

ANIMATE TEXTS: HIEROGLYPHIC READING PRACTICES IN EARLY MODERN  
ENGLAND, 1564-1658

Katherine Irene Shrieves

A dissertation submitted to the faculty of the University of North Carolina at Chapel Hill  
in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the  
Department of English and Comparative Literature.

Chapel Hill  
2013

Approved by:

Mary Floyd-Wilson

Megan Matchinske

Reid Barbour

Jessica Wolfe

Darryl Gless

©2013  
Katherine Irene Shrieves  
ALL RIGHTS RESERVED

## ABSTRACT

KATHERINE IRENE SHRIEVES: *Animate Texts: Hieroglyphic Reading Practices in Early Modern England, 1564-1658*  
(Under the direction of Mary Floyd-Wilson)

Sixteenth- and seventeenth-century hieroglyphs have rarely been studied as a distinct category, yet they offer a new venue to deepen and complicate our understanding of how contemporary readers, writers, and theatrical audiences conceived of their own engagement with multimodal texts. My dissertation argues that early modern authors and audiences conceived of “reading” such symbols not as passive consumption of a static text but rather as an active, embodied experience of transformation as well as interpretation. Situating my argument within the early modern intellectual contexts of emblem theory and spiritual alchemy, I suggest that hieroglyphic reading can be understood as a dynamic process thought to transmute both individual and collective identities, refining the reader as well as forging new bonds among groups of elite reader-participants.

My investigation tracks this notion of transformative reading across discursive domains and somatic zones, beginning with a unitary, self-contained symbol in Elizabethan polymath John Dee's alchemical writing, and ending with Sir Thomas Browne's quincunx, an expansive hieroglyph that fully contains, describes, and embodies humanity's capacity to perceive and interpret the world. In John Dee's *Monas Hieroglyphica*, the private letters of New England colonist John Winthrop, Jr., the court

masques of Ben Jonson, and Sir Thomas Browne's *Garden of Cyrus*, I consider how hieroglyphic texts "work" upon their readers in contexts both public and private, both published and manuscript, both dramatic and non-dramatic. Although new criticism on reading practices has begun to map the material, cognitive, and affective dimensions of book use, my project revises our understanding of reading in the period as an active, reciprocal endeavor with profound epistemological and ontological resonances.

## ACKNOWLEDGEMENTS

In his *Monas Hieroglyphica*, John Dee describes Holy Roman Emperor Maximilian II as having profound influence over his book: “During the whole time of birth your very pleasing countenance seemed to be present before my eyes. You have thus eased and expedited my labors in bringing forth [this child].”<sup>1</sup> Although my project aspires to far humbler aims than Dee’s cosmically ambitious work, there have nonetheless been many people whose “pleasing countenances” have guided its development. First and foremost, I am honored that Mary Floyd-Wilson has been willing to advise me. Her guidance at all stages of the writing process has challenged me to uncover and draw together the threads of an argument, and most of all to consider my project’s contribution to the field of early modern literary scholarship. I could not wish for a better mentor. I also thank Reid Barbour, Darryl Gless, Megan Matchinske, and Jessica Wolfe for their encouragement and advice. They have each inspired me with the models of scholarship and teaching that they embody.

I am indebted to my writing group for their contributions to *Animate Texts*. My fellow writers and friends, Kate Attkisson, Lauren Garrett, Ben Sammons, and Heath Sledge, have been willing to read everything from sketchy outlines to polished articles. Their careful readings and probing questions have encouraged me to define the

---

<sup>1</sup> C.H. Josten, “A Translation of John Dee’s *Monas Hieroglyphica* (Antwerp, 1564), with an Introduction and Annotations,” *Ambix* 12.2-3 (1964), 146-7.

conceptual underpinnings of this project. Together we have learned, and are still learning, what it means to be scholars. I thank them for welcoming me into their community.

My family has also been instrumental in bringing this dissertation to fruition. For their encouragement and support in ways both tangible and intangible, I thank my parents, Ann and Alfred Shrieves. Finally, this project could not have been completed without Stan Rydzewski's unwavering love and wise advice. When I was confused, he helped me navigate the "Labyrinth of Truth"; when the tasks ahead seemed insurmountable, he helped me believe in myself.

## TABLE OF CONTENTS

LIST OF FIGURES.....	viii
Chapter	
INTRODUCTION.....	1
I. HIEROGLYPHIC READERSHIP AND “COSMOPOLITICAL” ALCHEMY IN JOHN DEE’S <i>MONAS HIEROGLYPHICA</i> .....	47
II. MAPPING THE HIEROGLYPHIC SELF IN THE LETTERS OF JOHN WINTHROP, JR., AND EDWARD HOWES (1627-1640).....	96
III. SPIRITUAL ALCHEMY THROUGH EMBODIED HIEROGLYPHS IN THE JONSONIAN MASQUE.....	140
IV. “THE HIEROGLYPHIC OF THE WORLD”: QUINCUNCIAL READING IN SIR THOMAS BROWNE’S <i>GARDEN OF CYRUS</i> .....	180
BIBLIOGRAPHY.....	226

## LIST OF FIGURES

### Figure

1. Emblem 21 from Michael Maier's <i>Atalanta Fugiens</i> .....	24
2. Image from Heinrich Khunrath's <i>Amphitheatrum Sapientiae Aeternae</i> (1609).....	27
3. John Dee's monad.....	51
4. Arbor raritatis, from John Dee's <i>Monas Hieroglyphica</i> .....	90
5. Detail from letter by Edward Howes to John Winthrop, Jr., 22 January 1627.....	100
6. Detail from <i>Syons Calamitye or Englands Miserye Hieroglyphically Delineated</i> (London, 1643).....	181
7. Illustration of the quincunx from Browne's <i>Garden of Cyrus</i> (1658).....	183
8. Illustration from Rene Descartes, <i>La Dioptrique</i> (1637).....	201
9. Illustration from Athanasius Kircher, <i>Oedipus Aegyptiacus</i> (1652).....	214
10. A royalist standard.....	225



## INTRODUCTION

*The Symbol: that is the means by which we infer and know something [...] In short it is a representation by which something is concealed.*

-- Abraham Fraunce, *Symbolicæ Philosophiæ Liber Quartus et Ultimus* (1585)

The story of this project begins in 1419, on the island of Andros in the Aegean Sea, where the Florentine traveler Cristoforo Buondelmonti acquired a copy of a previously lost text. This manuscript was *Hieroglyphica*, supposedly written by Horapollo, a fifth century Alexandrian, and it contained two books with a total of 189 unillustrated descriptions and definitions of Egyptian hieroglyphs. Buondelmonti brought the book back to his native Florence, where it inspired a new interest in hieroglyphs and became one of the seminal influences on the new trend for symbolic expression in the form of emblems, *imprese*, and other meaningful signs that began in Italy but by the sixteenth century had spread throughout Europe. The Greek original of *Hieroglyphica* was first published in 1505 and over the next hundred years went through thirty more editions.<sup>1</sup> After its printing made it more widely accessible, authors began translating it and supplementing it with images, such as Willibald Pirckheimer's translation illustrated by Albrecht Dürer (c. 1512), or writing their own hieroglyphic texts inspired by Horapollo, such as Piero Valeriano's *Hieroglyphica* (1556).

---

<sup>1</sup> George Boas, ed, *The Hieroglyphics of Horapollo* (Princeton: Princeton University Press, 1993), 15.

Early modern interest in hieroglyphs continued for more than two centuries after the rediscovery of Horapollo's *Hieroglyphica*. Some authors became interested in the specifically Egyptian provenance of such symbols, for instance Michael Maier's *Arcana arcanissima hoc est Hieroglyphica Aegyptio-Graeca* (1613) or Athanasius Kircher's mid-seventeenth-century "translations" of Egyptian hieroglyphs. For other authors, however, the hieroglyphic became a mode of thought, folded into established modes like emblems and *imprese* or, more generally, coming to mean symbolic expression concealing profound, often spiritual truth that must be interpreted by the skilled reader.<sup>2</sup>

Somewhat surprisingly, given the manuscript's dubious provenance, some portion of Horapollo's knowledge of hieroglyphs actually has been proven correct.<sup>3</sup> The historical accuracy of *Hieroglyphica*, however, is in some ways beside the point, as early modern authors and artists incorporated their own imperfect understanding of ancient Egyptian language into a broad philosophical framework that saw symbolic weight in every object, word, and gesture. This includes the often-discussed idea of reading the Book of Nature, but also the overarching frameworks of symbolic expression informing early modern rhetorical practices.

As Thomas M. Greene describes it, hieroglyphs were only one part of the early modern "*mundus significans*, a signifying universe, which is to say a rhetorical and symbolic vocabulary, a storehouse of signifying capacities potentially available to each

---

<sup>2</sup> Examples of this latter understanding of the hieroglyphic (that is, less explicitly Egyptian), include references to hieroglyphs in many emblem books such as Estienne's *Art of Making Devises* (1655) and Paradin's *Heroicall Devises* (1591), as well as works using "hieroglyphic" in a more general sense to mean any occult or mystical symbolism, such as Elslot's *True Mariner, and his Pixis Nautica* (1653) or Pordage's *Mundorum Explicatio* (1661).

<sup>3</sup> Cf. Francesco Sbordone, *Hori Apollonis Hieroglyphica* (New York: Georg Olms Verlag, 2002); Erik Hornung, *The Secret Lore of Egypt* (Ithaca: Cornell UP, 2001), 12; and Erik Iversen, "Horapollo and the Egyptian Conception of Eternity," *Rivista degli Studi Orientali* 38 (1963): 177-86.

member of a given culture.”<sup>4</sup> An accurate reconstruction of how early modern authors and readers understood the hieroglyphic is difficult, since what Greene calls the “shifting and tangled matrix of semiotic reserves” makes sense only within a particular cultural and historical context.<sup>5</sup> Indeed, excising hieroglyphs from the larger context of symbolic expression in general may seem problematic. As Michael Bath writes in *Speaking Pictures*, “It is often impossible to distinguish the hieroglyphic theories of the Renaissance, which conceived the book of the creatures as a language of natural signs, from rhetorical theory concerning figurative constructions.”<sup>6</sup> One fundamental task of this project, then, before discussing the particular hieroglyphs with which this dissertation will be concerned, is to sketch the outlines of the early modern conception of the hieroglyphic.

Two “simple” definitions immediately come to mind, but neither of these proves to be entirely sufficient. On one hand, the term describes ancient Egyptian logographic writing, which was a relatively new area of study in early modern Europe due to the rediscovery of Horapollo’s *Hieroglyphica*. On the other hand, the term “hieroglyphic” is used in the context of contemporary emblem theory texts to describe one of the many varieties of early modern symbolic expression. I argue that the hieroglyphic is neither exclusively Egyptian nor exclusively emblematic, but instead is a conceptual category

---

<sup>4</sup> Thomas M. Greene, *The Light in Troy: Imitation and Discovery in Renaissance Poetry* (New Haven: Yale University Press, 1982), 20. On the ubiquity of nonverbal symbolic discourse in early modern culture, see also Mary E. Hazard, *Elizabethan Silent Language* (Lincoln and London: University of Nebraska Press, 2000). One important scholarly work that offers a comprehensive survey of hieroglyphs in relation to other forms of symbolic expression is Liselotte Dieckmann, *Hieroglyphics: The History of a Literary Symbol* (St. Louis, Washington University Press, 1970).

<sup>5</sup> *Ibid.*, 21.

<sup>6</sup> Michael Bath, *Speaking Pictures: English Emblem Books and Renaissance Culture* (London and New York: Longman, 1994), 47.

that can be used to interrogate the relationship between text, image, and meaning as well as the interpretive practices and expectations of authors and readers. Hieroglyphs have some characteristics in common with emblems, but can nonetheless be distinguished from them in nature, purpose, and scope.

Emblem theorists associate hieroglyphic writing with natural language, as opposed to other types of symbolic expression, which might be “conventional” rather than “natural.” Writers like Samuel Daniel and Francis Bacon repeatedly note that hieroglyphs represent what Bacon calls “an affinity with the things signified.”<sup>7</sup> More than a simple imagistic representation, that is, hieroglyphs were thought to have a congruence with the intangible essence of the “things signified.” That essential link between a hieroglyph and its meaning, though, can be problematic. As we will see in Chapter 4, for instance, Sir Thomas Browne’s *Garden of Cyrus* both excavates quincuncial structures in nature and imposes Browne’s hieroglyph upon the world.

The Egyptian provenance of hieroglyphs contributes to their status as ambiguously natural signs, originally thought to be the expressions of a people with a more direct connection to occult knowledge in the natural world. Because of their association with Egyptian antiquity, emblem theorists often viewed them as a precursor both of written language and of contemporary forms of symbolic expression. Hieroglyphs, thus, connote not only antiquity but also hidden, mystical knowledge. Simply put, the purpose of hieroglyphs is to reveal secret meanings to *some* readers while concealing from *others*. This notion surfaces in various discursive contexts throughout this project as a fundamental concern with community-building among readers.

---

<sup>7</sup> Francis Bacon, *Francis Bacon: The Major Works*, ed. Brian Vickers (Oxford: Oxford University Press, 2002), 231.

Hieroglyphs may also be distinguished from other form of early modern symbolic expression by the scope of their intended audience. *Imprese* or devices, for example, are highly personal expressions of an individual's character, while published emblem books are intended for a more public venue. The hieroglyphic examples I consider here fall somewhere in between, ranging from widely-distributed published books to private letters. As critic Diana Galis writes, distinguishing between *imprese* and hieroglyphs: "The former [*imprese*], so esoteric as to be intelligible only to one's circle of acquaintances, has a purely private application; the latter, secret yet expressive of a tradition of wisdom accessible to all sufficiently learned men, has universal application."<sup>8</sup> While some hieroglyphs may have "universal application" or be publicly displayed, as Galis's distinction suggests, these signs nonetheless self-select an audience by virtue of their esotericism. The group of "all sufficiently learned men" may in some cases be quite small, and in others more expansive.

These several qualities seem at first to contradict one another. Hieroglyphs may claim to be a public contribution to the collective human knowledge, yet they also participate in the tradition of concealing arcane wisdom. They reflect the fundamentally natural "essence" of the things they represent, yet that representation is mediated through complex visual and social rhetoric. Through the exercise of defining the hieroglyphic, I argue that hieroglyphs provide a unique locale in which to interrogate the relationship between author, reader/audience, and text. Hieroglyphs (like and yet not-quite-like *imprese*) supposedly provide a direct connection between the reader and the author's private, inner mind. From an authorial perspective, hieroglyphic expression entails a

---

<sup>8</sup> Diana Galis, "Concealed Wisdom: Renaissance Hieroglyphic and Lorenzo Lotto's Bergamo Intarsie," *The Art Bulletin* 62.3 (1980): 366-7.

balance between obviousness and obscurantism. From a readerly perspective, there is tension along two axes: whether readers are inherently worthy to engage with a particular text versus whether they can be trained in proper interpretation, and whether hieroglyphic interpretation is primarily innate and nonrational or learned and rational.

These attributes of hieroglyphs, however, are interrelated and complicate one another. For instance, the fact that hieroglyphs originate in ancient Egypt might call into question their supposed natural affinity. As English emblem theorist Abraham Fraunce writes, some might object that “hieroglyphs are the invention of the Egyptians, not of nature,” but he counters this objection by noting that many hieroglyphics “find their source in the most secret inward parts of nature herself.”<sup>9</sup> Another area of complication is the issue of how hieroglyphic knowledge is imparted. In his introduction to Horapollon’s *Hieroglyphica*, George Boas writes, “This kind of knowledge is contemplation; it is not reasoning. It is direct, immediate, non-verbal: *connaissance* not *science*, *kennen* not *wissen*.”<sup>10</sup> Hieroglyphs claim to mirror their meaning so that the reader may experience it directly, as Boas suggests, but in practice they often require elaborate explanations and expect advanced interpretive skills from their readers. Early modern hieroglyphic expression is a site of paradox: allegedly natural and yet fully meaningful only within highly specific cultural contexts, carefully mediated and yet positioning itself as direct, visual, and unmediated.

These paradoxes and difficulties do not preclude the possibility of defining the early modern conception of the hieroglyphic, though. In fact, such paradoxes are essential

---

<sup>9</sup> Abraham Fraunce, *Symbolicæ Philosophiæ Liber Quartus et Ultimus*, ed. John Manning, trans. Estelle Haan (New York: AMS Press, 1991), 34-5.

<sup>10</sup> Boas, 8.

to understanding how readers and writers deploy that term. Emblem theorists often distinguish among terms like *hieroglyph*, *emblem*, *impresa*, *sign*, and *symbol*, yet in practice the boundaries between such varieties of symbolic expression are porous. (And this does not even take into account the use of the word “hieroglyphic” in a more general context, apart from the learned and courtly world of emblem theory.) Therefore, any definition of the hieroglyphic cannot be generalized to all authors and all instances, and must take into account the paradoxes inherent in the form.

There are four images or series of images around which this dissertation centers: John Dee’s hieroglyphic monad as explicated in *Monas Hieroglyphica* (1564); a geometric diagram drawn in a letter from Edward Howes to John Winthrop, Jr. (1627); the procession of significant images in Ben Jonson’s *Mercury Vindicated from the Alchemists at Court* (1615); and Sir Thomas Browne’s quincunx in *The Garden of Cyrus* (1658). These images span almost a century, and none of them might be described as a typical hieroglyph: they are not directly inspired by sources like Horapollo or Valeriano and they do not mimic Egyptian hieroglyphs. Nonetheless, grouping these particular images together sheds light on early modern reading practices and conceptions of knowledge.

In these particular hieroglyphic examples, a significant image or series of significant images functions as the embodiment of transformation, with the goal of effecting change and perfecting the reader. Some of these images are static, by which I mean that they are one image rather than a series of images that can be connected syntactically. The imagery in Jonson’s masque is fluid rather than static, consisting of a progression of embodied hieroglyphics. All four examples, however, share a similar

purpose: to effect change in the reader that approximates an alchemical transformation. Within themselves, these hieroglyphs contain transformative power that the properly engaged reader may unlock.

In the epigraph at the beginning of this chapter, Fraunce (copying directly from French emblem theorist Claude Mignault) claims that “the symbol” allows us to “know something” that is otherwise hidden. The purpose of symbolic expression in such a definition is to conceal and reveal at the same time: to reveal the right meaning to the right reader at the right time. I would go farther and argue that the purpose of early modern hieroglyphic expression is to catalyze transformation in the individual reader and, in the cases I will examine, in society at large.

