedic art in terms of its relative safety; it leads eventually to action (Gregoire was in fact a professor of law), but avoids both the dangers and the delays of immediate practice: “while life may be short, art is long; and not only in medicine, as Hippocrates used to say, is experience dangerous, but also particularly in all human actions.”<sup>32</sup> What permits this distance is the way the encyclopedia itself renders the world conceivable as a whole and at the same time – as part of the same process, in fact – reduces it to signs that can be safely viewed, interpreted, or admired without actually absorbing the viewer. The circle of learning is no different from the charmed circle that protects the conjuror from demons – it enables a kind of summoning and detaining of reality without granting it the power to harm. In the encyclopedia, though, at the same time the user loses his power to intervene in reality, making of the world a kind of spectacle.

The practical negotiation of this doubled vision – the encyclopedia as somehow both acting and watching, ordering and contemplating – is suggested in the *Margarita Philosophica* (*The Philosophic Pearl*, 1503) of the Carthusian prior Gregor Reisch. Reisch intended his book to be an elementary guide to everything that one might need to know.<sup>33</sup> By reading over 1,500 pages of dialogue between the aptly if predictably named characters Discipulus and Magister (Student and Teacher), a diligent student, Reisch claimed, could be spared the time and expense of attending university.<sup>34</sup> As an emblem of its contents, the volume is prefaced by the woodcut image of a circle, within which dwells Philosophy, a tall woman with three faces for the three branches of philosophical knowledge, Natural, Rational, and Moral (Figure 3). Around her stand figures of the Liberal Arts, holding various objects to identify them. Outside this circle of knowledge sit the human representatives of wisdom, Aristotle and Seneca, gazing in admiringly and hoping, perhaps, to gain admittance. Appropriately above the circle of worldly knowledge is Divine Philosophy, attended by Augustine and other Church Fathers.

The first section of Reisch’s universal volume begins with another woodcut image, representing, like the first woodcut, the entire body of knowledge (Figure 4). This image is a circular tower with figures peering out of its windows and porches. Both images are illustrations of the contents of Reisch’s book, but they are also, in a sense, pictures of his thought. But although Reisch’s pictures represent the same object<sup>35</sup> – Reisch’s, and potentially the reader’s, knowledge – they display the architecture of Reisch’s mind in two different ways. Reisch’s first image for his book shows Philosophy whole and at a glance. It is the kind of image that someone trained in the arts of memory



Fig. 3 Three-headed Philosophy, frontispiece from Gregor Reisch, *Margarita Philosophica* (1503).

might plausibly have kept in his memory storehouse, a diagram showing the parts of Philosophy in vivid and easily recollectable form. It makes no attempt to refer to actual space through perspective or any other way. Instead, the image occupies a space different from that of the viewer and is meant to be scanned rather than entered, so that the viewer does not see the drawing in his or her own spatio-temporal terms, but as an alien, abstracted field, perfectly



Fig. 4 “Tower of learning,” from Gregor Reisch, *Margarita Philosophica* (1503).

visible but equally inaccessible in all its parts. Even a knower of Aristotle’s or Seneca’s stature must remain outside the circular limit that separates them from the mystical bodies of knowledge themselves, although these can be freely and completely viewed.

In the second image, on the other hand, the undistorted circle of knowledge of the first image has become a circular tower, pulled out of true by the perspectival position of the viewer in a space that fictionally extends beyond the

border of the image. It is as if the first picture had adopted a view of knowledge from directly overhead, while in the second the viewer has slid to one side and down, taking a position in space continuous with the represented space and turning the circle of knowledge into a tower that can be entered. Its contents are no longer instantly, completely, and equally visible; instead the crude perspective of the image suggests that, like an actual space, it cannot be grasped instantaneously but must be traversed in a sequence, as if the viewer were crossing it physically. The tower's contents reflect this shift to temporality as well. Instead of the allegorical figures of the Liberal Arts, the different branches of knowledge are represented by historical human figures who remain partially hidden by the tower's walls. Labels below the figures identify them as the writers of texts frequently used by students of the liberal arts: Donatus, known to a millennium of schoolboys as an editor of Terence and therefore as the gateway to formal education, appears just inside the door on the lowest level, with Priscian, the grammarian, near the door. Higher up are more advanced *auctores* who provided the texts that older students used: Cicero for rhetoric, Euclid for geometry, Ptolemy for astronomy, Peter Lombard and theology at the summit. Outside the base of the tower, as if to make the narrativity of the process of knowledge still more clear, a boy with a tablet stands behind a large female figure, labeled Grammatice, who gestures towards the door. The boy is about to enter and begin his climb under the guidance of Grammar.