This notion of transformative hieroglyphic interpretation is a new example of what Jennifer Richards terms “instrumental book-use” or the model of reading as active reinterpretation described by Lisa Jardine and Anthony Grafton.<sup>11</sup> Beginning with Adrian Johns’ *Nature of the Book*, much recent scholarship has focused on the materiality of books represented by works like William Sherman’s *Used Books* and Bradin Cormack and Carla Mazzi’s *Book Use, Book Theory 1500-1700*.<sup>12</sup> The aforementioned scholars all quote a maxim from Geoffrey Whitney’s 1586 *Choice of Emblems*, noting that early moderns did not conceive of reading in the same way that we do: “*Usus libri, non lectio*

---

<sup>11</sup> Jennifer Richards, “Useful Books: Reading Vernacular Regimens in Sixteenth-Century England,” *Journal of the History of Ideas* 73.2 (2012): 248; Lisa Jardine and Anthony Grafton, “‘Studied for Action’: How Gabriel Harvey Read His Livy,” *Past and Present* 129 (1990): 30-78.

<sup>12</sup> For other works on the material, cognitive, and affective processes and import of early modern books and reading, see also the *Huntington Library Quarterly* special issue on early modern reading, 73 (2010); Cecile M. Jagodzinski, *Privacy and Print: Reading and Writing in Seventeenth-century England* (Charlottesville: University Press of Virginia, 1999); Femke Molekamp, “Early modern women and affective devotional reading,” *European Review of History: Revue europeenne d'histoire* 17.1 (2010): 53-74; Kevin Sharpe, *Reading Revolutions: The Politics of Reading in Early Modern England* (Connecticut: Yale University Press, 2000); Kevin Sharpe and Stephen Zwickler, eds., *Reading, Society, and Politics in Early Modern England* (Cambridge: Cambridge University Press, 2003); Jennifer Summit, *Memory’s Library: Medieval Books in Early Modern England* (Chicago: University of Chicago Press, 2008).



*prudentes facit* (The use, not the reading, of books makes us wise).”<sup>13</sup> Cormack and Mazzio describe early modern reading as an intellectually labor intensive process of internalizing a book rather than simply plodding through its words.<sup>14</sup> This new critical focus on *process* suggests a model of active interpretation rather than passive consumption. Katharine Craik characterizes such a process as an interchange between text and reader that bridges the gap between intellectual and physical and may even impinge upon the reader’s body, “a series of transactions between material language and the material bodies of readers and writers.”<sup>15</sup> A historicized understanding of early modern reading practices, thus, acknowledges that texts may have the capacity to change readers on material and immaterial levels, inside the mind but also upon the body.

Hieroglyphs have not been specifically distinguished and considered within this context, although emblems have. Cormack and Mazzio also describe a particular emblem as a text that “[enables] a difficult kind of cognition, whereby the mind’s movement across different and incommensurate media enacts an otherwise unrepresentable dimension of the psyche.”<sup>16</sup> Just as emblems combine text and image in a way that makes them uniquely poised to allow reflection on readership, so too do hieroglyphs draw attention to the often unacknowledged processes of engaging with – transforming and being transformed by – texts. Much book-use criticism has focused on physical use: e.g.

---

<sup>13</sup> William H. Sherman, *Used Books: Marking Readers in Renaissance England* (Philadelphia: University of Pennsylvania Press, 2008), xiii.

<sup>14</sup> Bradin Cormack and Carla Mazzio, *Book Use, Book Theory 1500-1700* (Chicago: University of Chicago Library, 2005), 2.

<sup>15</sup> Katharine A. Craik, *Reading Sensations in Early Modern England* (New York: Palgrave Macmillan, 2007), 3. See also the model of “collaborative” readership proposed in Stephen B. Dobranski, *Readers and Authorship in Early Modern England* (Cambridge: Cambridge University Press, 2005).

<sup>16</sup> Cormack and Mazzio, 124.

marginalia, commonplace-books, note-taking, and other physical evidence of how readers used books. In her article about sixteenth-century medical self-help books, Jennifer Richards turns the focus inward to books' "instrumental" value upon the reader's mind. She argues that thoughtful and critical intellectual digestion of medical texts (that is, not just practical application of their advice) is in-and-of-itself intended to have a salubrious effect on the reader.<sup>17</sup> The hieroglyphs this project explores reveal a similarly intellectual yet embodied interchange between "reader" – a broad category that also includes theatrical audience members – and symbol.

Some historical and conceptual background is necessary to unfold this model of early modern hieroglyphic reading. First, a closer examination of contemporary writings on language and symbolic expression enables us to distinguish hieroglyphs from similar forms like emblems, and to unpack the "natural" and "Egyptian" connotations of these signs. Next, a consideration of the early modern conception of spiritual alchemy enables us to see the epistemological connections between alchemical and hieroglyphic knowledge. The esoteric symbolism of hieroglyphs has much in common with alchemical symbolism, and early modern alchemical practice invariably had a spiritual dimension to it. Exploring the connection between hieroglyphs and alchemy enables us to understand what readerly transformation entails and by what processes it might occur. After synthesizing these historical contexts of emblem theory and spiritual alchemy, an explication of a brief excerpt from John Dee's *Monas Hieroglyphica* demonstrates how the complex of issues and definitions that characterize the early modern hieroglyphic can be applied in a particular instance. Finally, this introduction will summarize how my

---

<sup>17</sup> Richards, 249-50.

chapters work together to give a fuller sense of the nature of early modern hieroglyphs, and how each individual chapter contributes to my project.

## I. DEFINING THE HIEROGLYPHIC MODE OF KNOWLEDGE

What kind of knowledge do hieroglyphs represent? And how are readers meant to engage with them? By considering early modern definitions of “the hieroglyph” we may begin to apprehend contemporary opinions about the philosophical potential of this symbolic mode and the way readers might approach and interpret such signs. Perhaps because emblems and other “devices” were such popular book subjects in early modern Europe, “emblem theory,” or the categorization of different types of symbolic expression and meditation on their purposes and proper construction, was a frequent topic of scholarly discourse.<sup>18</sup> Early modern writers frequently made distinctions between various types of emblematic expression, and although these distinctions may occasionally be stated clearly, words like *emblem*, *device*, and *hieroglyphic* are more often than not used ambiguously, and the boundaries between these categories are porous. In one of the most often-cited definitions of the hieroglyphic, Francis Bacon’s *Advancement of Learning* distinguishes the symbolic category by its Egyptian heritage, natural affinity, and capacity to be connected in sentence-like structures.

Bacon defines writing in general as a method of notating human thought, and further divides “these Notes of Cogitations” into two broad categories: those in which there is a direct correspondence between meaning and sign, and those in which the relationship between meaning and sign is arbitrary and determined by cultural context.

---

<sup>18</sup> For surveys of early modern emblems and emblem theory, see in particular Michael Bath’s *Speaking Pictures*; Rosemary Freeman, *English Emblem Books* (New York: Octagon Books, 1996); and Mario Praz, *Studies in Seventeenth-Century Imagery* (Roma: Edizioni di storia e letteratura, 1964).

Hieroglyphs and gestures both fall into the former category in which “the note hath some similitude or congruity with the notion.”<sup>19</sup> Bacon defines these two terms as follows:

For as to Hieroglyphics (things of ancient use, and embraced chiefly by the Egyptians, one of the most ancient nations), they are but as continued impresses and emblems. And as for Gestures, they are as transitory Hieroglyphics, and are to Hieroglyphics as words spoken are to words written, in that they abide not; but they have evermore, as well as the other, an affinity with the things signified.<sup>20</sup>

Bacon’s definition of hieroglyphs puts the term into two separate contexts: linguistic and emblematic. He defines hieroglyphs as a type of writing of ancient provenance, and distinguishes them from modern “characters real” and “words” which accumulate meaning through custom and time rather than by natural “affinity.”<sup>21</sup> This affinity or “similitude or congruity” also gestures toward the contemporary mental framework of occult correspondences, placing hieroglyphs within a philosophical tradition of significant references and influences. At the same time that hieroglyphs are contrasted with modern written languages, Bacon also defines them in terms linked to early modern emblem theory, as “continued impresses and emblems.” *Imprese*, emblems, and hieroglyphs are similar to words insofar as they all are methods of representing thoughts and ideas in abiding visual form (as opposed to Bacon’s definition of gestures and speech as “transitory”), yet the type of knowledge encapsulated in these symbolic forms and the methods of accessing that knowledge seem notably different from words. Bacon’s definition of hieroglyphs also calls attention to the fact that hieroglyphs, unlike emblems, can be formed into sentences and can represent an extended series of ideas.<sup>22</sup>

---

<sup>19</sup> Bacon, 231.

<sup>20</sup> *Ibid.*, 231.

<sup>21</sup> *Ibid.*, 231.

<sup>22</sup> Michael Bath writes that Bacon is perhaps thinking of Francesco Colonna’s *Hypnerotomachia Poliphili*

Bacon defines emblems not as “Notes of Cogitations” like hieroglyphs, but rather as tools in the “art of Memory,” mnemonic devices that “reduceth conceits intellectual to images sensible, which strike the memory more.”<sup>23</sup> Emblems, unlike hieroglyphs, are entirely removed in Bacon’s taxonomy from their linguistic context. Instead they are a separate method of representing thought visually, but with a personal goal of aiding individual memory rather than communicating ideas to others. Bacon’s definition places hieroglyphs ambiguously between words and emblems, between written and emblematic expression. Like words, they may be used in combination with one another to express complex ideas, but like emblems they contain a structural or visual similarity to the ideas they express.<sup>24</sup>

In Bacon’s *Advancement of Learning*, hieroglyphs are poised between language and emblem. Other early modern emblem theorists place hieroglyphs more firmly in the category of emblematics, often as the progenitors of other forms of symbolic expression such as emblems and *imprese*.<sup>25</sup> Two significant English categorizations of symbolic expression can be found in Samuel Daniel’s *Worthy Tract of Paulus Giovius* (1585) and Abraham Fraunce’s *Symbolicæ Philosophiæ*. Both of these texts are translations (into English and Latin, respectively) of Italian works specifically about *imprese*, yet both are

---

in which hieroglyphs “were linked up into syntactic strings” (51).

<sup>23</sup> Bacon, 230.

<sup>24</sup> Rosemary Freeman also notes the tendency, inspired by early modern writers’ engagement with Horapollo, to describe “hieroglyphics as the prototype of the emblems and of all other symbolical writing” (40-1). She writes, following the eighteenth-century emblem theorist Anthony Ashley Cooper, third Earl of Shaftesbury, that hieroglyphics are “forms half way between pictures and words” and connects them with idea of “reading” divinely inscribed meaning in the Book of Nature (41).

<sup>25</sup> Bath, 134.

more than simple translations, and both place *imprese* as a particular star within the larger constellation of symbolic expression that also includes hieroglyphs.

For example, Daniel draws a historical trajectory from primitive human expressive impulses, to Egyptian hieroglyphs, to medieval and early modern heraldic imagery. His *Worthy Tract* is a translation of an Italian treatise on *imprese*, which are personal devices used in courtly contexts, typically consisting of an image paired with a short motto.<sup>26</sup> In Daniel's preface to the translation, he notes that children always want to draw on walls (scratching out pictures with a coal, for example), and he identifies this as an innate human tendency toward pictorial expression, out of which emerged the ancient practice of hieroglyphic expression:<sup>27</sup>

This naturall disposition hath raigned generally euen from the beginning when the worde was but yet new, and induced nations first to figure beasts, plants, trees, celestially signes, and such like, obseruing the nature and qualitie of euerie creature represented by their figures, whereby in times they became able to shewe their intent so their frends and others vayed vnder the forme of these creatures, in which facultie the Ægyptians were most singulare as the first authors of this *Hieroglyphicall art*.<sup>28</sup>

Daniel's narrative of hieroglyphic origins envisions hieroglyphs emerging naturally from the human tendency to represent the visible world in artistic form, evolving from the primitive doodles of children to ancient peoples' visual reproductions of nature. This origin story suggests a tension between the seemingly crude simplicity of hieroglyphs and their surprising symbolic weight. More than just, say, a drawing of a fish, a hieroglyph

---

<sup>26</sup> Paolo Giovio, *Dialogo dell'Imprese militari et amoroze* (Lyons: G. Roville, 1574).

<sup>27</sup> As several scholars have noted, Daniel's preface, while represented as his own writing, consists largely of quotations from another Italian emblem text, Ruscelli's *Discorso*. See Norman K. Farmer's introduction to the 1976 facsimile of Daniel; Katherine Duncan-Jones, "Two Elizabethan Versions of Giovio's Treatise on *Imprese*," *English Studies* 52 (1971): 118-123; Michael Bath, 140.

<sup>28</sup> Paolo Giovio, *The Worthy Tract of Paulus Iovius (1585)*, trans. Samuel Daniel (Delmar, New York: Scholar's Facsimiles and Reprints, 1976), A.i.v-A.ii.r.

represents the essence of “fishiness” in a way that the word “fish” fails to do. In this characterization of hieroglyphic knowledge, such symbols are primitive yet also deeply significant, reflecting the notion of Egyptian wisdom. For Daniel, though, early modern forms of emblematic expression are superior to hieroglyph, because of the addition of explanatory “mots or posies” – i.e. poetic mottoes that enhance and supplement the meaning of the image.<sup>29</sup> Since Daniel is primarily concerned with courtly *imprese*, he discusses hieroglyphs only as a historical precursor. Nonetheless *The Worthy Tract* sheds some light on the perceived purpose of emblematic expression in general and hieroglyph in particular.<sup>30</sup>

In the introductory letter “To his good friend Samuel Daniel,” N.W. wonders: “But to what end serued this [hieroglyphic writing]? to shadow suerly their purposes and intents by figures.” N.W. then moves from ancient Egypt to contemporary Europe and wonders similarly about the purpose of *imprese*: “Then what was the intent of these Ensignes and *Deuises*? What cause can bee pretended for them? What did they import? *Iamblichus* saith that they were conceiptes, by an externall forme representing an inward purpose.” Both emblematic forms represent meaning via imagery, and N.W.’s reference to Iamblichus continues the philosophical line from Egyptian wisdom through to Neoplatonism, further suggesting that the “inward purpose” represented by hieroglyphs may be a secret essential knowledge. This representation is not straightforward, though: hieroglyphs “shadow” the inward meaning of the concepts they represent, sketching or suggesting rather than literally stating. Even if hieroglyphs originated from sketches on a

---

<sup>29</sup> Giovio, A.ii.r.

<sup>30</sup> As N.W. states, “*Symbolum est genus, Emblema species*,” which implies that hieroglyphics also should be considered a species of symbolic expression.

wall, N.W. and Daniel suggest, as a fully developed form of expression they go beyond simple one-to-one visual representation.

Abraham Fraunce also puts great importance on the idea of emblematic expression as an outward representation of the author's inner thoughts: "And so, the first inventor of the *impresa* presumably wished to disclose by this means a concept deeply implanted within his mind, and to reveal it to his mistress or his friends or to other onlookers. Now he was aware that in order to disclose to others the ideas conceived within his mind he needed either a motto or symbolic images."<sup>31</sup> He describes *impreses* as an expression of "an idea which he [the inventor] had already conceived within his mind" and again as an "idea conceived within the mind."<sup>32</sup> Fraunce's *Symbolicæ*, which draws upon several Italian theorists in addition to Giovio, conceives of *impreses* as an alternative to written language, a form of expressing oneself with different aims and interpretive practices from writing.

As in Daniel's *Worthy Tract*, hieroglyphs are characterized as another species within the broader genus of symbols, under which Fraunce distinguishes between emblems, *impreses*, and hieroglyphics. Emblems are very similar to *impreses* but more public, meant to have a "general application" rather than, like *impreses*, representing the character and worldview of a particular individual.<sup>33</sup> For Fraunce, hieroglyphs are distinguished from other symbolic categories because they lack any supplemental text; an *impresa* with no motto "will be confused with hieroglyphs."<sup>34</sup> Moreover, they have

---

<sup>31</sup> Fraunce, 6-9.

<sup>32</sup> *Ibid.*, 8-9 and 14-15.

<sup>33</sup> *Ibid.*, 14-17.

<sup>34</sup> *Ibid.*, 20-1.



particular connotations of ancientness and secret wisdom.<sup>35</sup> So far in Bacon, Daniel, and Fraunce, we have seen that hieroglyphs share characteristics with emblems and *impreses*, but they differ in their Egyptian origins and supposedly natural correspondence between meaning and sign.

This “affinity with the things signified,” to return to Bacon’s phrase, relates hieroglyphs to the debate over natural versus conventional signs and the search for “natural language” or “real characters” that was part of intellectual culture in sixteenth- and seventeenth-century Europe.<sup>36</sup> Natural language or real characters are signs that have a direct relationship to their referents, either because the symbol literally looks like what it represents, or because it reflects the intangible essence of what it represents. Many early modern scholars viewed hieroglyphic writing as a type of natural language, as when Bacon notes that in hieroglyphs “the note hath some similitude or congruity with the notion.”<sup>37</sup>

The linguistic puzzle of constructing or reconstructing a truly natural language had both religious and epistemological implications. For many scholars, this project meant recovering or reconstructing the prelapsarian or “adamic” language, and many early modern thinkers considered hieroglyphs to have a central place in this quest. As critic Thomas C. Singer notes, however, early modern ideas about natural language were hardly monolithic. Singer makes a chronological distinction between earlier efforts, which focused on the theological implications of natural language, and later thought,

---

<sup>35</sup> Ibid., 28-9 and 34-5.

<sup>36</sup> See, among others, James Knowlson, *Universal Language Schemes in England and France 1600-1800*; Umberto Eco, *The Search for the Perfect Language*, trans. James Fentress (Cambridge, Mass.: Blackwell, 1995); Thomas C. Singer, “Hieroglyphs, Real Characters, and the Idea of Natural Language in English Seventeenth-Century Thought,” *Journal of the History of Ideas* 50.1 (1989): 49-70.

<sup>37</sup> Bacon, 231.

which focused more on a “philosophical language” by which scholars from all nations might communicate with each other:

While early humanists conceived of a natural language as being related in some way to the language spoken by Adam in the Garden of Eden and to animal symbolism, many proponents of a natural language in the mid-seventeenth century conceived of it either as a universal language that might be understood by all men or as a philosophical language made up of ‘real characters,’ whose composition would mirror the composition of and relation between the things of the world<sup>38</sup>

Singer notes, moreover, that hieroglyphs are an intellectual site in which these ideas converge: “In England hieroglyphs, universal languages, real characters, philosophical languages, and natural language form a spectrum of related ideas during the late Renaissance and the first three-quarters of the seventeenth century [...] within the culture as a whole these languages provided mutual support for one another.”<sup>39</sup> My project is not primarily concerned with early modern universal language endeavors, but rather with what it means that hieroglyphs are conceptually associated with such endeavors. As Singer suggests here, early moderns saw the ancientness of hieroglyphs as aligned not only with the Egyptian tradition but also with the prelapsarian origins of human expression itself. In either case, these origin stories align hieroglyphic knowledge with ancient secrets and special insight into the inner workings of the natural world.

At the same time as early modern authors associated hieroglyphs with natural language, however, the symbols also inevitably have something conventional or arbitrary about them. In his survey of Italian emblem theory, Abraham Fraunce notes that some theorists reject hieroglyphs because they are the obscure relics of a foreign culture:

---

<sup>38</sup> Singer, 51.

<sup>39</sup> Ibid., 66.

...for hieroglyphs are the invention of the Egyptians, not of nature. But because many, or rather very many, of the hieroglyphs which I have described in previous books find their source in the most secret inward parts of nature herself and have been acclaimed for some time in the literature and tongues of all nations, let us retain them and acquire from them the 'bodies' and images of *imprese*; let us abandon the others which are more abstruse and contain some Egyptian mysteries or other, but have no connection with the workings of nature.<sup>40</sup>

In this critique, Fraunce notes that *some* hieroglyphs are purely “the invention of the Egyptians” - that is, conventional signs whose original meaning was situated within Egyptian philosophy and culture - but *other* hieroglyphs are more like natural signs that “find their source in the most secret inward parts of nature herself.” For the purposes of his treatise on *imprese*, Fraunce rejects the influence of those “abstruse” hieroglyphs, arguing that if *imprese* are to adopt and incorporate hieroglyphs, they should be easier to understand and thus natural, rather than conventional (since one idea about natural signs is that they require no particular expertise to interpret them, because everyone “understands” an image of the natural world).

One contention of this dissertation is that hieroglyphs are a category fraught with paradox. They are natural *and* yet arbitrary, obvious *and* arcane. Fraunce’s discussion of Egyptian hieroglyphic origins assumes that Egyptians themselves were uniquely positioned to understand the “secrets inward parts of nature herself.” Thus, signs that are “the invention of the Egyptians” are nonetheless natural or real characters.

Fraunce’s perspective is a result of the connotations of ancient Egypt to an early modern European mind. Erik Hornung and Erik Iversen’s accounts of early modern ideas about Egyptian wisdom are particularly useful for understanding the cultural context of

---

<sup>40</sup> Fraunce, 34-5.

hieroglyphs.<sup>41</sup> In *The Secret Lore of Egypt*, Erik Hornung coins the term “egyptosophy” to describe “the study of an imaginary Egypt, viewed as the profound source of all esoteric lore.”<sup>42</sup> Hornung’s definition elegantly captures the philosophical context within which early modern readers would have placed hieroglyphs, and his book unfolds the story of how legitimate Egyptian lore became transformed through processes of inaccurate representation and imaginative addition into the hermetic-esoteric material that would have been familiar to early modern authors. When early modern emblem theorists and authors thought about ancient Egypt, they thought not only of the pyramids or historical examples of hieroglyphs on Roman obelisks, but also of what we now recognize as inaccurately-attributed texts like the famous Emerald Tablet of alchemical secrets, or quasi-mythical figures like Hermes Trismegistus. Thus, hieroglyphs cannot be separated from the loosely-defined esoteric tradition invoked by their association with Egypt.

In *The Myth of Egypt*, Erik Iversen tells a similar story of the early modern fascination with Egypt. Iversen notes that the interest in late antique authors like Iamblichus and Plotinus during the Florentine Neoplatonist revival resulted in a lasting connection between hieroglyphs, Neoplatonic philosophy, and transcendent mysticism. Iversen writes: “Egyptian wisdom, Neo-Platonic philosophy, and the humanistic studies,

---

<sup>41</sup> See also J.R. Harris, *The Legacy of Egypt* (Oxford: Clarendon Press, 1971), Garth Fowden, *The Egyptian Hermes: A Historical Approach to the Late Pagan Mind* (Princeton: Princeton University Press, 1993), Jan Assmann, *Moses the Egyptian: The Memory of Egypt in Western Monotheism* (Cambridge: Harvard University Press, 1998), and Edgar Wind, *Pagan Mysteries in the Renaissance* (London: Faber, 1968). See also Erwin Panofsky’s description of Dürer’s hieroglyphic inspiration for the triumphal arch for Maximilian I: “Egypt, the home of sacred mysteries, had always held a strange fascination for the erudite and would-be erudite, and the humanists greeted with enthusiasm a new ideographic language which could express a whole sentence by a series of images and was both international and esoteric” (173).

<sup>42</sup> Erik Hornung, *The Secret Lore of Egypt: Its Impact on the West* (Ithaca: Cornell University Press, 2001), 3.

became in this way consecutive links in an unbroken chain of tradition, joined together and united with Christianity by their common aim: the knowledge and revelation of God.”<sup>43</sup> Hieroglyphs thus become freighted with the semantic weight of Egyptian wisdom, and their “true significance thus revealed was nothing less than an insight into the very essence of things [...] made possible by an immediate contact between the human intellect and the divine ideas.”<sup>44</sup> We see Hornung’s and Iversen’s “Egyptosophy” illustrated in Bacon’s reference to the Egyptians as “one of the most ancient nations,” Daniel’s explanation of the Egyptians’ development of symbolic visual expression, and Fraunce’s grudging acknowledgement of signs that “contain some Egyptian mysteries or other.” Hieroglyphs, thus, were thought to be both unmediated representations of nature and reflections of the Egyptian’s unique insight into the natural world.

Nevertheless, Fraunce’s measured critique of the Egyptian wisdom tradition suggests that, like attitudes toward natural language, attitudes toward Egyptian wisdom were not monolithic or uncritical. Fraunce acknowledges that some people might reject hieroglyphs as purely “the invention of the Egyptians,” and he does not view this rejection as entirely unreasonable. In his acknowledgement that some hieroglyphs are culturally-bound relics while others reflect the “secret inward parts of nature herself,” he strives to find a middle ground between viewing all hieroglyphs as simply arbitrary signs and uncritically accepting the Egyptian wisdom tradition.

These issues of arbitrary vs. natural signs and the extent to which the early modern conception of Egyptian wisdom informs the hieroglyphic tradition both touch upon what

---

<sup>43</sup> Erik Iversen, *The Myth of Egypt and its Hieroglyphs in European Tradition* (Princeton: Princeton University Press, 1993), 60.

<sup>44</sup> *Ibid.*, 64.

Thomas C. Singer calls “a problem of representation.”<sup>45</sup> The writings of Bacon, Daniel, and Fraunce suggest that hieroglyphs were thought of as “natural” signs, that is, direct and unmediated representations of true meaning, yet notions of “naturalness” were complicated by the potential origins of hieroglyphs as reflections of ancient Egyptian mystical knowledge, as echoes of prelapsarian written language, or as expressions of the mind of individual authors. Nonetheless, these signs were thought to allow special access to a hieroglyphic mode of knowledge, enabling the reader to attain unique philosophical insight. I turn next to the mechanisms of reading, the recursive processes of interacting with a hieroglyphic text that early modern readers conceived of as potentially transformative.

## II. ENGAGING WITH HIEROGLYPHS AS ALCHEMICAL PRACTICE

Early modern alchemical discourse provides a useful context for deepening our understanding of hieroglyphic reading practices, both because alchemical texts were often rife with symbolic images and because the concept of spiritual alchemy enables us to understand how hieroglyphic interpretation was thought to change readers. As Alison Adams and Stanton J. Linden write in their introduction to *Emblems and Alchemy*, alchemical texts often rely heavily upon emblems, and “alchemical representation, like the traditional emblem, is characteristically a fusion of the verbal and the visual, word and picture.”<sup>46</sup> Even alchemical texts that lack illustrations often rely upon highly visual, figurative language, but many illustrated works include symbolic images that represent alchemical processes or hieroglyphic signs denoting alchemical substances. Moreover,

---

<sup>45</sup> Singer, 50.

<sup>46</sup> Alison Adams and Stanton J. Linden, introduction to *Emblems and Alchemy* (Glasgow: Glasgow Emblem Studies, 1998), v.

alchemical texts often display the same the paradoxical impulses of revelation and concealment that characterize hieroglyphic expression. On several levels, then, a consideration of alchemical rhetoric and spiritual alchemy provides a model for how hieroglyphic texts were thought to transform the individual and communal identities of their readers.

One need only see an example like the illustration from Michael Maier's 1617 *Atalanta Fugiens*, a book of alchemical emblems, to confirm the close relationship between hieroglyphs and alchemy (Figure 1). Moreover, in this *particular* alchemical emblem we can see the confluence of emblem and hieroglyph – and material and spiritual alchemy – that characterize the early modern hieroglyphs examined in this project. Maier's emblem 21 follows the traditional emblem pattern of an image accompanied by a motto, but the image itself has much in common visually with the geometric hieroglyphs of Howes's *Mysterium* diagram, Dee's monad, and Browne's quincunx. Moreover, the image reflects a simultaneous concern with material and spiritual alchemical practice. The emblem describes the role of "squaring the circle" in the process of creating the philosophers' stone, and the imagery of the man and woman inscribed within a series of geometric figures represents the alchemical trope of the "chemical wedding" of mercury and sulphur. Yet the image has a spiritual valence as well: as Hereward Tilton writes, Maier uses "an occult geometry to describe a 'spiritual' body that is the image of divine perfection, uniting opposites within itself."<sup>47</sup> Maier's emblem represents not only the technical processes of metallic refinement but also the perfectibility of the individual human soul.

---

<sup>47</sup> Hereward Tilton, *The Quest for the Phoenix : Spiritual Alchemy and Rosicrucianism in the Work of Count Michael Maier (1569-1622)* (Berlin: Walter de Gruyter, 2003). 187.



**Figure 1: Emblem 21. Michael Maier, *Atalanta Fugiens* (Kassel: Bärenreiter, 1964), <http://books.google.com/books?id=VuoQAQAIAAJ&pg=PP1#v=onepage&q&f=false>.**

Like Maier's alchemical emblem, the hieroglyphs examined in this dissertation operate on at least two levels. They claim to describe or reveal occult properties of the natural world, or to teach specific material processes for manipulating natural objects. At the same time, they seek to transform the reader through revelatory understanding, a process which has implications beyond self-improvement for the single reader, reaching outward to larger-scale social or spiritual transformation. How does this transformation occur, though? There is a danger that this process might seem so vague and mysterious as to be incomprehensible, but one aim of this project is to situate the transformative act of hieroglyphic engagement within an early modern epistemological and alchemical context.



The hieroglyphs that I will examine are often paired with text, yet the act of engaging with a hieroglyph is not exactly equivalent to “reading.” Hieroglyphic engagement, as characterized in the examples that this project will examine, is less like *interpreting* a text and more like *experiencing* a text. Even “experiencing” might be too passive a verb: in Dee’s *Monas Hieroglyphica*, the “reader” is meant to actively manipulate the text’s central symbol, and in Jonson’s *Mercury Vindicated*, both the masquers and the audience *participate* in the creation of the hieroglyphic text through their dances.

Two concepts – one rhetorical and one drawn from occult philosophy – can help us to theorize hieroglyphic engagement. The first is the concept of *enargeia*, a rhetorical figure in which an author seeks to achieve “the graphic portrayal of living experience” through vivid, visually-engaging language.<sup>48</sup> Drawing upon Erasmus’ definition of *enargeia*, Michael Bath in *Speaking Pictures* applies this concept to emblems, noting that “emblems persuade the reader that he has ‘seen,’ not ‘read’ [...] the meaning of an emblem,” and that “an appeal to the eye was felt to be a more immediate and direct route to the reader’s memory and his understanding.”<sup>49</sup> In hieroglyphs, perhaps even more than emblems, it is through visual engagement with the symbol that the reader gains access to meaning.<sup>50</sup> By conveying their meaning through sight rather than words, hieroglyphic

---

<sup>48</sup> Gerard Paul Sharpling, “Towards a Rhetoric of Experience: the Role of Enargeia in the Essays of Montaigne,” *Rhetorica: A Journal of the History of Rhetoric* 20.2 (Spring 2002): 173.

<sup>49</sup> Bath, 55.

<sup>50</sup> See also Paul Julian Smith, *Writing in the Margin: Spanish Literature of the Golden Age* (Oxford: Clarendon Press, 1988), and Terence Cave, “*Enargeia*: Erasmus and the Rhetoric of Presence in the Sixteenth Century,” *L’Esprit Créateur* 16 (1976): 5-19. Smith writes: “*Enargeia* seems to correspond, in its initial movement at least, to an ingenuous and impassioned desire for the union of language and concept which will transcend both terms and embody a primal, linguistic plenitude. In other words, a rhetoric not of communication (relative and determinate) but of presence (absolute and integral)” (46).

reading becomes an experiential process, purporting to offer an unmediated connecting between sign, meaning, and the reader's understanding.

The rhetorical concept of *enargeia* allows us to understand how visual representation could be thought of as a uniquely direct mode of apprehension, but how might this process of apprehension actually work? Stephen Clucas's concept of *inspectival knowledge* offers a model of how meaning was thought to have been transmitted from hieroglyph to reader/audience. Drawing on a twelfth-century text of Solomonic magic owned by John Dee, Clucas argues that the visual components (such as the seals detailed in the *Liber Misteriorum*) and the "visual logic" of Dee's angelic conversations were intended to work through an "inspectival" process, in which physically looking at an object or image, combined with inward meditation, results in "revelatory access" to meaning.<sup>51</sup> Clucas writes that this mode of knowledge "involves a kind of seeing which involves both physical sight and 'the eyes of faith' (or spiritual vision) and requires the ocular infusion of prophetic 'mysteries' or revealed knowledge," and that the "inspectival" process applies not only to images, but also to "the highly visual language of parable, allegory, and visionary narrative."<sup>52</sup> As we can see in Figure 2, an illustration used by Clucas that depicts a scholar receiving knowledge through "magical inspection," the inspectival knowledge is also embodied knowledge. The magical adept in Khunrath's image acquires knowledge by prostrating himself before symbolic texts, recalling Craik's characterization of reading as a "material transaction."

---

<sup>51</sup> Stephen Clucas, "'Non est legendum sed inspicendum solum': Inspectival knowledge and the visual logic of John Dee's *Liber Mysteriorum*," in *Emblems and Alchemy*, ed. Alison Adams and Stanton J. Linden (Glasgow: Glasgow Emblem Studies, 1998), 112. Clucas describes Dee's monas as working through this type of "inspectival" process, "in which the eponymous magical character or talisman was [...] to be 'inspected' rather than analyzed" (121).

<sup>52</sup> *Ibid.*, 126.

If *enargeia* describes the seeming unity of sign and meaning that characterizes hieroglyphs, then inspectival knowledge explains the method by which the reader/operator accesses and activates that meaning. Clucas notes, interestingly, that this idea of “visionary infusion” gives the reader less agency: the sign’s fixed meaning influences and works upon the reader, rather than the other way around.<sup>53</sup> Hieroglyphic engagement is a two-way-street of agency: the reader must be prepared through study or inherent receptivity, and he or she must go through the motions (whatever those may be) of “actuating” the hieroglyph, yet at some level the hieroglyph infuses the receptive

reader with meaning.

“Reading,” thus, is too narrow a term to describe the complex interaction between reader, symbol, and meaning that occurs when someone engages with a hieroglyphic text. At the very least, the reader must have an active understanding of the symbol’s import (as we will see in Edward Howes’ expectation for his friend John Winthrop, Jr.’s understanding of the *Mysterium*

diagram). At its most extreme, this



**Figure 2:** Image from Heinrich Khunrath’s *Amphitheatrum Sapientiae Aeternae* (1609), <http://books.google.com/books?id=mBPMkq8NFg8C&pg=PR3#v=onepage&q&f=false>.

<sup>53</sup> Ibid., 121.

active understanding becomes active participation, in the form of Jonson's masque participants and audience joining together in dance: through ritualized dance (not unlike ceremonial magic), both observers and operators act out a hieroglyphic performance, and through their actions are transformed.

This transformation is crucial, and is the reason why the notion of spiritual alchemy, broadly defined as personal or even political refinement, unifies these seemingly disparate texts. The knowledge imparted by these early modern hieroglyphs is not simply theoretical, and does not simply augment the reader's store of knowledge. The ultimate result of hieroglyphic engagement, I argue, is *transmutation*: of the individual reader/audience member, but also potentially of society as a whole. Alchemy is not just a metaphor for the action that occurs when readers engage with hieroglyphics. Rather, hieroglyphic reading is in itself a kind of spiritual alchemy.

As cultural historians have long noted, an understanding of alchemy as operating on immaterial as well as material levels was commonplace in sixteenth- and seventeenth-century England.<sup>54</sup> Early modern alchemy inevitably made claims not only to the transmutation of metals or other chemical processes, but also to the inward purification of the alchemist. Lyndy Abraham writes that alchemical emblems “simultaneously represent a ‘chymical’ substance and a psychic truth” and notes, “From the earliest treatises, alchemy had been concerned with both the physical and metaphysical [...] such a unified

---

<sup>54</sup> The notion of spiritual alchemy has been discussed extensively in scholarly work on the history of science and the history of ideas. See, for instance, Robert M. Schuler, “Some Spiritual Alchemies of Seventeenth-Century England,” *Journal of the History of Ideas* 41 (1980): 293-318; Bruce Janacek, *Alchemical Belief: Occultism in the Religious Culture of Early Modern England* (University Park, PA, Penn State University Press: 2011); B.J.T. Dobbs, *Alchemical Death and Resurrection: The Significance of Alchemy in the Age of Newton* (Washington, D.C., Smithsonian Institution Libraries: 1990); Neil Kamil, *Fortress of the Soul* (Baltimore: Johns Hopkins University Press, 2005); Urszula Szulakowska, *The Alchemy of Light: Geometry and Optics in Late Renaissance Alchemical Illustration* (Leiden: Brill, 2000).

philosophical experience of matter existed beyond the scope of the rational mind, and could only adequately be expressed in symbol, emblem, paradox, and allegory.”<sup>55</sup> Peter Levenda describes early modern alchemy (specifically in the Rosicrucian text *The Chymical Wedding of Christian Rosenkreuz*) as “a mutually reinforcing system of inner transformation and outer chemical process.”<sup>56</sup> Spiritual alchemy, I suggest, offers a historically-grounded model for the kind of readerly refinement that hieroglyphs were thought to enable.

Although alchemical writing and practice inevitably had a spiritual valence, this is not to say that early modern thinkers had a uniform idea of what spiritual alchemy entailed. At the most extreme end of the spectrum were those who saw material alchemy as a fruitless discipline and saw only figurative value in an alchemical analogy of spiritual betterment.<sup>57</sup> Most people were less skeptical of the claims of material alchemy and saw the connection between material and spiritual practice as more integral, although to varying degrees.<sup>58</sup> As Bruce Janacek notes in his recent *Alchemical Belief*, spiritual alchemy entailed creating the philosophers’ stone in order to “redeem ‘corrupted’ matter and therefore possibly - hopefully - transform and restore the entire natural world to its

---

<sup>55</sup> Lyndy Abraham, *A Dictionary of Alchemical Imagery* (Cambridge: Cambridge University Press, 1998), 99.