In contrast to the diagrammatic first image, which served as a kind of visual table of contents, in this second image Reisch shows how his text is to be used – how allegory, in fact, becomes history, or how the authority of Philosophy and the Liberal Arts is transformed into personal experience.<sup>36</sup> Reisch casts the act of reading his encyclopedic text as entering and moving through an imaginary space filled with a shared set of authoritative figures and texts – knowledge is mediated and represented metonymically, by its exemplary practitioners, rather than appearing allegorically and as a whole. To read, to learn, is to move through a series of stepped levels, to pass through a space until one transcends it and achieves, at the end of space, the masterful “view from nowhere.” The first image presents such a view without a viewpoint; the second maps the course that one follows to reach it. In this literal change in perspective, Reisch's second woodcut signals a shift, whether intended or not, from the idealization of thought as a still and coherent space to its realization, its being-made-real, as the temporality of thinking.

Reisch's text, or Elyot's educational system of an encyclopedic library and a theatre, like humanist education in general, were meant to prepare their users for action. To stop at observation and never proceed to action is to remain merely within the realm, as Reisch described it, of the theatre. Philosophy must be lived as well as written, and those who philosophize but do not

act ethically with their knowledge are like *histriones* “who, when they act poems on stage enter often as kings or as powerful men, though they are neither kings nor powerful, nor even perhaps freeborn.”<sup>37</sup> Reading an encyclopedic text, it was imagined, allowed its user to familiarize himself with the world’s structure free from risk.<sup>38</sup> It was a way of setting physics and other non-theoretical arts (in Aristotle’s terms) into a form of *theoria*, extending the reach of the exact observational sciences into the sublunary realm of action and change. Later encyclopedic texts of the Renaissance, notably those of the theatre, prefigure much later models of the social sciences in their application of *theoria* to prudential arts, and the *Encyclopédie* of Diderot and D’Alembert remains famous for its attempts to include the practical arts within the sphere of knowledge. Before any worldly objects could be set into the circle of the encyclopedia, they had to be abstracted from their real existence, codified and ordered. Writers like Elyot used the figures of the encyclopedia and the theatre to impose an order on the world, while other writers like Giulio Camillo went much farther in claiming the order of the encyclopedic text not as the writer’s arbitrary imposition, but as literally reflective of the world itself. But they show a varying degree of interest in the two visions of knowledge represented by Reisch – knowledge as reflection and knowledge as narrative, knowledge as possession and knowledge as action – or as performance.

The encyclopedia’s border and the theatrical distance it established with its reader are in place not only because reality is a threat. They are there because the contemplation of reality is also so absorbing. When Varro’s *contemplatio* cut out its *templum* from the whole of the world, the result was to render the newly founded space an object of fascination. In the strangely diffuse dialogue of Skalich de Lika’s *Encyclopaedia*, Philomusus (meaning “Lover of the Muses”) tells Epistemon (“Knower”), whom he is trying to convince to be his teacher, that he has come to him “for no other reason . . . than burning desire (*desiderium*) and leisure for contemplation (*contemplandi ocium*).”<sup>39</sup> The dialogue form in which this and so many works are set points to an additional characteristic of encyclopedic writings. This wonder is to be shared; it should fashion both a world of information and a community to inhabit it. Thus in his dedication Skalich de Lika mentions the innate need of men to know and to communicate their knowledge as a motive for writing his *Encyclopaedia*. The love of knowledge (*scientiae cupiditatem*) and desire for community is so great “that none can doubt that we seize these things drawn on by no advantage” other than the sheer desire to see, to hear, to learn “the acquaintance of things either hidden or exposed to wonder (*aut occultarum aut admirabilium*).”<sup>40</sup> Desire is both inexplicable (because it is treated as axiomatic) and irresistible. Varro’s *contemplatio* is the initiation of augury, which is itself a practice devised to help one to prepare for action.