<sup>56</sup> Peter Levenda, *Stairway to Heaven: Chinese Alchemists, Jewish Kabbalists, and the Art of Spiritual Transformation* (New York: Continuum, 2008), 207.

<sup>57</sup> See, for example, Bruce Janacek’s discussion of Patrick Scot’s *Tillage of Light* (1623): “Scot thought it was fine to believe in alchemy metaphorically, that is, to believe that individuals could be transformed and that even the bases of individuals might be redeemed in the eyes of God, but he argued that it was at best unhelpful and at worst spurious to believe that actual transmutations of metal were possible and that these transmutations could emanate to other properties in the natural world.” Janacek, 43.

<sup>58</sup> See Janacek’s chapter on Francis Bacon for an example of someone who criticized alchemy on numerous grounds, yet whose work still cannot be said to universally condemn the disciplines of alchemy and occult philosophy.

pristine, prelapsarian state, when humanity and nature were in perfect harmony.”<sup>59</sup> For others, working with physical substances was less important than a quest for “spiritual enlightenment” via alchemically-directed meditation.<sup>60</sup> As Robert M. Schuler has noted in his discussion of pluralistic “spiritual alchemies,” however, “In a period of such religious heterogeneity [...] the term ‘spiritual alchemy’ is useful only in a very general way.”<sup>61</sup> I would suggest, though, that the flexibility of this concept makes it more rather than less useful: it thus becomes possible to locate and contextualize different models of the spiritual alchemical transaction in the different hieroglyphic texts this project examines.

Such notions crossed denominational borders, and people of widely varying theological viewpoints “could find in alchemy something to harmonize with their very different religious beliefs and experiences.”<sup>62</sup> The connection between, for instance, Paracelsian philosophy and medical practice and Puritanism has been well-documented, and individuals from every conceivable early modern religious proclivity drew upon various aspects of the alchemical and hermetic traditions.<sup>63</sup> Acknowledging the diverse definitions of spiritual alchemy in the early modern period is important, and my project does not conceive of spiritual alchemy as a monolithic concept. Each chapter situates the

---

<sup>59</sup> Janacek, 3.

<sup>60</sup> See Schuler’s reading of the bylaws of a seventeenth-century secret society (294-303).

<sup>61</sup> Schuler, 318. Schuler is speaking specifically about seventeenth-century England, but his point applies more broadly to sixteenth- and seventeenth-century Europe as a whole.

<sup>62</sup> *Ibid.*, 294.

<sup>63</sup> On Paracelsian alchemical and medical thought and Puritanism, see P.M. Rattansi’s seminal essay, “Paracelsus and the Puritan Revolution,” *Ambix* 11 (1963):24-32, and more recent scholarship, including J. Andrew Mendelsohn, “Alchemy and Politics in England 1649-1665,” *Past and Present* 135 (1992): 30-78; Neil Kamil, *Fortress of the Soul* (Baltimore: Johns Hopkins UP, 2005); Walter W. Woodward, *Prospero’s America: John Winthrop, Jr., Alchemy, and the Creation of New England Culture, 1606-1676* (Chapel Hill: University of North Carolina Press, 2010).

author's ideas about material and spiritual alchemical practice within his own particular cultural and philosophical context.

The process of spiritual alchemy offers a model for transformative reading, but this conceptual parallel is not the only point of contact between alchemy and hieroglyphs. Alchemical practice shares with hieroglyphic discourse its characteristic tension between revelation and concealment. As Seth Ward and John Wilkins wrote in the mid-seventeenth century, “‘*Hieroglyphicks* [...] were invented for *concealment* of things,’ rather than ‘for *explication* of our minds and notions.’”<sup>64</sup> Erik Hornung's definition of “esoteric” from his discussion of the Egyptian wisdom tradition also evokes some of the key characteristics of the early modern hieroglyph: “Esoteric matters have to do with hidden, often deliberately concealed truths that can be grasped only through intuition or revelation and that elude any and all experimental verification.”<sup>65</sup> Pamela Long's discussion of openness and secrecy in scientific and occult thought provides another useful perspective on the paradoxical impulses toward openness and secrecy. Writing about an earlier hieroglyphic moment, the late antique neoplatonism of authors like Iamblichus (who in turn directly inspired the fifteenth-century Florentine neoplatonists, feeding directly into the early modern hieroglyphic tradition), Long describes hieroglyphic writing as particularly suited to denoting esoteric knowledge: “[they] valued in particular the process by which one gained an understanding of these symbols [...] that person would then understand how much righteousness and truth these symbols

---

<sup>64</sup> Allen G. Debus, *Science and Education in the Seventeenth Century: The Webster-Ward Debate* (New York: American Elsevier Publishing Company, 1970), 212.

<sup>65</sup> Hornung, 3-4.

contained when they were freed from their enigmatic forms.”<sup>66</sup> For Long, cloaking arcane knowledge within specialized, symbolic discourse is a way of establishing community bonds among like-minded thinkers: “Secrecy would have served to reinforce the intense closeness of the group, giving them a bond of shared knowledge from which outsiders were excluded.”<sup>67</sup> In general, alchemical and hieroglyphic texts are similarly concerned with constructing an elite community of the initiated.

This community-building impulse in both alchemical and hieroglyphic discourse seeks to conceal meaning from unworthy readers and reveal it to the worthy. Like Long’s description of esoteric bonds, Umberto Eco portrays hieroglyphs as creating a community through the exclusion of the supposedly unworthy: “These symbols were *initiatory*, because the allure of Egyptian culture was given by the promise of a knowledge that was wrapped in an impenetrable and indecipherable enigma so as to protect it from the idle curiosity of the vulgar multitudes.”<sup>68</sup> Similarly, what Diana Galis calls “the hieroglyphic method” consists of revealing meaning “to the knowledgeable few, while concealing it from the ignorant multitude.”<sup>69</sup> This divide between worthy and unworthy reveals a profound anxiety about the “vulgar” or “ignorant” masses acquiring hieroglyphic knowledge. In the chapters to come, we will see this anxiety in Dee’s fear of what might happen “if vulgar men were listening” to his hieroglyphic explication and Howes’ worry that his letters might “fall into vnworthie hands.”<sup>70</sup> Even the characteristic divide between

---

<sup>66</sup> Pamela Long, *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to the Renaissance* (Baltimore: Johns Hopkins University Press, 2001), 57.

<sup>67</sup> *Ibid.*, 63.

<sup>68</sup> Eco, 154.

<sup>69</sup> Galis, 364.

<sup>70</sup> C.H. Josten, “A Translation of John Dee’s ‘Monas Hieroglyphica’ (Antwerp, 1564), with an Introduction



masque and antimasque in Jonson's *Mercury Vindicated* indicates a concern with purging the unworthy auditors and preparing the worthy audience members for the masque's perfecting message.

In each of the texts I examine, the question of how to distinguish worthy from unworthy readers is a vexed one, as well as whether worthiness is an inherent or learned quality. In hieroglyphic discourse, *including* the worthy readers is just as important as *excluding* the vulgar. Early modern emblem theorists and scholars interested in recovering or reconstructing a universal language saw hieroglyphs as a language that would be equally intelligible to learned men of all countries, uniting the international scholarly community.<sup>71</sup> This impulse, too, will be unfolded in my readings of Dee, Howes, Jonson, and Browne. In all four texts (although in different ways, and for different ends), I argue that the authors seek to unify and perfect a larger community of the worthy through their deployment of hieroglyphic knowledge.

Whether worthiness as a reader or as an alchemical adept is innate or can be learned is a complicated question: the answer is different for different texts, and in some cases it remains an unresolved paradox. Scholars of spiritual alchemy have frequently made an analogy between the successful alchemy and Protestant election. Describing this attitude among English Puritan alchemists, Schuler writes: "They identified the Calvinist *electus* with the alchemical *adeptus*. Just as the elect were chosen by God for salvation, so the *adepti* were not merely initiated by other *adepti*, but were granted a spiritual perfection (sometimes through a direct revelation) which in turn made them worthy of the

---

and Annotations," *Ambix* 12 (1964): 138-9; and the Winthrop Papers, *Collections of the Massachusetts Historical Society*, vol. 6, ser. 4. (Boston: Printed for the Society, 1865), 501.

<sup>71</sup> Diana Galis describes the "universal application" of hieroglyphs as "secret yet expressive of a tradition of wisdom accessible to all sufficiently learned men" (366-7).

knowledge of the philosopher's stone."<sup>72</sup> Similarly, Janacek claims that not only did early modern adepts believe that they were worthy of alchemical secrets, but also they saw a larger spiritual role for their alchemical practice: "Adepts in early modern England believed that they were uniquely, even divinely, ordained to re-create the harmony that existed between humanity and nature before the Fall."<sup>73</sup> In some alchemical communities, in other words, technical success was aligned with spiritual election, with the suggestion that, just as humans cannot influence whether they are among the elect, no amount of preparation and learned skill could make a practitioner into an alchemical adept.

In other cases, though, failure to achieve alchemical results like successful transmutation could be blamed on lack of sufficient moral and spiritual preparation on the part of the alchemist. As Pamela Long writes, for "both alchemical and Neoplatonist writers [...] belief that the moral integrity and purity of the knower or magical operator were crucial [...] knowledge of the world and of the cosmos intersected with the knower's purity of soul."<sup>74</sup> That is, sometimes the knowledge of the adept was not akin to spiritual election, and could indeed be attained through the alchemical equivalent of "works" rather than "grace." The hieroglyphic examples that this project will consider grapple with similar questions: Can the reader/audience attain transcendent understanding of the hieroglyph with sufficient preparation? Or must they be inherently worthy to be "successful" readers? In an alchemical experiment, success (at least insofar as most early modern scholars believed) was dependent upon the practitioner performing everything

---

<sup>72</sup> Schuler, 303-4.

<sup>73</sup> Janacek, 3.

<sup>74</sup> Long, 173.

perfectly *and* being spiritually prepared for the work's fulfillment. The results, in other words, are dependent upon the raw materials, the process, and the practitioner himself or herself. Hieroglyphic reading, I suggest, works in a similar way, and in fact functions as a kind of spiritual alchemy, in which worthy readers elevate themselves to more elite levels of understanding through the interpretive experience.

### III. ACTUATING HIEROGLYPHIC KNOWLEDGE

A close-reading of a key passage from John Dee's *Monas Hieroglyphica* serves to illustrate the complex processes and potential of hieroglyphic reading. In the preface to his dedicatee, Holy Roman Emperor Maximilian II, Dee describes the special knowledge that he claims is locked within his monadic symbol, and explains the process of "actuating" or completely understanding it:

I know well (O King) that you will not shrink away in horror if I dare proffer this magic parable in your royal presence. This our hieroglyphic monad possesses, hidden away in its innermost center, a terrestrial body. It teaches without words, by what divine force that terrestrial body should be actuated. When it has been actuated, it is to be united (in a perpetual marriage) to a generative influence which is lunar and solar, even if previously, in heaven or elsewhere, they were widely separated from that body. [...] When that advance has been made, he who fed [the monad] will first himself go away into a metamorphosis and will afterwards very rarely be held by mortal eye.<sup>75</sup>

In unpacking this example, we may begin to explore how hieroglyphic authors identify and address their readers, how authors intend their readership to interpret the text (using text broadly to mean anything interpretable, including images and movements), and how readers might engage with the text both in ways that authors intend and those that they might not. *Defining readership* is a key idea for this project: the modes of engagement with his text that Dee mentions are surprising and curious. Some people might "shrink

---

<sup>75</sup> Josten, 135-7.

away in horror” from this book, but he believes Maximilian will not, being such a laudable and exceptional person. The book, in a way, tests for its own ideal reader who can “actuate” the symbol, because that person will change into another order of being entirely, in what Dee calls “the true invisibility of the *magi*.” In later chapters, we will see that each author defines and addresses a supposedly worthy readership, while excluding the unworthy.

In most cases, as in the case of *Monas*, this construction of a worthy readership is inextricable from the work’s socio-political and cultural contexts. This excerpt comes from Dee’s lengthy dedicatory letter to Maximilian II, Holy Roman Emperor, which takes up almost a third of the length of the whole book. In my longer analysis of *Monas*, I will consider the context of Dee’s extravagant praise of Maximilian, his presentation of the book to Elizabeth, and his anxiety about readership expressed in the epistle to the printer. His language also places *Monas* within the discipline of occult philosophy, with the readership issues that entails.

Dee’s concern with readership extends as far as prescribing how readers should engage with his text. Dee describes what the process of “actuation” should look like, in which the terrestrial body (i.e. the small dot in the center of the monad) “is to be united” with the lunar and solar influences to particular ends. The passive periphrastic construction in “*Lunaris & Solaris est (Matrimonio perpetuo) copulanda*” denotes obligation on the part of the reader. He expects, even commands, his readers to come to certain conclusions.

Dee distinguishes his *Monas* from other texts in a fundamental way, though; in calling the monad a “magic parable,” he emphasizes the way in which hieroglyphic

discourse *works* like parable. Scholars of early modern emblematic expression have noted the parallels between such symbolic discourse and biblical parable; Diana Galis, for instance, notes that in his *Hieroglyphica*, Valeriano connects the “hieroglyphic method” of revealing while concealing to the way in which “Christ himself used hieroglyphic when he spoke in parables.”<sup>76</sup> Even though Dee’s monad is an image, not a story, it nonetheless functions like a parable, and moreover, a *magic* parable, in that Dee intends his image to influence the reader via its occult properties. It is through the dynamic process of seeing, absorbing, and interpreting this magic parable that the monad is “actuated” (a process that functions through similar mechanisms, as we have seen, as spiritual alchemy).

At first glance, one major difference between the monad and a parable – that is, between a single image and a story – is that the image “exists” all at once. There is no narrative built into it. Dee’s deconstruction and reconstruction of the monad in his theorems, however, takes a static image and, setting it in motion, turns it into a narrative. He hints at this in the above excerpt: the references he gives to the “lunar and solar influences” and the “terrestrial center” literally refer to the lines and points of the symbol. The large circle represents the sun, the upper crescent the moon, and the small dot in the middle the earth. “Even if previously” the lunar, solar, and terrestrial components of the monad were “widely separated,” the disassembled parts have a relationship to one another, they influence each other: they can change and be manipulated. The “theorems” that comprise the body of *Monas*, as we shall see, deconstruct the monad into its

---

<sup>76</sup> Galis, 364. See also Michael Bath, who writes: “To understand the connections between rhetorical commonplace, hieroglyphic symbolism, and biblical parable – different though all these things may seem to the modern reader – is to come very close to understanding the activating assumptions out of which the Renaissance emblem was created” (58).

component parts, explicating each part to the reader and enabling the reader to reconstruct the symbol herself.

Reading *Monas* (i.e. looking at this “magic parable”) is not a passive experience, or at least Dee does not intend for it to be so. In this passage, he uses dynamic language like “actuated,” “advance,” and “metamorphosis” to suggest change and activity, certain things coming together and others separating, things becoming visible or invisible. Dee also uses curiously dynamic “feeding” words to describe the monad: “he who fed” (*qui aluit*) the image will reap its rewards. In the omitted part of the passage, Dee describes the monad as something that can be “fed or watered” (*nutriri ... vel irrigari*). These two feeding verbs, *alo* and *nutrio*, can both mean “to feed, nourish, bring up, rear.” Dee portrays the monad as organism to be tended and raised, like a plant. These feeding words suggest what the process of “actuating” the monad is like - gradual and nurturing, yet with a sudden payoff when the task comes to fruition.

The actuation process can be understood in another way as the process of getting to know the monad, which “teaches without words.” Dee claims that his hieroglyph perfectly reflects its meaning so that the reader may experience it directly; that is, the reader’s access to meaning is mediated by the clarity and simplicity of the hieroglyph rather than by potentially obscuring words. Like Clucas’s concept of inspectival knowledge, Dee’s hieroglyph, at least on one level, is intended to be “read” through intuitive understanding rather than rational analysis. Intuition, however, does not entirely describe the mode of knowledge through which Dee expects readers to engage with the monad. In fact, the “feeding” metaphor is more apt: through contemplation of the monad, the reader seeks to elevate his own nature and nourish his own understanding of the

surrounding world. Such transformation is a *process*: it may be *unmediated*, but it is not temporally *immediate*. Earlier, Dee explains that contemplation of the monad can substitute for practical experience, giving the example of scientists who will feel foolish at having spent many cold nights observing the stars or studying the nature of matter, when “here the doctrine of our monad will teach by most certain experience.”<sup>77</sup> Actuation is an experiential process that enables worthy readers to transform themselves.

In a quasi-alchemical process, readers, prepared by both prior study and inherent virtue, transmute themselves through reading, watching, thinking about, or even manipulating the text. This engagement with the central hieroglyph is a process, but the moment of transformative understanding is immediate and revelatory. The monad is the central exemplar of the early modern hieroglyphs that I will consider in this dissertation, in which a symbol functions as the static embodiment of transformation. The ultimate goal of the hieroglyphic is effecting change, or more specifically, perfecting the reader. This hieroglyph, and all those I will examine in this dissertation, is broadly *about* the arrangement of the natural and spiritual worlds – the order of the cosmos and humanity’s place within it. The monad supposedly illuminates a variety of fields: manipulation of metals, society as a whole, the organization of the natural world, but most importantly for my project, the actuation of potential within the individual reader.

#### IV. CHAPTER SUMMARIES

My chapter on Dee’s *Monas Hieroglyphica* comes chronologically first, since the work was published in 1564, but Dee also serves as a touchstone and connector for the other authors I consider. John Winthrop, Jr., purchased a number of volumes, both books

---

<sup>77</sup> Josten, 130-1.

and manuscripts, from Dee's library and used the monad as his personal symbol.<sup>78</sup> In 1634, Winthrop's friend Edward Howes, living in London, writes that he has sent a crate of books to Winthrop in Massachusetts, filled partly with books that Winthrop requested and partly with those of Howes's own choosing, marked with the monad: "Thus much concerning your box of books which you shall receive of Mr. Dillingham directed to you and marked with [the monad]."<sup>79</sup> Sir Thomas Browne was friends with Arthur Dee, John Dee's son. And while Jonson has less direct connection, the stereotypical alchemists and occult philosophers whom he lampoons have a lot in common with Dee (witness Merefool in *The Fortunate Isles*, who hopes to gain knowledge of secret mysteries from his conversations with an "airy spirit" with an angelic name, Jophiel).