But it is also the emergence of the wonderful from the ordinary – from birds and trees, truth. At the heart of every encyclopedic effort is this desire to marvel, what Conte calls “the will to astonish and the capacity for astonishment,”<sup>41</sup> elegantly combining in the reflexive verb *stupirsi* both the agency of the wonderer and his passivity before the object that he sets before himself. The Roman encyclopedist Pliny the Elder, who is cited by Renaissance encyclopedists perhaps more than any other predecessor as both a positive and a negative example, links this desire for wonder to human inadequacy.<sup>42</sup> Unlike all other animals, man is born helpless and needs to acquire *disciplina* (*Natural History* VII, 1). But what makes him helpless at birth also reveals the world to him as a chain of wonders:

What is not a wonder when it first comes to our attention? How many things come to pass that earlier were judged not to be possible? Truly, the force and majesty of the nature of things lacks credence at every moment (*in omnibus momentis*) if one embraces its parts and not the whole in one’s spirit.<sup>43</sup>

Pliny recognizes that it is human ignorance that renders the world constantly (*in omnibus momentis*) surprising; fragmented by time and the partial perspective of humankind, the world reveals itself as marvel after marvel rather than as a single comprehensible whole.

Aristotle is the first theorizer of this desire practiced and exemplified by Pliny, in his famous observation in *Metaphysics* I: “It is through wonder that men now begin and originally began to philosophize.”<sup>44</sup> Aristotle immediately distances the desire to philosophize from any practical (*poiêtikê*) science; it is obvious, he says, that the first philosophers pursued science for the sake of knowledge itself and not for any immediate practical purpose.<sup>45</sup> This sounds very close to Pliny’s position; the search for knowledge is not rational or practical, occasioned by specific needs and difficulties, but is entailed by the universal human conditions of ignorance and amazement. For Aristotle, though, philosophy only *begins* in wonder; it also leaves wonder behind. By giving his desire for wonder a purpose, or at least an end, Aristotle has already gone beyond Pliny’s sense of the purely marvelous. For Pliny, nature is everything in the world worthy of memory, prior to any consideration of its usefulness. This catholicity of interest challenges the purposefulness that Elyot or Serranus or Reisch claim for their encyclopedic texts. In spite of being reference works, encyclopedic writings contain a strongly utopian bent towards a potentially timeless suspension of disbelief and practical interest in the sheer sense of wonder – and pleasure – at the things of the world.

Wonder and the desire for it alone, prior to any application of it to the progress of knowledge through philosophy, to moralizations, or to other practical purposes, connect encyclopedic writings from Herakleitos to Eco, however sincere

the belief in the possibility of knowledge or however ironized it becomes. Vincent of Beauvais, for instance, explains in his preface to the thirteenth-century *Speculum Maius*, called the *Apologia Actoris*, that the work is intended for other Dominicans, interpreters of Scripture, and the learned, then surprisingly he adds another category:

but also for others, who, laboring under a kind of curiosity of knowing unfamiliar things (*curiositate quadam sciendi incognita laborantes*), perhaps are delighted by the awareness of such things (*taliū noticia*) . . .<sup>46</sup>

This *curiositas* is what makes of the contemplative space of the encyclopedia a theatre of learning – a desire to know unrooted in any practical concerns, a hopefulness that charges the ordinary, in its new context, with meaning. Vincent has no explanation for such *curiositas*, and, surprisingly, no condemnation of it either. Knowing itself has a kind of attraction apart from any purpose or organization attached to it, and indeed prior to both. In the “Prohemium” to his edition of John of Trevisa’s translation of Bartholomaeus Anglicus’ *De Proprietatibus Rerum* (1495), located inexplicably at the end of the volume, the printer Wynkyn de Worde links world and book as the parallel and equal objects of this desire to know:

For in this worlde to reken every thyng  
 Plesure to man there is none comparable  
 As is to rede and understondyng  
 In bokes of wysdom they ben so dilectable.<sup>47</sup>