Chapter 1 argues that Dee's *Monas*, far from being a purely theoretical text, actually engages deeply with contemporary political and religious concerns, and can be illuminated by considering it within the context of Dee's travels and interactions in 1563 and early 1564, and contemporary religio-political issues such as the possibility of a marriage alliance between England and the Holy Roman Empire. I examine three types of readership for whom the text is intended: the public readership, of whom Dee writes in his letter to the printer Willem Silvius; Elizabeth I, to whom Dee personally presented and explained the book; and Maximilian II, Holy Roman Emperor and the text's dedicatee. Dee conceives of a heroic model of readership, in which the readers are not simply passive receptacles: they influence the text and are influenced by it. Dee's readers

---

<sup>78</sup> See also C.A. Browne, "An Old Colonial Manuscript Volume Related to Alchemy," *Journal of Chemical Education*, reprinted in *Microfilm Edition of the Winthrop Papers*, ed. Majorie F. Gutheim (Dec 1928): 1583-1590; William H. Sherman, *John Dee: The Politics of Reading and Writing in the English Renaissance* (Amherst: University of Massachusetts Press, 1995), 84; and Ronald Stearne Wilkinson, 'The Alchemical Library of John Winthrop, Jr. (1606-1676) and His Descendants in Colonial America, Part IV,' *Ambix* 13 (1966), 139-86.

<sup>79</sup> Winthrop Papers, 496.



help to shape his writing process and the content of *Monas*, yet he also challenges them to transform themselves and to aspire to become what he calls a “singular hero” who might carry the monad’s message into the world. Dee writes that an attentive reader will uncover “greater mysteries” with “cosmopolitical” relevance, which I argue relates to Dee’s repeated references to the “Christian polity” (*Reipublica Christianæ*) and his apparent hope for religious reconciliation among denominations. In addition to alchemical transformation on a physical and personal level, I argue that *Monas* offers a third type of alchemy: macrocosmic societal change via actuating the transformative power of the monad.

While Dee’s hieroglyphic monad points toward a cosmopolitical transformation that is theologically syncretic and politically focused on England’s increasing prominence on the pan-European stage, nearly seventy years later, Edward Howes deploys similar alchemical and hieroglyphic strategies to further a more radical Protestant vision of cosmopolitical transformation. Chapter 2 examines letters written by Edward Howes, a London mathematician and clerk, to his friend John Winthrop, Jr., an early American colonist with an interest in natural philosophy, between 1627 and 1640. In a letter dated January 22, 1627, Howes draws a geometric diagram consisting of a subdivided triangle inscribed within a circle, containing several short phrases in Latin and headed with the title *Mysterium*. On its surface, the central hieroglyph for this chapter seems different from Dee’s monad: it contains words, for one thing, and seems irregularly scribbled on the page rather than carefully crafted. I will argue, however, that Winthrop and Howes engage with hieroglyphic modes of thought that are remarkably similar to those seen in Dee’s *Monas*.

The *Mysterium* diagram unites several threads that run throughout this project: spiritual alchemy (embodied in the words “*Christus et lapis*”), larger socio-political implications (suggested by “*via ad Indos et Indos*,” a reference to the search for the Northwest Passage), and an overall concern with readership, revelation, and concealment indicated by the central triangle of the diagram, which invokes the image of a concealing “cloak” (*clamis*). In this transatlantic correspondence, epitomized by one hieroglyphic image yet born out in letters spanning more than a decade, Howes uses alchemical transformation as a controlling metaphor for “perfection” that is both private and public, personal and global. These letters envision Winthrop and Howes as participants in a unique historical moment, with the capacity to attain a divine “Center of Truth” within their own perfected souls, to forge a uniquely intimate friendship that transcends geographic boundaries, and to aid in the creation of a godly community in New England. I argue for an equation between Howes’s notion of the perfected self and Protestant election, in which spiritually elite American colonists and “elect” readers of alchemical texts experience a similarly special relationship with the divine. Moreover, Howes’s rhetoric suggests a connection between the hope for individual and societal perfection and Winthrop’s quest to find the Northwest Passage, envisioned as a channel facilitating a diffusion of Christ’s spirit throughout the world and a transcendent union of East and West.

In Chapter 3 I turn my attention from the closed circle of private correspondence to the more public venue of masques, from a hieroglyph drawn informally on a personal letter, to a series of hieroglyphs carefully designed to delight and edify a courtly audience. This chapter argues that Ben Jonson’s masques are an embodied hieroglyphic

experience composed of verbal, visual, and kinetic elements, through which the participants are refined in a kind of theatrical alchemy that transforms through engagement with a symbolic system. In much the same way that emblem theorists characterize the relationship between image and motto as like that between the body and the spirit, Jonson meditates on the body/spirit relationship between the imagery and text of the masque, and more broadly between word and meaning. Despite Jonson's claim of privilege for his poetic text, the symbolic weight of the masque culminates in the bodies of the masquers, acting out stylized, hieroglyphic tableaux and supplemented by professional actors delivering the text. The intent of these embodied hieroglyphs is to transmute both the courtly participants and observers into more perfect versions of themselves in a process that I characterize as theatrical alchemy.

Jonson frequently condemns the methods and motivations of practical alchemists, yet the masque itself both performs and valorizes spiritual alchemy. Chapter 3 concludes with an extended reading of *Mercury Vindicated from the Alchemists at Court* that examines the character of Mercury as a living alchemical hieroglyph: an artificial marker whose meaning shifts throughout the masque and who both represents and acts as an agent of transformation. Mercury's speeches criticize both the alchemists who supposedly abuse him and the courtiers who strive to conceal their flaws and rise above their stations, yet I suggest that instead of condemning all alchemy, Jonson represents the physical space of the performance as a theatrical alembic in which the noble masquers dance and are transmuted by the benevolent light and heat of James I, the supreme alchemist. *Mercury Vindicated* moves toward the moment in which the masque participants and the audience unite: the male masquers join with the female audience

members in a dance, under the king's gaze and perfected by the king's transformative presence.

The masques analyzed in Chapter 3 are highly formal and artificial. Although *Mercury Vindicated* claims to represent and uphold the natural order, its hieroglyphic aesthetic inevitably seems more one of conventional rather than natural signs. Chapter 4 considers a text that concerns itself deeply with natural signs, Sir Thomas Browne's 1658 *Garden of Cyrus*. For Browne, every aspect of the sensible world holds potential meaning, and moreover, human creation and divine creation blend together in ways that call into question the distinction between art and nature.<sup>80</sup> In *The Garden of Cyrus*, Browne provides a case study for how to "read" the natural world by tracing appearances of the quincunx, a five-pointed shape that can be connected into a network, finding it in everything from the way ancient Greeks wove their mattresses to the shape of ridges on a pineapple – and significantly, within the human eyes and brain, invisibly influencing the way we perceive the world.

I argue that *Cyrus* models a kind of hieroglyphic reading that reinforces Browne's own intellectual and political framework. Browne's science navigates carefully between rigorous empiricism and a mystically-infused natural philosophy. He encourages "studious observers" to probe deeply into the minutiae of the natural world, but at the same time he recognizes and embraces both the inherent subjectivity of human perception, in contrast to Bacon, who rejects such subjectivity. Moreover, quincuncial reading has "cosmopolitical" implications by training the observator to seek out natural

---

<sup>80</sup> In *Religio Medici*, Browne refers explicitly to the Book of Nature, "that universall and publik Manuscript that lies expans'd unto the eyes of all." Furthermore, he notes that "Art is the perfection of Nature ... In briefe, all things are artificiall, for Nature is the Art of God." See *Selected Writings*, ed. Sir Geoffrey Keynes (Chicago: University of Chicago Press, 1968), 21-2.

and divinely-instantiated hierarchy during the Interregnum. Recent scholarship has sought to trace the hidden threads of Browne's Royalist politics through his work, and my reading of *Cyrus* contributes to this conversation. The quincuncial network that pervades and encloses all natural and civic structures gestures nostalgically toward the lost monarchical order and suggests that such hierarchies are merely submerged, not erased. In this final model of hieroglyphic reading, the hieroglyph resides not only on the printed page but also in the material world, the reader's body, and in the hermeneutic framework itself.

In his work on Michael Maier's alchemical emblems, György Szőnyi notes that contemporary literary scholarship makes it difficult to "set up once-and-for-all valid categories" to describe the functions of and processes of interpreting early modern emblematic images, but this difficulty does not entirely preclude interpretation:

By today it has become a commonplace for scholars of literature and cultural representations, that 'the meaning' is not inherently embedded in the picture or text of an artwork, rather it is generated in the dialogical space between the work and the addressee [...] In spite of the difficulties, I argue that it is possible to come to good approximations about the built-in programs of occult emblematics.<sup>81</sup>

Like Szőnyi's essay on Maier's emblems, this project seeks to interrogate the complex interaction between audience, text, and meaning, thereby illuminating the way in which these particular images "work" to effect change in their readers and in wider society. The texts represented in this project are drawn from a variety of genres, formats, and occasions: private and public, published and manuscript, dramatic and non-dramatic, literary and non-literary. In choosing to group such outwardly disparate works together,

---

<sup>81</sup> György E. Szőnyi, "Occult Semiotics and Iconology: Michael Maier's Alchemical Emblems," in *Mundus Emblematicus: The Neo-Latin Emblem Books*, ed. Karl Emenkel and Arnoud Visser (Turnhout: Brepols, 2003), 318.

my project highlights the commonalities of their hieroglyphic content. In different rhetorical ways and embedded in different historical moments, each chapter enables us to reconstruct the way early modern readers might have been expected to approach the text's central image or images. Examining Dee's monad, Howes' geometric diagram, Jonson's embodied hieroglyphs, and Browne's quincunx, we are able to interrogate the experiential, transformative process of coming to understand such hieroglyphic content. Having distinguished hieroglyphs more carefully from other early modern symbolic categories in this introduction, each chapter seeks to situate the text within its particular cultural context and consider how readers might engage with its central hieroglyph. Through understanding how early modern authors and readers defined, deployed, and engaged with hieroglyphs, and what they believed the transformative possibilities of hieroglyphic discourse were, we may, I hope, gain a deeper, more historically contextualized understanding of early modern reading practices.

## CHAPTER 1

### HIEROGLYPHIC READERSHIP AND “COSMOPOLITICAL” ALCHEMY IN JOHN DEE’S *MONAS HIEROGLYPHICA*

*I know well (O King) that you will not shrink away in horror if I dare proffer this magic parable in your royal presence.*

-- John Dee, *Monas Hieroglyphica* (1564)

Over the course of twelve days in January 1564, John Dee wrote *Monas Hieroglyphica*, a short but ambitious Latin treatise explicating a hieroglyph of his own design, a symbol constructed from a number of common alchemical signs, but intellectually and rhetorically novel. Despite the work’s specialized and frankly obscure content, Dee nonetheless addresses *Monas* to three prominent and distinct audiences: the formal dedicatee, Holy Roman Emperor Maximilian II; Queen Elizabeth, and the reading public. Woven throughout the text are direct addresses to and effusive praise of Maximilian, and elsewhere Dee writes of presenting and explaining his book personally to Queen Elizabeth. In letter to printer Willem Silvius published with *Monas* Dee expresses hope that his book will find a receptive public audience but also anxiety that it will find its way into “the hands of common people” for whom the knowledge he imparts may even lead to atheistic denial of the “mighty works of God.”<sup>1</sup> Addressed to one

---

<sup>1</sup> C.H. Josten, “A Translation of John Dee’s *Monas Hieroglyphica* (Antwerp, 1564), with an Introduction and Annotations,” *Ambix* 12.2-3 (1964), 150-1. All citations from Dee’s text are from the edition by C.H. Josten published in *Ambix*. Josten’s translation has facing page Latin, so I will follow the lead of other

monarch, read by another, and offered for public consumption with seeming trepidation, this text raises more questions than it answers. Why choose to dedicate this work to Maximilian? Why publish such a text at all, a work that Dee explicitly intends to be a revelatory experience for the Holy Roman Emperor? How does Maximilian's relationship with *Monas* differ from Elizabeth's? Why might Dee consider it both crucial and dangerous for the reading public to have access to this work?

We can begin to answer these questions of readership and interpretation by situating *Monas* within its particular political moment as well as within Dee's lifelong agenda to assert England's intellectual, religious, and political centrality on the world stage. Although the purported subject of *Monas* is the philosopher's stone, Dee's readers, not metals, are the real matter to be transmuted. Moreover, different social strata of readers as well as different individual readers may be intended to take away different messages from – or, in other words, to be differently transformed by – Dee's hieroglyphic text. In attending explicitly to the reading experiences of Maximilian, Elizabeth, and the book-buying public, I argue, Dee not only responds to the particular diplomatic and religious circumstances of 1563-4 but also seeks to influence the pan-European “cosmopolitical” structure (to use Dee's word).

As we have already seen in Chapter One, “actuating” the monad entails much more than the passive accretion of knowledge through reading. This context of dynamic interchange between text and reader emerges from early modern ideas about reading in general and about reading alchemical hieroglyphs in particular.<sup>2</sup> In her work on early

---

scholars who have used his edition and refer to pages in *Monas* by both the Latin and English page numbers. Brackets within quotations from *Monas* are Josten's unless otherwise noted.

<sup>2</sup> See the critical works on early modern “book use” discussed in my introduction.



modern alchemical illustration, Urszula Szulakowska describes the transformative power of such symbols, writing that “alchemical visual semiosis from the late sixteenth century is deliberately ‘contaminated’ [...] by the viewer’s imminent physical reality. Thus, the alchemical imagery under present consideration does not merely copy, it also restructures the physical world by forcing a continuum between the viewer’s space and that of the picture.”<sup>3</sup> Dee’s monad can and should be thought of similarly, as not just an abstract metaphysical representation, or even as a set of concrete alchemical instructions, but as a symbol grounded in its particular time, place, and circumstance, and designed to elicit effects based on those circumstances. “Actuation” constitutes a complex spiritual, intellectual, and material transaction between reader and text by which “common” readers become refined as political subjects and elite readers become empowered as “heroic” individuals.

Examining his vexed address to the public readership, I argue that Dee envisions the experience of reading *Monas* as crafting political subjects of a transcendent and syncretic “Christian polity” or *Reipublica Christianae*. Dee believes that this transformative process, though, has the potential to go seriously awry; throughout the text, Dee frets that he has revealed too much and that unworthy readers will understand his secrets, which he thinks would be dangerous not just for the readers themselves, but for society at large. Yet despite prominent protestations that *Monas* is not meant for vulgar eyes, Dee chose to publish it rather than present it privately in manuscript form to

---

<sup>3</sup> Urszula Szulakowska, *The Alchemy of Light: Geometry and Optics in Late Renaissance Alchemical Illustration* (Leiden: Brill, 2000), 2.

the two monarchs.<sup>4</sup> This choice seems deliberate, particularly since many other texts in Dee's *oeuvre* were circulated in manuscript, suggesting that he believes the transformative potential of the monad outweighs the risks of publication.

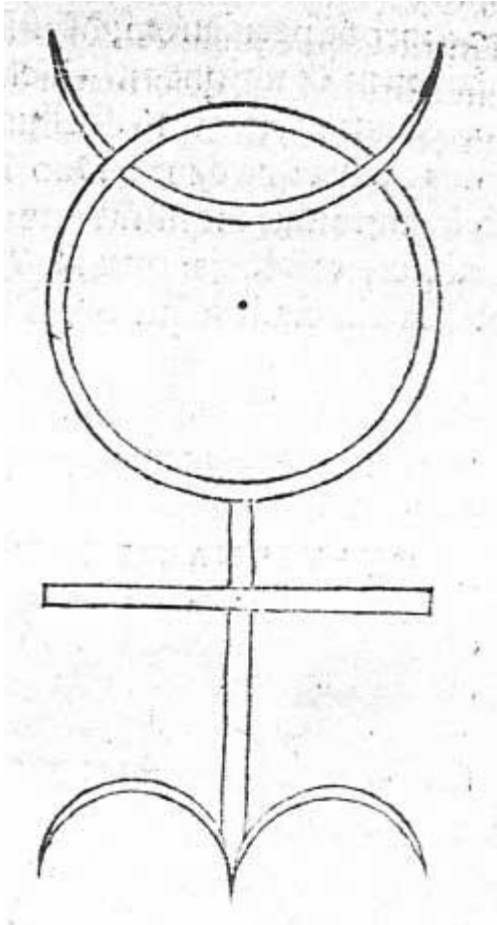
The interchange between author, text, and reader, however, is no less complex at the level of Dee's elite readers. Dee's presentation of *Monas* to Elizabeth reveals a dynamic yet delicate balance of power between the author and his monarch: he views Elizabeth as requiring interpretive instruction to benefit fully from the text, yet this teacher-student relationship is complicated by the apocalyptic significance with which Dee imbues his queen. This apocalyptic significance extends to Maximilian as well, whom Dee figures as an exemplar of personal and political virtue, an individual whose leadership, like that of Elizabeth, could lead to a healing of interdenominational factionalism. These broad intellectual goals, I suggest, become evident through renewed attention to the dedicatory material of *Monas* as well as Dee's travels and England's relationship with the Holy Roman Empire around the time the text was written. It initially may seem strange that an emperor and a queen constitute an appropriate audience for this peculiar, technical work. This chapter, however, will argue that the alchemical message of *Monas* is primarily one of socio-political transformation: reshaping readers and thus reshaping society.

---

<sup>4</sup> Dee's choice to publish is particularly noteworthy, since he frequently chose not to publish his works. In his "Discourse Apologeticall" (1599), a retrospective of his life and writings, Dee lists eight published works, and 48 "unprinted books and treatises" - and suggests that these are only the ones he chooses to name in this published document, because there are "many other books, pamphlets, discourses, inuentions, and conclusions, in divers Artes and matters: whose names, in this Abstract, need not to be notified." See Dee, *A letter, containing a most briefe discourse apologeticall* (London: Peter Short, 1599).

## I. OVERVIEW OF *MONAS HIEROGLYPHICA*: TEXT AND CRITICISM

*Monas Hieroglyphica* is a deliberately secretive and obscure text, the body of which is a rich and multivalent hieroglyph in its own right. Readers have long recognized the difficulty of the text and commented upon it, beginning with one of its earliest



readers, the English clergyman Thomas Tymme (d. 1620), who wrote an unpublished commentary on *Monas* for a friend of his, “That in the perusing this ænigmaticall *Monas*, you might more easily attaine the marrow of the Authors meaning.”<sup>5</sup> More recently, Brian Vickers called it “possibly the most obscure work ever written by an Englishman.”<sup>6</sup> The text’s modern translator, C.H. Josten, describes its interpretive difficulty with an eloquent analogy:

The author of the *Monas* seems to be taking his reader on a conducted tour through a dark room where, every now and then, he strikes a light to illuminate one out of a multitude of objects apparently assembled there for a distinct purpose.

**Figure 3: John Dee's monad (Josten 206-7)** The reader soon guesses that other objects, which he perceives dimly glistening in the background, are probably more pertinent to that purpose than the one set before him for which bland and seemingly lucid explanations are offered.<sup>7</sup>

<sup>5</sup> Thomas Tymme, *A light in darkness, which illumineth for all the Monas hieroglyphica of John Dee, discovering natures closet and revealing the true Christian secrets of alchemy*, ed. S.K. Heninger (Oxford: New Bodleian Library, 1963), 5.

<sup>6</sup> Brian Vickers, “Frances Yates and the Writing of History,” *Journal of Modern History* 51 (1979): 308.

<sup>7</sup> Josten, 84.

In order to set the stage for my analysis of Dee's readership, a brief summary of that "conducted tour through a dark room" is necessary.

In *Monas* Dee invents and explains a single symbol that he believes both encapsulates the process of alchemical transmutation and epitomizes the unity of the created world and all human knowledge (Figure 3). The monad itself, as many have noted and as Dee explains at great length, combines astrological and elemental signs into one meaningful symbol, what Frances Yates calls "a unified arrangement of significant signs."<sup>8</sup> The text has three components: a lengthy dedicatory letter addressed to Maximilian II, a brief letter to the Antwerp printer, Willem Silvius (with whom Dee stayed while he was writing the book), and a series of "theorems" explicating the symbol.

The substantial letter to Maximilian praises Dee's dedicatee and expounds on the benefits that a worthy reader might derive from *Monas*, as well as offers Dee's views on the "rarity of this speculative present."<sup>9</sup> The dedicatory letter stands on its own as an epistemological treatise, explaining Dee's theories about what constitutes worthwhile or beneficial knowledge, who constitutes a deserving readership, and what the ultimate ends of a natural philosopher should be. As we have already seen, he goes so far as to suggest that the truly understanding reader, the one who can apply the principles of the Monad and "actuate" the symbol, "will first himself go away into a metamorphosis and will afterwards very rarely be held by mortal eye."<sup>10</sup> This prefatory material serves as an

---

<sup>8</sup> Frances Yates, *The Art of Memory* (Chicago: University of Chicago Press, 1974), 263. J.A. van Dorsten writes: "In this special hieroglyph, Dee argues, all mathematical form is contracted, all number, all art; in it, stellar and elemental symbols converge" (22). See J.A. van Dorsten, *The Radical Arts: First Decade of an Elizabethan Renaissance* (Leiden: Leiden University Press, 1970).

<sup>9</sup> Josten, 138-9.

<sup>10</sup> *Ibid.*, 134-7.

invaluable resource for examining Dee's opinions about hieroglyphics, readership, and interpretive practice.

The main body of *Monas* consists of twenty-four quasi-mathematical theorems explaining the hieroglyph. First, Dee explicates the meaning of each part of his symbol: the solar and lunar symbols at the top, the rectilinear cross (representing the four elements), and the pointed symbol at the bottom (representing the constellation Aries and the element of fire). Then, in Dee's characteristically digressive manner, he deconstructs the Monad, breaking it into its component parts and recombining them in different ways, all the while unveiling new layers of meaning, new things each component can signify. The theorems offer multiple perspectives or avenues of interpretation for the Monad: alchemical, cabalistic, mathematical, astronomical, and theological. Even within one interpretive framework, the same part of the symbol may contain simultaneous and seemingly contradictory meanings. For example, the central cross in the Monad can be seen as binary (two crossed lines), ternary (two crossed lines plus a central point), or quaternary (four lines meeting in the center); significantly, these meanings augment one another rather than cancel each other out.<sup>11</sup> The theorems conclude with a prayer and a reference to the Apocalypse, connecting the twenty-four theorems with the twenty-four elders surrounding the throne of God in Revelation 4:4 and suggesting again that the real purpose of the Monad is to facilitate "metamorphosis" – of metals, of the individual, of society, and possibly of history on a cosmic scale.<sup>12</sup>

---

<sup>11</sup> Ibid., 180-3.

<sup>12</sup> Ibid., 216-9.

Much of modern scholarship about *Monas* has sought to do two things: decode its alchemical message and interpret its philosophical significance. Criticism with the former focus takes as its assumption that the work's primary significance was alchemical, and its primary goal was to hint at the nature of the great alchemical *opus*, the philosopher's stone.<sup>13</sup> Of course, the physical and spiritual dimensions of alchemy are inextricably entwined, and, as Peter J. Forshaw notes, even Dee's contemporaries in the sixteenth and seventeenth centuries "engaged with [the text] on a mixture of levels, theoretical and practical, and material and spiritual, not to mention antiquarian, mathematical, and philological."<sup>14</sup> Other scholarship has focused on the philosophical significance of *Monas*: its meaning on the level of spiritual alchemy, its place in Dee's writing and thought, and the philosophical and literary figures and text that influenced Dee.<sup>15</sup>

The last fifteen years has seen a flowering of Dee criticism that has reevaluated his intellectual contribution to political and natural philosophical realms. First, recent Dee scholarship has begun to explore his position in Elizabethan political circles, and the role of his work in justifying and encouraging a sense of nascent British imperialism and

---

<sup>13</sup> Cf. Federico Cavallaro, "The Alchemical Significance of John Dee's *Monas Hieroglyphica*," in *John Dee: Interdisciplinary Studies in English Renaissance Thought*, ed. Stephen Clucas (Dordrecht: Springer, 2006); and Peter J. Forshaw, "The Early Alchemical Reception of John Dee's *Monas Hieroglyphica*," *Ambix* 52.3 (2005): 247-269. Another work that focuses less on alchemy (*astronomia inferior*, as Dee calls it) and more on the astronomical valence of *Monas* is J. Peter Zetterberg, "Hermetic Geocentricity: John Dee's Celestial Egg," *Isis* 70.3 (1979): 385-393. Also see Clulee's comment in *John Dee's Natural Philosophy*: "It has become customary to consider the alchemical quest for the philosopher's stone the main subject of the *Monas* and to look to alchemy for the elucidation of the text" in *John Dee's Natural Philosophy: Between Science and Religion* (London: Routledge, 1988), 78.

<sup>14</sup> Forshaw, 268.

<sup>15</sup> Cf. Stephen Clulee, "*Astronomia inferior*: Legacies of Johannes Trithemius and John Dee," in *Secrets of Nature: Astrology and Alchemy in Early Modern Europe*, ed. W.R. Newman and A. Grafton (Cambridge, Mass.: MIT Press, 2001) and *John Dee's Natural Philosophy* (1988); György Szönyi, *John Dee's Occultism: Magical Exaltation through Powerful Signs* (Albany: State University of New York Press, 2004); and Håkan Håkansson, *Seeing the Word: John Dee and Renaissance Occultism* (Lund: Lunds Universitet, 2001). Yates discusses *Monas* briefly in *The Art of Memory*, 263 and *The Occult Philosophy in the Elizabethan Age* (New York: Routledge, 2005), 98-9, but she does not analyze the text extensively.

greater political role for Britain on the world stage. In *John Dee: The Politics of Reading and Writing in the English Renaissance*, William Sherman unfolds Dee as a political figure by exploring the contents of his library, his marginalia, and some of Dee's own political treatises. Sherman starts with the broad principle that Dee has been misread as simply a hermetic philosopher, and advocates a scholarship which situates Dee in his "social, economic, and political frameworks" rather than "seeing him as the isolated, aloof magus."<sup>16</sup> Sherman's work marks a significant change in Dee scholarship, and his new attention to a politicized Dee has been followed by scholars like Parry, MacMillan and Abeles, and Artese, among others.

Second, recent scholarship has sought to correct the idea that Dee's later activities and interests – particularly the angel magic – were completely divorced from his earlier, seemingly more rational and scientific endeavors. In *John Dee's Occultism*, Györgi Szőnyi describes this interpretive problem: "Very few efforts have been made to embrace both Dee's scientific experiments and his angel magic in their entirety and interconnectedness [...] Until recently, interpreters of Dee's magic have tried to underline the importance of magic as a vital precondition to the scientific revolution."<sup>17</sup> Szőnyi's own book, as well as the work of Deborah Harkness and Håkan Håkansson, offers a corrective to earlier scholarship and presents Dee's later angelic conversations as completely consonant with the underlying goals of his earlier works – specifically, a

---

<sup>16</sup> William H. Sherman, *John Dee: The Politics of Reading and Writing in the English Renaissance* (Amherst: University of Massachusetts Press, 1995), 23.

<sup>17</sup> Szőnyi, 12.

belief in the transformative power of a profound and transcendent knowledge of the world in all its parts.<sup>18</sup>

My work intervenes in these twin critical threads by politicizing *Monas*, a text that has more frequently been interpreted in the light of Dee's scientific/magical endeavors. In offering a culturally-situated model of reading the monad, my work suggests that Dee's political and natural philosophical aims can be understood as fundamentally aligned and interdependent. This reader-focused yet historically-grounded approach to *Monas* exposes the mechanisms by which Dee's presentation of his hieroglyph may have had different utilitarian purposes for different readers, purposes which are all directed toward reshaping those readers via a form of political alchemy.

## II. SHAPING THE *REIPUBLICA CHRISTIANAE* THROUGH PUBLICATION

The best place to start when considering the public readership of *Monas* is the brief dedicatory letter to Willem Silvius, Dee's printer in Antwerp and his "singular friend."<sup>19</sup> Dee writes that in this book, he "impart[s] rare and very excellent arcana from [his] innermost heart," and that despite its occult content, he wishes it to be published:

I do this also with the intention that, thanks to your care and fidelity, the more people may enjoy them [the *arcana*] throughout the world (for the [greater] honor of the King, on account of his uncommon and royal virtues, and also that [thus] others may by example learn from him, who knows how to find time most wisely

---

<sup>18</sup> Deborah Harkness writes: "With the Book of Scripture in one hand and the Book of Nature before him, Dee was attempting to refashion the identity of the natural philosopher to include a reinterpretation of knowledge, a universal reform of institutions, and a restitution of nature and all things" (6). See Deborah Harkness, *John Dee's Conversations with Angels: Cabala, Alchemy, and the End of Nature* (New York: Cambridge University Press, 1999). Håkansson describes the "reformation" of the individual as Dee's ultimate goal throughout his work, much as Szönyi refers to *exaltatio*, and says that this "reformation was, in effect, synonymous with his [man's] deification, implying a return to that original state when he had been the perfect 'image and similitude of God'" (70).

<sup>19</sup> Josten, 148-9.



to attend to the government of [his] kingdoms and nevertheless also to learn in rich abundance the stupendous mysteries of philosophers and wise men).<sup>20</sup>

In this dense sentence, Dee implies that the knowledge contained in *Monas* is too important to be contained within a small circle, that “more people” ought to “enjoy them” so the benefits of these *arcana* might be disseminated widely. Given Dee’s tendency toward secrecy rather than revelation, evident in the fact that many more of his works were circulated in manuscript rather than published, his stated desire to publish *Monas* to enrich the public fund of knowledge seems unexpected and surprising. One scholar of sixteenth-century print history, Natalie Zemon Davis, writes that early modern authors, readers, and members of the book industry “inherited [...] a belief that property in a book was as much collective as private” – in other words, that knowledge is a public commodity rather than something to be individually hoarded.<sup>21</sup> Dee’s adherence to this belief seems conflicted, at best, since he worries throughout *Monas* that its secrets should not be made public, despite writing to Silvius about the potential for public good from making his special knowledge known.

This tension between secrecy and revelation stretches throughout his career. Dee clearly grappled with the question of whether or not to publish and disseminate his works throughout his life, even from quite early on. Peter French writes: “The fact that John Dee was essentially a secretive man can hardly be over-emphasized. When he was in prison in 1555, an unnamed doctor felt that banishment from England would be proper punishment because Dee refused under any circumstances to ‘communicate any part, of his learned Talent, by word or writing: But is wholly addicted, to his private commodity

---

<sup>20</sup> Ibid., 148-9.

<sup>21</sup> Natalie Zemon Davis, “Beyond the Market: Books as Gifts in Sixteenth-Century France,” *Transactions of the Royal Historical Society*, Ser. 5. 33 (1983): 72.

only advancing, by his own Studies and practises very secret.”<sup>22</sup> Although Dee’s contemporary here criticizes his secretive tendencies and in *Monas* Dee himself seems anxious about revealing his arcane knowledge too plainly in print, at other times he acknowledges that transmitting knowledge is essential to furthering humanity’s collective intellectual development. In his later records of the angelic conversations, the angel Michael (supposedly speaking through Edward Kelley) demands an oath of secrecy from Dee, and Dee initially protests: “Yf no man, by no means, shall perceyue any thing hereof, by me, I wold think that I shold not do well.”<sup>23</sup> Dee worries that he “shold not do well” if he does *not* share the knowledge gained from his angelic discourse for the benefit of humanity, and only after Michael convinces him otherwise does he agree to swear secrecy. In *Monas*, Dee resolves the seemingly incompatible demands of concealment and revelation by publishing his work yet veiling its content in such a way that the supposedly unworthy should not be able to discern it. Dee argues in the letter to Silvius that the enormous benefits of disseminating the text outweigh the possible risks of misuse by such unworthy readers.

After Dee’s declaration that “more people may enjoy” his *arcana*, however, he qualifies this argument for common knowledge enhancing the common good by saying that he publishes it for the sake of the emperor, that public readers should “enjoy” these *arcana* precisely because they are dedicated to and presented for the benefit of Maximilian. The public, Dee suggests, should note how the emperor balances his civic responsibility with his acquisition of knowledge, and how his “uncommon and royal virtues” make him uniquely able to understand and apply the principles of the monad. As

---

<sup>22</sup> Peter J. French, *John Dee: The World of an Elizabethan Magus* (London: Routledge, 1972), 81.

<sup>23</sup> John Dee, *John Dee’s Five Books of Mystery*, ed. Joseph H. Peterson (San Francisco: Weiser, 2003), 90.

an emperor who diligently “attend[s] to the government of [his] kingdoms,” Maximilian represents a ruler who recognizes and fulfills his responsibilities to his people. For Dee’s reading public (most of whom have no kingdoms to govern), Maximilian serves not as a model to emulate themselves, but as an exemplar of an proper and wise ruler to whom subjects should willingly submit. Dee thus mitigates the potential danger of overreaching readers misinterpreting the *Monas* by subtly suggesting that the message readers *should* glean from his text is one that reinforces traditional socio-political structures. Even while attaining transcendent knowledge on an individual basis, Dee suggests, the truly worthy reader will acknowledge his or her own rightful social position. The ideal public reader of *Monas* should strive to understand and emulate Maximilian’s virtues, if not his unique political agency.

Nonetheless, Dee still thinks it is important to keep the book out of the hands of those who might misinterpret or misuse it, even unintentionally. Dee’s instructions to Silvius in his published letter explicitly direct him to select to whom the printer sells these books, avoiding unworthy readers:

[...] you may not on any account give these books into the hands of common people. Not as if I grudged them these [books], or anything better still; but I suspect that evil might result, in so far as those poor people may not be able to extricate themselves from that labyrinth (while they torture their minds in incredible ways, and neglect their everyday affairs), and also because they will advise others to venture forth on the same road (which is impassable to them) or, as imposters and mere specters of men, may lie about its certainty, pretending that they have explored it; or, finally, they may boldly deny the existence of such mighty works of God and may utter furious accusations against my honesty, despairing in the end, as at the beginning they had approached these mysteries, with unthinking audacity.<sup>24</sup>

Dee enumerates the various dangers to self, society, and author that might occur if a “common” reader acquires his book. The dangers he describes are threefold: the “poor”

---

<sup>24</sup> Josten, 150-1.

reader might torment himself trying to understand Dee's work, he or she might advise others based on his imperfect understanding, and finally, he or she may misinterpret it in such a way as to accuse Dee himself of purveying dangerous and faulty information. Dee's language characterizes these bad readers as "imposters" who try to understand *Monas* but are unable to, and failing in their understanding, they pretend to have comprehended its whole meaning. In Dee's eyes, a partial or incorrect understanding is more dangerous than no knowledge at all.

Dee's language also implies a kind of intellectual class-consciousness. The "common people" by definition are unworthy of even trying to apprehend his book, and if they have "approached these mysteries," it is with the hubris of "unthinking audacity." In Dee's worldview, the ranks of the worthy intellectual elite and the unworthy hoi polloi are relatively fixed, and little mobility is possible from one group to the other. His explanation to Silvius also implies a demeaning condescension toward those vulgar readers, as he claims to want to restrict access to *Monas* "not as if [he] grudged them" the opportunity to read it, but because he paternalistically wants to protect them from knowledge that would only confuse and possibly endanger them.

The adjective "common," used to describe these unworthy readers, contrasts with "rare," a word that Dee uses numerous times throughout *Monas* to describe the special status of his work.<sup>25</sup> The letter to Silvius expands greatly, as we have seen, on what might happen if the "common people" read *Monas*, but Dee does not give similarly explicit

---

<sup>25</sup> A few examples: "the great rarity and remarkable quality" of his book (114-5); the "rarity of the present" (114-5); "in what degree of three-tiered (philosophical) rarity" he hopes his book will be counted (118-9); "[my] gift is endowed with rareness" (120-1); "we have demonstrated a rare example of this kind" of philosophical investigation (126-7); "the rarity of this speculative present of mine" (138-9); in the letter to Silvius, Dee refers to the book's "rare and very excellent arcana" (148-9); etc. Indeed, hardly a few pages go by without Dee touting the "rarity" of his work, as contrasted with the mundane output of common philosophers.

instructions on how to identify the appropriate customers for his friend's bookselling. The nature and practices of the worthy reader must be inferred from other statements made by Dee in the letter to Silvius and elsewhere. He does imply that a worthy audience will consist of careful readers; he also admonishes Silvius to make sure to print his text accurately, down to the smallest typographical detail, because an inaccurately printed book would be "unworthy [also] of the intense studies and work which the philosophers, often examining its depths, will wish to expend on it."<sup>26</sup> This intense study contrasts with the similarly intense mental tortures that the vulgar readers might inflict upon themselves in an attempt to understand what is beyond their grasp: the former is fruitful, the latter fruitless.

Elsewhere in the introductory matter, Dee combines his discussion of typographical accuracy with a discussion of cabalistic attention to detail in letters and numbers. He claims it to be "exceedingly rare" that in this book "there may be not even one superfluous dot, and that not one dot may be wanting [in it] to signify those things which we have said (and things far greater yet)."<sup>27</sup> *Monas*, he claims, contains precisely the right content – not too little, not too much – and furthermore, Dee's concern with typographic detail suggests that the worthy reader will not only pay attention to his language, but also to the manner of presentation - spelling, punctuation, and other cosmetic minutiae.<sup>28</sup> The worthy reader will also be a careful reader, attentive both to the meaning of the words on the page and to their typography and configuration. Dee's focus

---

<sup>26</sup> Ibid., 150-1.

<sup>27</sup> Ibid., 122-3.