As Stephen Greenblatt has remarked on European reactions to the New World, wonder is in a sense pre-ethical – it is one of the forces that shapes ethics, action, belief, and so on, but the shock of the truly new and strange may properly come, or be hoped to come, outside of the fields of ordinary practices.<sup>48</sup> Greenblatt suggests that in the context of early modern Europe, this sense of wonder quickly converts into a desire to dominate or conquer. For learned men of the Renaissance – or Romans, for that matter – knowledge was both intimately linked to *imperium* and distinct from it. Pliny writes his encyclopedia for the Roman emperor; more famously, and recounted in dozens of medieval and Renaissance sources, is Aristotle’s tutelage of Alexander and his use of Alexander’s resources to carry out his researches throughout the world.<sup>49</sup> To see with Greenblatt or Aristotle something in wonder prior to ethics is not to ignore or forget Varro’s lesson of preparing a ground for the wonderful. Before there can be augury, there must be *contemplatio* – the entempling of the world into significant and insignificant. But this activity, alone of encyclopedic activities, is represented as productive rather than conservative or reflective. The point of these stories of scholars and emperors is to distance wonder from

power and *praxis* while at the same time acknowledging their connection. The ruler provides an example of titanic, conquering will, asserting himself in the face of worldly resistance. The scholar, in contrast, is completely submerged in the desire to know, in the texts he has read, in the fascinating objects he gathers. Pliny, for instance, does not assume responsibility for the facts he enumerates, but refers the reader to his index for the sources of his information. It is not until Marlowe writes a Faustus on the model of his Tamburlaine that these figures of scholar and emperor begin to coalesce and it is acknowledged that the scholar, like the emperor, can segment the manifold world that confronts both of them. Even for Galileo, the self-fashioning scholar looks ridiculous compared to the disciplined follower of knowledge and power, or of knowledge-as-power.<sup>50</sup>

Pliny the Elder serves both as a model for the Renaissance idea of the scholar and as a source of amazement at the thoroughness of his self-effacement. In his preface, not only does he remove his own labor from consideration (however ironically), he also removes the labor of the audience by assuring Titus Vespasian, the emperor's son and the dedicatee of the *Natural History*, that he has included a detailed table of contents of the volumes "so that you will not have to take the trouble to read them."<sup>51</sup> Taking the model of contemplative teacher and active, worldly student to its extreme, Pliny's work effectively isolates itself completely from any realm but the study and any perusal but its author's. But Pliny the Elder also becomes, in the letters of his nephew and namesake Pliny the Younger, a figure of a different sort of power than an imperial one: he becomes prodigious, a source of wonder in himself – physically immense and preternaturally relentless in his pursuit of information, an example of the active desire for marvels who "read nothing which he would not excerpt," and also the object of that desire; appropriately, since his work "is no less various than nature itself," mixing marvelous human effort with nature's marvels.<sup>52</sup> Pliny the Younger recounts stories of his uncle's encyclopedic drive with his own sense of wonder, but also with an exemplary intention – his uncle's life and death model an ideal, if nearly incredible, relation of labor and admiration to a whole world. In one letter, Pliny the Younger goes on at length describing his uncle's obsession with conserving time in which to write – taking a litter rather than walking so that he could dictate to a slave, being read to at all hours of the day except during his bath ("and by bath I mean his actual immersion, for while he was being rubbed down and dried he had a book read to him"), berating a friend who asked a slave to reread a passage, thus wasting the time in which at least ten more lines could have been read (Letter 3. 5). In a letter to the historian Tacitus, Pliny the Younger recounts how his uncle met his death in the eruption of Vesuvius that destroyed Pompeii when he led a ship to shore to investigate the disaster, making him into what Umberto Eco describes as "a paramount example of scientific holocaust,"<sup>53</sup> a researcher so single-minded



in his pursuit of knowledge that he eliminates himself altogether. But Pliny the encyclopedist is also a figure of ridiculous excess, one who cannot set limits at all. He dies at Pompeii in part because he insists on spending the night in a villa near the eruption to study it, and in part because he is asthmatic – he snores loudly enough to be heard through doors – and is what his nephew coyly calls “ample of body.” This self-erasure is the consequence threatened by limitless, consuming *curiositas* – it is as if Pliny the Elder had allowed his fascination to consume him literally.

In the Renaissance, Pliny the Elder becomes the emblem of the desire to see the world whole and to grasp it instantly, conclusively, and (marvelously) selflessly. In the formulation of Conrad Gessner, the Swiss polymath and author of a book reviewing every Latin, Greek, or Hebrew book ever written, Pliny’s desire is a model of selflessness: “There is, said Pliny, much more merit in having persevered for the love of the work . . . and not for the sake of one’s ego.”<sup>54</sup> Juan Luis Vives, too, finds Pliny not only an example for Vives’ own philosophical activity, but an object of wonder in his own right: “In general things there is learning, just as in singulars there is pleasure; the first is of the mind, the latter of the senses. By this token Pliny delights more, Aristotle teaches more.”<sup>55</sup> Aristotle’s rules for comprehending give way in Pliny, in an undoing of the move from wonder to philosophy he recounts in *Metaphysics*, to an emphasis on particulars themselves, bright astonishing shards of information about the wonderful world. Aristotle moves on towards philosophy, and learning as a practical skill, but Pliny represents learning as pleasure, or, better, learning as its own pure and endless *telos*, as unstinting activity – an uncalculated, aneconomic expenditure of effort.

In spite of his own pleasures, Pliny the Elder is oddly at pains in the preface to the *Natural History* to stress the superficial unpleasantness of his work. It contains none of the elements in which pleasure is usually thought to consist:

it does not allow of digressions, nor of speeches, or dialogues, nor marvelous accidents or unusual occurrences – matters enjoyable (*iucunda*) to relate or pleasant (*blanda*) to read. A barren subject (*sterilis materia*) – the nature of things, or in other words, life, is narrated; and that in its most sordid part, and employing either rustic terms or foreign, downright barbarian, words that must be introduced by an apology. (Preface, §§12–13)

Even taking into account the obligatory obsequiousness of a dedicatory preface, Pliny’s insistence on the crudity of the work and particularly of his topic is extreme. His reference here to the *sterilis materia* that is the *natura rerum* is an oblique allusion to the productive matter, *genitalis materia*, of Lucretius’ version of the nature of things, *De Rerum Natura*, the fecund atoms that of their own accord produce all that exists by combining and colliding. But Lucretius’ atomistic universe is unexpectedly passionate, alive with desire and fertility; Pliny, on the other hand, claims to find in his world only barrenness, dullness, crudity.

What saves his work from a corresponding dullness, according to Pliny, is the way in which it is collected from its many sources and assembled in an

order – that is, it itself is a source of wonder, aside from its wonderful contents. Pliny's contribution to the nature of things is simply arrangement, but it is enough to render them palatable and, as writers like Conrad Gessner and Juan Luis Vives assure us, even engrossing. In organizing his atomistic facts, Pliny finds in them an overarching rationality that is finally, for Pliny and his followers, as wonderful as the novelty it avoids. Immediately before the passage in which he apologizes for the dullness of the *Natural History*, Pliny assures the reader that he lacks any remarkable skill (*ingenium*) even if his work had allowed for a display of such giftedness. What he can do instead is to collect and arrange, as he tabulates them, thirty-six volumes (not including a preface and a narrative index of sources, the earliest in Western literature) containing twenty thousand facts drawn from two thousand works by over a hundred selected authorities.<sup>56</sup> Thus textualized, quantified, and indexed, the account (in every sense) of nature acquires an interest value that is immanent in the things themselves, but invisible:

For which reason I seek to prevent those who read my works from condemning the *accounts* of them with boredom (*fastidio*), just because they dismiss many of these *things*, when in the contemplation (*contemplatione*) of nature nothing can be seen that is superfluous.<sup>57</sup>

Like Pliny himself, his work is marvelous in its own right. Pliny's nature itself contains many dismissable things. But the wonderful order of Pliny's text stands in for the wonderful order of nature – just as Pliny's own limitlessness can stand in for nature's. The labor of delimiting and arranging is the alchemy that changes the *sterilis materia* into an object of delight, and it is by means of his orderly text that Pliny seeks "to prevent those who read my works from condemning the *accounts* of them with boredom, just because they dismiss many of these *things*." The typical author of an encyclopedia, like Pliny, presents himself as a compiler, one who gathers together and arranges the writings of others without adding to them.<sup>58</sup> In a Lucretian universe, creative of its own accord, an account of the wonders of nature could be no more wonderful than the wonders themselves; there is much more danger of falling short of them. Pliny's universe, though, and even more that of Christian encyclopedists, relies on another wonder behind the wonders of the surface phenomena of the world, a logic that manifests itself in wonders even as it conceals itself behind them. This combination of dull material and fascinating collation creates a paradoxical attitude towards learning in Pliny's and similar, later works. Knowledge is carefully split up into elements, which are each carefully accounted for but also individually dismissed. The wonder of knowing is not in knowing one thing or another thing, but in knowing everything. It resides in the aggregate of parts rather than in any individual part, although the text is treated as a collection of many separate parts rather than as a unified whole. Every fact the encyclopedia