<sup>28</sup> This attention to typographic detail is reinforced and expanded by his discussion of cabalistic letter manipulation in subsequent pages (124-127).

on such details suggests that the combined mental and physical effort of attending both to the text's meaning and to its material attributes is key to effecting the reader's personal transformation.

The language of Dee's letter to Silvius also implies a contrast between those intellectual "commoners" and a group of elite readers whose interpretive faculties could match the author's own "rarity." So what else, besides an aptitude for "intense study" and attention to details, characterizes these rare readers? How can Silvius be expected to discern whom to sell *Monas* to and whom to refuse? Of course, the fact that *Monas* is written in Latin immediately self-selects a certain learned audience, but Dee implies that there are those even among the educated whom he would exclude. One way to get closer to a definition of the worthy reader is to look at the case of one person whom Dee would almost certainly deem worthy, and here the introductory material to his 1558 *Propaedeumata Aphoristica* offers some clues.

*Propaedeumata*, a collection of astronomical aphorisms, has some relevance to *Monas* since the monad symbol appears on the title page and in other images throughout the work. In Aphorism 52, Dee refers explicitly to the monad as the emblem of *astronomia inferior* (alchemy).<sup>29</sup> *Propaedeumata* is dedicated to Dee's friend and colleague Gerard Mercator, and his address to Mercator in the dedicatory letter suggests both why Dee thinks of him as a worthy reader and what he believes the aims of publication are. Dee writes:

---

<sup>29</sup> He writes: "[...] the very august astronomy of the philosophers, called inferior, whose symbols, enclosed in a certain Monad and taken from my theories, I send to you along with this treatise." See John Dee, *John Dee on Astronomy: Propaedeumata Aphoristica (1558 and 1568), Latin and English*, trans. Wayne Shumaker (Berkeley: University of California Press, 1978), 149.

Do you, therefore, who are by custom a most observant investigator of nature, search out in these aphorisms the true virtues of nature: virtues which are great, and barely credible to a few wise men, but known only to a very few. And, when you receive them, I request that you declare publicly that no ‘incautious person’ should strive to fish out and draw forth from them, to his own harm, things that are not written for him.<sup>30</sup>

Mercator, Dee believes, is an “observant investigator” and will be one of those careful readers who would benefit from the typographical detail of his later *Monas*. Moreover, Dee’s books themselves have occult properties: they have both obvious and hidden “virtues,” the latter of which can only be understood by a penetrating reader who can see beneath the surface and interpret true meanings. Like the letter to Silvius, Dee here warns against those incompetent readers who might misunderstand the text, to their own detriment; these “incautious” people might falsely imagine themselves to understand the hidden meaning of the text rather than truly apprehending it. The “wise men” he refers to in his letter to Mercator evoke the motto surrounding the monad on the title page of *Propaedeumata*, which declares, “In this Monad is whatever wise men seek.”<sup>31</sup> Ultimately, in order to understand Dee’s work, he claims that one must already be “wise”: only those with an already rare capacity for understanding could hope to interpret correctly.

For Dee, the choice to publish requires a careful balance between the possibility of public good and the danger of exposing vulgar readers to knowledge that they may misinterpret or misuse. As for the public good, this may mean two things to Dee: benefit to the English population, and benefit to what he calls the “Christian state.” In his *Briefve Discourse Apologeticall*, published more than thirty years later in 1599, Dee looks back

---

<sup>30</sup> Ibid., 113.

<sup>31</sup> Ibid., 102-3.

on his life's work and asserts in the strongest possible language that all of his authorship has been "for the benefit, and commoditie publique of this kingdome" and moreover, all of his literary productions have been undertaken "as a true, faithfull, and most sincerely dutifull servant, to our most gracious and incomparable Queene Elizabeth, and as a very comfortable fellow-member of the body politique, gouerned under the scepter Royal of our earthly Supream head (Queene Elizabeth)." Philosophical and scientific endeavors, for Dee, are inextricably bound up with the civic duties of being one of the queen's subjects. Although he does not mention England in *Monas*, and chose to publish it in Latin, in Antwerp rather than London, the fact that he chose to present it to Elizabeth and discuss it with her indicates that it is nonetheless important to read it in the light of his later declaration that all of his works are for the good of the English "commoditie publique." In terms of the public readership, one might speculate that Dee hopes his own works will enhance the prestige of English scholarship and help bring England's intellectual climate (which he often speaks of disparagingly, e.g. in his letter to Mercator in *Propaedeumata*) onto a more equal footing with Continental scholarship.

But in addition to enhancing the status and quality of English intellectual endeavors, Dee also has a more global audience in mind. Twice in *Monas*, Dee mentions the effects of his text on the "Christian polity," ("*Reipub. Christianæ*") once in the dedication to Maximilian and once in the letter to Willem Silvius.<sup>32</sup> In both places, he notes that philosophers can powerfully affect the state of the Christian polity: both good and bad philosophers, as he tells Maximilian, "have at various times done great harm to

---

<sup>32</sup> Josten, 142-3 and 152-3.



the Christian polity.”<sup>33</sup> Good and bad, here, connotes both skilled vs. unskilled and well-intentioned vs. ill-intentioned. Even talented and well-meaning philosophers may inadvertently injure the *Reipublica Christianæ*, though naturally Dee implies that he has attained both the high level of scholarship and the savvy to be able to deploy his knowledge to the benefit of society. In the letter to Silvius, he implores his friend to fulfill his requests about typography and about restricting sales of the book, “in the interest of the Christian polity, or at least on account of the heroic virtues of the very wise Maximilian that have nothing in common with the destiny of common men.”<sup>34</sup> He implies that *Monas* will have a public benefit, both because it contributes to the collective store of humane knowledge and because it inspires people to emulate its patron’s admirable virtues by transforming themselves into model citizen-subjects.

This concern for the *Reipublica Christianæ* is not limited to *Monas* alone among Dee’s works. In *Propaedeumata*, he describes his plans for publication to Mercator, specifically that Dee was worried about his own ill health while writing the book, going so far as to make provisions for what would happen if he were to die its publication. In that case, *Propaedeumata* would be bequeathed to “Pedro Nuñez, of Salácia” who would then “polish it for the public use of philosophers as if it were entirely his.”<sup>35</sup> Dee writes that he trusts his friend Pedro Nuñez to deal with the book’s completion and publication, because “it is inborn in him by nature, and reinforced by will, industry, and habit, to

---

<sup>33</sup> Ibid., 142-3.

<sup>34</sup> Ibid., 152-3.

<sup>35</sup> Dee, *John Dee on Astronomy*, 115. Pedro Nuñez (1502-1578) was a Portuguese mathematician and geographer.

cultivate diligently the arts most necessary to a Christian state [*Christianae Reip.*].”<sup>36</sup> Dee claims his colleague’s innate ability and hard work have enabled him to become a productive citizen of the “Christian state,” but constituents of *Christianae Reipublica* may also be changed and improved through the intellectual exercise of consuming Dee’s writing.

In addition to molding communities of virtuous political subjects, I argue that Dee hopes the individual transcendence made possible by “actuating” the Monad might facilitate religious reconciliation within the diverse Christian confessions. The phrase *Reipublica Christianae* implies a unified body of believers and hints at a hope that Christian people might consider themselves not divided by doctrinal difference, but united through faith. Dee himself speaks little about the specifics of his own religious beliefs, although he frequently and devoutly refers to God, and he seems to have considered himself foremost a Christian rather than a dogmatic adherent of a particular doctrine.<sup>37</sup> His primary devotion seemed to be to praise and discover God through study of the Book of Nature. That does not mean, though, that religion was not important to him, especially since religious syncretism was often a goal associated with Neoplatonic occult philosophy.<sup>38</sup>

---

<sup>36</sup> Ibid., 115.

<sup>37</sup> See French, who writes: “Dee’s nationalism was strong, but, like his religion, was based on broad concepts” (56).

<sup>38</sup> See Pamela Long, who suggests that 16<sup>th</sup> century developments in occult philosophy offer something separate from doctrinal differences: “[...] both alchemy and Neoplatonism seemed to many to offer the possibility of a more highly intense and more personal spirituality than did institutional Catholicism or even some of the newer forms of Protestantism.” Long, *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to the Renaissance* (Baltimore: Johns Hopkins University Press, 2001), 173). See also French, who discusses the “widespread movement to reunite a fragmented Christianity through the use of the *prisca theologia*” and Dee’s association with those who had such interests (135).

A hope for Christian reunification seems to have run throughout Dee's life. He befriended scholars with similarly syncretic interests, such as Guillaume Postel during his stay in Paris in the 1550s, and later, during the period of angelic conversations, he even expressed conciliatory sentiments toward Jesuits, characterizing them as "mostly devout and peaceful men."<sup>39</sup> Biographer Peter French writes that Dee "was unable to accept the idea of a permanently divided Christianity. Revealingly, he hoped the Catholic Church would reform itself, return to pristine sources and once again become the universal church of love."<sup>40</sup> Indeed, he later sought the patronage of the Polish nobleman Albrecht Laski because his angelic communications had informed him that Laski's family would help "accomplish religious reunion among Christians, Jews, Saracens, and pagans in addition to ruling Poland."<sup>41</sup> Such syncretic ambitions are hinted at in the monad itself, a symbol that seeks to unify a complex philosophical system in one hieroglyph imbued with colossal power and significance.

Perhaps in addressing the public good of a "Christian polity," Dee hopes to *define* and *create* such an entity, or at least to nudge history along in that direction. But if he is so concerned about screening his work from unworthy readers in this potentially world-changing project, how does he plan to conceal his meaning? Although he directs Silvius to be careful to whom he sells these books, he still frets that he has revealed too much in the course of his theorems. In Theorem XX, he writes: "I beseech Thee, O God, to forgive me, if now I have sinned against Thy Majesty by revealing so great a secret in

---

<sup>39</sup> French, 31 and 123.

<sup>40</sup> *Ibid.*, 124.

<sup>41</sup> Clulee, *John Dee's Natural Philosophy*, 198.

published writings, but I hope that only those who are worthy will really understand.”<sup>42</sup> A digression in the midst of his description of how the central cross of the Monad can contain a binary, ternary, and quaternary simultaneously, this prayer indicates that *Monas* contains secret meanings that supposedly only those wise readers will be able to apprehend.

Thus, Dee’s screening process for reader worthiness comprises two stages: first, Silvius must determine whether someone ought to own the book at all; second, once someone does own the book, its full meaning is deliberately obscure. Dee claims to have revealed “so great a secret” but conceals this secret in rhetoric that only the understanding reader will be able to penetrate – or at least Dee would like the average reader to *believe* that a great revelation remains hidden just beneath the surface. Stating that such a hidden meaning exists is a self-conscious rhetorical move on Dee’s part. After all, would the truly worthy reader not be able to discern the presence of a secret meaning whether or not Dee alludes to it? If such is the case, then Dee’s posturing must have an ulterior motive. The apostrophe to God announces the presence of a hidden meaning too loudly, making the reader feel as though he or she is “in on” a great cosmic secret. Just as Dee’s address to the Christian polity both speaks to and defines that group, so too does Dee’s language throughout *Monas* both *address* his intended readership and *construct* that same body of readers, by making the reader feel as if he or she must be part of an elite group who are uniquely positioned to understand the text and make use of its esoteric revelations. In effect, Dee recreates the intimate feeling of manuscript circulation within an elite coterie, even while publicly disseminating his book.

---

<sup>42</sup> Josten, 182-3.

### III. DEE'S "SCHOLAR" AND HIS QUEEN

It is unclear, however, whether anyone, even among the elite readership who could be expected to purchase and read *Monas*, would be able to decode the secrets that Dee so vocally wishes to hide within the text. In this regard, Queen Elizabeth exemplifies a certain type of elite reader of Dee's *Monas*: a privileged, powerful, and intelligent reader who nonetheless may be unable to understand Dee's meaning unaided. In the "Compendious rehearsal," Dee describes showing his book to Elizabeth and helping her understand it.<sup>43</sup> Immediately around the time of writing *Monas*, Dee escorted the Marchioness of Northampton from Antwerp home to England as a personal favor to Elizabeth, and after fulfilling this favor, the queen deigned to read his text and expressed some interest in its interpretation, at least according to Dee's own account.

While a reader who purchased *Monas* from Silvius would presumably have to read the book according to his or her own interpretive capacity, Dee presented his work to his queen and explained it to her personally. Twice in the "Compendious Rehearsal" Dee mentions sharing *Monas* with Elizabeth. First, he says that "her most excellent Majestie [...] did vouchsafe to read that book *obiter*, with me at Greenwich."<sup>44</sup> Later, he writes in more detail:

[H]er Majestie very graciously vouchsafed to account herselfe my Scholar in my book, written to the Emperour Maximilian, intituled, *Monas Hieroglyphica*; and said, whereas I had præfixed in the forefront of that book: *Qui non intelligit, aut*

---

<sup>43</sup> "The compendious rehearsal of John Dee," a manuscript dated 1592, recounts Dee's many services rendered to the Crown and his illustrious career, in order to clear his name of libelous accusations and seek royal preferment. The manuscript was first published in the 18<sup>th</sup> century. See John Dee, "The Compendious Rehearsal of John Dee," in *Johannis, confratriis & monachi Glastoniensis, chronica sive historia de rebus Glastoniensibus. [...] Descripsit ediditque Tho. Hearnius. [...] Duobus voluminibus* (Oxonii: e Theatro Sheldoniano, 1726).

<sup>44</sup> *Ibid.*, 507.

*taceat, aut discat*:<sup>45</sup> if I would disclose unto her the secrets of that book, she would & *discere & facere*; whereupon her Majestie had a little perusal of the same with me, and then in most heroical and princely wise did comfort me and encourage mee in my studies philosophical and Mathematical.<sup>46</sup>

The idea that an esoteric book might *require* verbal explanation by its author for anyone other than the most skilled adept is an early modern commonplace of sorts. As Pamela Long comments in her discussion of Agrippa's *De Occulta Philosophia*, "Reading books alone cannot direct you since they are 'mere enigmas' [...] they contain concealed mysteries that have not been publicly explained by any master."<sup>47</sup> In Dee's own work, he occasionally acknowledges the need for further private explanation. As Glyn Parry notes, some of the hidden meanings of Dee's 1577 navigational treatise, *General and Rare Memorials*, "could only be orally transmitted 'in convenient Tyme and Place' to privy councilors or Elizabeth."<sup>48</sup> Thus, one way in which the meaning may be concealed from vulgar minds is that the book's secrets may be actually unintelligible without authorial assistance, such as Dee gave to Elizabeth.

In this regard, *Monas* presents something of a false public façade, making various paradoxical claims about its own interpretation. As noted previously, Dee expects the careful reader to pay attention to every typographic detail; because there is "not even one

---

<sup>45</sup> "He who does not understand, should either be silent, or learn." This phrase, Dee's personal motto, appears also on the title page of *Propaedeumata Aphoristica* (1558 and 1568).

<sup>46</sup> Dee, "Compendious Rehearsal," 519.

<sup>47</sup> Long, 161.

<sup>48</sup> Glyn Parry, "John Dee and the Elizabethan British Empire in its European Context," *The Historical Journal* 49.3 (2006): 663. Parry also notes that some of Dee's texts (particularly the imperial ones that his article is concerned with) "had covert meanings accessible only to the elite, and from which 'many mo [meanings] may consequentlie be thought upon, and inferred'" (647-8).

superfluous dot” in his book, every bit of it may be scoured for secret meaning.<sup>49</sup> On the same page, Dee claims almost exactly the opposite of this rigorously learned and difficult attention to detail: “We have done this in such a way that the hieroglyphic interpretations fall into place most gently and, as it were, of their own accord.”<sup>50</sup> In the latter explanation, the reader needs to expend almost no effort at all, because the monad should reveal its own meaning naturally. In these paradoxical suggestions, Dee implies that there are layers of meaning, some that give up their secrets only to rigorous analysis and others that lend themselves to plain and intuitive interpretation; different readers may apprehend different layers of this complex text.

Moreover, this paradox gestures toward a tension between active and passive reading. Dee at once suggests that “intense study” is needed to unlock the monad’s meaning and that the monad itself will clearly and unequivocally reveal its own secrets. In describing the latter model of reading, Dee’s language figures the reader as a passive receptacle: in order to learn the alchemical “work of rehabilitating [metals] by fire,” the reader must listen to “the hieroglyphic messenger [*sc.* Mercury, manifested in the hieroglyphic monad]” who “himself tells us most expressly, if only we will fix our eyes on him and lend him a more attentive ear.”<sup>51</sup> In Dee’s language here, the text itself “speaks” and is the active agent, rather than the reader, and “reading” consists of a

---

<sup>49</sup> Josten, 122-3. The interpretive richness of Dee’s book is paralleled with that of the Book of Nature itself, when Dee later alludes to Matthew 5:18, writing: “O Almighty and Divine Majesty, we mortals are compelled to acknowledge what great wisdom and what infinity of ineffable mysteries are contained in Thy titles and jots, as delineated and set out in Thy law, if the greatest secrets and arcana of the earth can be explained and most faithfully demonstrated by the various evidence solely of that point which has been singled out and examined by me” (182-3).

<sup>50</sup> *Ibid.*, 122-3.

<sup>51</sup> *Ibid.*, 162-5.

physical transaction between the text and its audience. The reader must be properly attentive to receive the monad's message, but the real "work" is being done by the monad itself, which broadcasts its own meaning; the reader's stance here is passive, a receptacle for meaning rather than an active interpreter of the text. At the end of that same Theorem XIII, Dee provides a diagram to illustrate the solar properties of the Monad (related to its alchemical use), and notes to the reader: "You [will] see how exactly, how openly, the anatomy of our hieroglyphic monad [as here illustrated] answers the arcana, [here] to be intimated, of these two theorems."<sup>52</sup> Again, here it is the text itself – in this case a diagram that deconstructs the parts of the monad and recombines them to illustrate certain alchemical properties – that broadcasts its secrets "exactly" and "openly," and the reader need only be open to the reception of the text's seemingly obvious meaning.

These tensions between intuitive and learned understanding remain intentionally unresolved. Just as readers from different social or intellectual strata will apprehend *Monas* differently, so too will readers with different interpretive goals and methodologies. For example, in Theorem XX, Dee discusses the central point of the cross in the monad, which can be viewed as either a necessary point in the ternary (that is, two lines meeting at a central point), or as a "superfluous point" in the quaternary (that is, the invisible gap where four lines converge in a cross-shape). Dee explains this argument about the nature of the point in two different ways: first he explains it allegorically and spiritually, then mathematically.<sup>53</sup> In between the two explanations, he writes: "[S]ince I

---

<sup>52</sup> Ibid., 164-5.

<sup>53</sup> In the former, he describes the "superfluous point" as "feculent, corruptible, and full of darkness" and exclaims: "O thrice and four times blessed those who can reach that (as it were, copulative) point of the ternary, and who can part with that loathsome and superfluous point of the quaternary and leave it to the prince of darkness" (184-5). In the latter, he gives two diagrams of the central cross, and explains, "[...] you see in figure B ([which has] a blank area whence the superfluous point would seem to have been



have already spoken to those whose eyes reside in their hearts, I shall now have to address myself to those whose hearts are yet projecting from their eyes.”<sup>54</sup> It is clear that Dee expects readers to approach his text with different aims and strategies; some may seek an intuitive understanding (“those whose eyes reside in their hearts”) but others may need a clearer, rational explanation. His language, though, seems to privilege “those whose eyes reside in their hearts,” because the other group have their “hearts *yet projecting* from their eyes.” An intuitive, spiritual understanding of the monad seems preferable to a purely mathematical one.

Unlike the tutorial he must provide for Elizabeth, Dee implies that Maximilian will apprehend the text, as it were, from above – with the kind of immediate and revelatory understanding characteristic of a man of his extraordinary intellect (at least in Dee’s own estimation). Maximilian, as the text’s formal dedicatee, is the kind of person whose “eyes reside in [his] heart.” In contrast, Dee’s account of his sharing it with Elizabeth implies that she will approach the text from below, as a supplicant or scholar – an intelligent reader, but someone who needs the author to explain the nuances and secrets of the monad. The author must personally “disclose [...] the secrets of that book,” because she will not have the intuitive understanding of a true adept. Although he clearly venerates Elizabeth as his ruler, he does not describe his interaction with her in the idealized terms that he uses for Maximilian, and although she “vouchsafed” to read his text, to some extent *he* condescends to *her* in explaining its mysteries.

---

removed) four distinct lines that, without suffering any damage, have been separated from the point, which formerly they had in common” (184-5).

<sup>54</sup> Ibid., 184-5.

The “heroical” way in which the queen encourages Dee’s scholarship seems not exactly synonymous with Maximilian’s “heroic virtue.” The former is much more like the expected, traditional relationship between patron and author; the exalted patron, although naturally possessed of many superior virtues and accomplishments, may not necessarily be an expert in the works she chooses to patronize. In the latter case, though, *Monas* implies that Maximilian has everything needed to become a *mens adepta* already inherent within him. He does not need to be taught “the secrets of that book,” because he will already understand them – for him, the book will be like a beacon of clarity, illuminating knowledge that he already had and needed but a little guidance to combine it in just the right way.

In some ways, then, Elizabeth’s encounter with *Monas* may be more typical of readers of early modern esoteric texts, because Dee implies that she needs a master rather than understanding it all by herself. Why, though, would Dee have wanted to personally present his new book to the queen, and teach her about it? This complicated question does not have one answer, but Dee’s interest in showing *Monas* to Elizabeth may be grounded in the immediate political situation in England as well as his larger philosophical agenda of furthering the *Reipublica Christianae* through transformative hieroglyphic interpretation.

At the very time when Dee was writing *Monas* and dedicating it to Maximilian II, there was a real possibility of a matrimonial settlement between Elizabeth and Charles, archduke of Austria and Maximilian’s brother.<sup>55</sup> In January 1564, an envoy from the Duke of Württemberg, acting as an intermediary between Charles and Elizabeth, visited

---

<sup>55</sup> For a complete account of the courtship, see Susan Doran, *Monarchy and Matrimony: The Courtships of Elizabeth I* (London: Routledge, 1996), 73-98.

the English court and received ambiguous, but not entirely discouraging, messages from the English queen. According to Susan Doran, “Elizabeth told the ducal envoy that she might have to take a husband out of necessity, yet had resolved not to marry an Englishman, and ‘will accept neither France, nor Spain, nor yet Sweden or Denmark,’ which left only the Archduke Charles as an acceptable prospective husband.”<sup>56</sup> In the early stages of the matrimonial negotiations between England and the Habsburgs, which lasted until 1567, the parties attempting to further the match downplayed the religious differences between Elizabeth and Charles, depicting Charles as less devout a Catholic than in fact he was.<sup>57</sup> Moreover the Duke of Württemberg, a Lutheran himself, had hopes of furthering peace between the Catholic and Protestant powers by promoting the match.<sup>58</sup> Although religious differences ultimately did prove to be the downfall of the match, at first “they did not appear to be too problematic” because “[m]any at the English court believed that the Emperor Ferdinand ‘was not so addicted to the Roman religion,’ that Maximilian was a crypto-Lutheran, and Charles was moderate in his religious beliefs.”<sup>59</sup>

That Dee may have known about the potential match seems likely, as it was probably discussed among those close to the court. The primary proponent of the

---

<sup>56</sup> Doran, *Monarchy and Matrimony*, 75.

<sup>57</sup> Doran focuses particularly on William Cecil as the primary proponent of the match: “The archduke’s religion was admittedly an inconvenience but to Cecil’s mind it posed much less of a threat to the security of the realm or the Protestant settlement than Elizabeth’s unmarried state. At the outset of the negotiations Cecil seemed unaware of any major religious incompatibilities or difficulties with the projected marriage. Emperor Ferdinand’s decision not to enforce all the Tridentine reforms, his eldest son Maximilian’s sympathy towards Lutheranism and Charles’s known toleration of Lutherans within his own territories caused him to believe that the Habsburgs were far more flexible in religion than was really the case” (*Monarchy and Matrimony*, 73).

<sup>58</sup> *Ibid.*, 75.

<sup>59</sup> *Ibid.*, 97.

Habsburg match was William Cecil, who at this time Dee had a relatively cordial relationship with, and who had furthered Dee's career at various points.<sup>60</sup> In February 1563, a year before the publication of *Monas*, Dee wrote to Cecil while staying at the house of Willem Silvius to tell him that "he had learned more about recondite philosophy than he had ever dared to hope possible."<sup>61</sup> Although it is impossible to know for certain, it seems not outside the realm of possibility that Dee's public and extreme praise of Maximilian at a time when a match with the emperor's brother was being actively considered might have had the ulterior motive of aligning Dee with Cecil's powerful influence in court and promoting the desirability of an affiliation with the Habsburgs.

Dee may have had larger plans in showing his book to the queen than aligning himself within the marriage debate. In Glyn Parry's discussion of Dee's imperial writings and philosophy of British imperial expansion, Dee believed that Elizabeth might become the apocalyptic "Reforming Empress of the Last Days," for which she would need the Dee's philosophical guidance.<sup>62</sup> Dee, influenced by his own interpretation of the catalogue of historical epochs in Trithemius's *De septem secundeis*, saw Elizabeth's reign as crucial to moving events toward the end times:

[Dee] noted that Anael, the angel of Venus, governed the remarkable number of female rulers in mid-sixteenth-century Europe. The 1572 supernova, which he placed within the orbit of Venus, redoubled that angel's influence, signaling both

---

<sup>60</sup> For example, when Dee was just making his entrance into courtly society, during the reign of Edward VI, it was Cecil who arranged to have Dee presented to the king and arranged a pension for him. See French, 32 and Benjamin Woolley, *The Queen's Conjurer: The Science and Magic of Dr. John Dee, Adviser to Queen Elizabeth I* (New York: Henry Holt and Company, 2001), 22.

<sup>61</sup> French, 36.

<sup>62</sup> Parry, 663.

the decay of Nature to be restored by angelic magic before the Eschaton, and that promised restoration through the discovery of the philosopher's stone.<sup>63</sup>

Although Parry's discussion of Dee's imperial writings focuses on the 1570s and 1580s, a little later than *Monas*, there is no doubt that Dee saw Elizabeth as a cosmically significant figure, and thus it seems naturally important to enlighten her about *Monas*, the text in which he most completely unfolds his philosophy. It is within this confluence of circumstances and goals – Dee's lifelong search for patronage and recognition within his own country, the possibility of a match between his queen and Maximilian's brother, and Dee's larger religio-political ideas about the reconciliation of the "Christian polity" – that we can understand his choice to present and discuss *Monas* with Elizabeth. *Monas* nowhere mentions Elizabeth, yet she casts a long shadow over the book. As supplicant yet also tutor, Dee's paradoxical relationship with his monarch mirrors the text's multilayered characterization of readership. Demanding scholarly exertion at times yet claiming at others that no effort is necessary, expecting some readers to passively absorb and others to actively pursue, Dee does not settle on one model for reading *Monas*. The work's unity does not extend to its readers, each of whom might be expected to approach the text differently and be differently transformed by that transaction.

#### IV. THE MONAD'S "SECOND FATHER"

The figure whom Dee weaves most inextricably into *Monas*, though, is Maximilian II. Despite the prominence of the dedication, even in translation history readers have typically glossed over the text's relationship to Maximilian II. There are only two extant translations of *Monas* into English, both made in the twentieth century. The most recent, C.H. Josten's excellent introduction and translation (1964), includes the

---

<sup>63</sup> Ibid., 648.

full text and an extensive commentary, but J.W. Hamilton-Jones's translation (1947) omits the letters both to Maximilian and Willem Silvius. The dedicatory letter to Maximilian takes up almost half of the text, and understanding its context is critical to any interpretation of *Monas* as a whole.

Dee positions Maximilian as the apex of readership; we have considered the reading public, an elite reader like Queen Elizabeth, and finally Maximilian, *the* elite reader most openly privileged and extolled by the text itself. *Monas*, ultimately, is a text designed for several levels of readership to glean differing messages from it. As I discussed in the example of the "superfluous point," *Monas* is deliberately multivalent: multiple levels of meaning coexist happily and invite varying, sometimes paradoxical, interpretations. It is a commonplace in alchemical literature to speak of two types of transmutation, physical and spiritual. The physical alchemical valence of *Monas* has been well-discussed in terms of the text giving veiled instructions for the creation of the philosopher's stone. We may never be able to decipher the specific alchemical process that Dee alludes to, and in fact Dee's spiritual alchemy may be more important to understanding the text than his message about the physical transmutation of metals. The spiritual alchemy of *Monas* is a personal transformation, enabling the individual to achieve the supercelestial *horizon aeternitatis* that Dee describes in the accompanying diagrams, but, I would argue, it is also a socio-political transformation. In addition to literal production of gold from dross, and in addition to the spiritual purification of the alchemist's soul, *Monas* promises a third type of alchemical transmutation: macrocosmic social change via actuating the transformative power of the monad.

Different readers will grasp these three levels in different ways. In this extremely esoteric work, read by both Dee's own sovereign and that of a rival empire, the privileged audience is first and foremost *royal*. Dee states repeatedly that only a worthy reader will be able to understand the mysteries propounded in *Monas*, and who might be counted worthier than a prince? At the same time, though, alchemy is not typically the pastime of a ruler of nations, so one might wonder why Dee thought it so crucial for both Maximilian and Elizabeth to read this text. One explanation is that Dee did not intend Maximilian or Elizabeth to glean a literal message from the book – such exalted persons could hardly be expected to race into to a musty laboratory and begin puttering with alchemical vessels and materials. Instead, such readers are meant to see the spiritual and societal implications of the monad. As such, *Monas* becomes an occult philosophical analogue of something like *The Booke named the Governour*, meant for the education of the political elite, supposedly inspiring Dee's audience to actuate his philosophical goals – to enact the personal transformation and spiritual transcendence he envisions.

Choosing to devote *Monas* to Maximilian may have been aligned with this syncretic religious agenda. Maximilian was Catholic, but as Holy Roman Emperor he was in a unique position to mediate between Catholic and Protestant factions, and in fact many of his political challenges came because he ruled both ardently Lutheran and firmly Catholic areas. Maximilian himself fielded accusations of Lutheranism from his Catholic subjects and criticism for his support of the Catholic church from his Protestant subjects, yet his personal faith remained difficult to pin down. One historian writes that when his father and wife pressured him in the late 1550s to be more overtly supportive of Catholic orthodoxy, "Maximilian responded to these pressures ambiguously, calling himself

neither papist nor evangelical but simply a Christian.”<sup>64</sup> Thus, Dee may have seen a kinship between his own religious beliefs and those of Maximilian; Dee’s syncretic tendencies and ambiguity of affiliation may have been mirrored in the emperor, making Maximilian both potentially open to the message of *Monas* and uniquely situated, as ruler of nations of mixed confession, to stimulate real change.

So why publish this esoteric text, especially with so many reservations about how vulgar readers may misuse the knowledge contained therein? Dee hints at an answer to this question:

Now, in what degree of that three-tiered (philosophical) rarity [here] explained I should like this my present to be, and to be ranked, you (most merciful King), who excel and who are rich in the knowledge of the greatest arts and of very secret matters, may easily conjecture.<sup>65</sup>

In publication, Dee can send a message to political leaders like Maximilian, and also empower those individual readers who are canny enough to grasp the hidden meaning in the text. Those who can understand the “very secret matters” woven into this multivalent text, could practice alchemy both literal and figurative: physically, personal, and globally. *Monas* implies that through transformed individuals, the “Christian polity” might again find unity and peace.

Dee’s translator Josten notes that in the course of his continental travels in 1563, the author “was certainly at Pressburg, Hungary, and perhaps attended there on 8. September, 1563, the coronation, as King of Hungary, of Maximilian of Habsburg, King of Bohemia and King of the Romans.”<sup>66</sup> Josten bases this conclusion on two pieces of

---

<sup>64</sup> Paula Sutter Fichtner, *Emperor Maximilian II* (New Haven: Yale University Press, 2001), 42.

<sup>65</sup> Josten, 118-21.

<sup>66</sup> *Ibid.*, 87.



evidence: internal evidence in *Monas* which implies that Dee saw Maximilian in person sometime in 1563, and a letter written to Maximilian's son, Emperor Rudolf II, in 1584, declaring that "at Pressburg, in 1563, Dee had conceived a special liking for that King."<sup>67</sup>

We cannot be certain that Dee attended the Hungarian coronation, but contemporary scholarship generally agrees that Dee was in Pressburg in September, 1563.<sup>68</sup>

Maximilian's Hungarian coronation was supposedly a grand affair: "The magnates and other nobility of the kingdom turned out in full regalia. Their finery and jewelry were 'indescribable,' according to one bedazzled observer."<sup>69</sup> Gems and sumptuous appearances, however, would have been unlikely to inspire Dee's strong recommendation of Maximilian's moral and philosophical qualities; as an English observer, Dee may have had a favorable impression of the religious aspect of the coronation ceremony, in which Maximilian displayed at least some degree of nonconformity. According to historian Paula Sutter Fichtner, "The archbishop of Esztergom, who officiated at the rites, wanted him to swear all of this by the virgin and

---

<sup>67</sup> Ibid., 87. In the first paragraph of the dedicatory letter, Dee establishes himself as an eyewitness to Maximilian's laudable qualities: "Yet those who in your presence have become aware of your virtues by way of careful and precise observation will own that their speech and style become altogether insufficient and poor whenever they would like to expatiate oratorically on the fullness of your virtues; the reasons whereof I learned most clearly and in various manners as an eye witness when only last September [1563], I spent some time at Posonium in your Hungarian realm" (114-5).

<sup>68</sup> Benjamin Woolley mentions Dee's visit to Bratislava (another name for Pressburg) in 1563 (74). According to Peter French, in 1563 Dee traveled from Zurich, to Urbino, to Rome, and thence to Pressburg, he may have attended the coronation of Maximilian of Habsburg as Hungary's king" (38). Of Dee's major biographers, only Charlotte Fell Smith does not seem to think Dee was in Hungary during that year; Smith implies that Dee remained in the Low Countries from the time he began his studies of a manuscript of Trithemius' *Steganographia* (February 1563) to the publication of *Monas* in January, 1564. See Charlotte Fell Smith, *John Dee (1527-1608)* (London: Constable & Company Ltd., 1909), 23. Smith's work, however, published in 1909, does not take into account some of the primary sources and evidence used in later biographies to more fully reconstruct Dee's deeds and travels.

<sup>69</sup> Fichtner, *Emperor*, 57.

the saints. Maximilian refused, calling instead on the Gospel as witness to his sincerity.<sup>70</sup> Maximilian was in an advantageous position to mediate between Catholic and Protestant nations and regions under his rule, and in the decade after the 1555 Peace of Augsburg, “reconciling the two confessions still seemed possible to many, the two emperors [Maximilian and his father Ferdinand I] included.”<sup>71</sup> Moreover, if Dee was aware of the rumors of a match with Archduke Charles, perhaps seeing what could be interpreted as the seeds of nonconformity in Maximilian’s coronation ceremony may have confirmed the common English perception that the Habsburg monarch and his brother were not irrevocably (or unpalatably, for an English audience) wedded to Rome. Because of all these circumstances, of all the Catholic monarchs he could have chosen to address a major work to, Maximilian may have seemed an attractive option to Dee.

Indeed, although England did not have formal diplomatic ties with the Holy Roman Empire, Elizabeth’s relations with the Habsburgs in the early part of Elizabeth’s reign were not overtly hostile – otherwise, it would have seemed a strange choice for Dee to publicly pledge his loyalty to and extol the virtues of a rival monarch. Susan Doran writes: “Emperor Ferdinand [Maximilian II’s father] refused to countenance Pius IV’s proposal to recognize the title of Mary Queen of Scots to the throne of England [...and furthermore...] efforts were made to negotiate a matrimonial alliance between Elizabeth and the Archduke Charles of Austria for the purpose of strengthening Anglo-Habsburg accord.”<sup>72</sup> A few years later, in 1570, Maximilian publicly opposed Pope Pius IV’s

---

<sup>70</sup> Ibid., 58.

<sup>71</sup> Paula Sutter Fichtner, *The Habsburg Monarchy, 1490-1848: Attributes of Empire* (New York: Palgrave Macmillan, 2003), 24.

<sup>72</sup> Susan Doran, *England and Europe 1485-1603* (New York: Longman, 1996), 68.

excommunication of Elizabeth.<sup>73</sup> Maximilian may have seemed more like a potential ally (or even a potential brother-in-law) than a rival, and Dee chooses to address him at the exact moment when the emperor finally inherited the full breadth of his power - a moment of promise and potential for Continental politics and religion.

This historical context may in part explain Dee's choice of dedicatee. What seems more difficult to explain, however, is the effusively hyperbolic praise that Dee heaps upon Maximilian. First of all, the dedicatory letter takes up almost a third of the text, at 33 pages compared to 71 pages for the rest of the book. Second, and more intriguingly, is the language that Dee uses to describe the relationship he wants with Maximilian and the hopes he has for his would-be patron. In particular, Dee uses the language of pregnancy and parenthood to construct an intimate relationship between dedicatee and author, positioning the monarch as father and Dee as father/mother in a way that also reinforces the book's alchemical import.

Dee describes the emperor as co-author, muse, and something more besides. He claims that he was "pregnant" with the idea for *Monas* for seven years, and yet it "took only twelve days most gently to bring it into the world."<sup>74</sup> Dee attributes a large part of the ease of conceiving of and writing his book to the beneficent influence of Maximilian:

And now I offer most humbly to Your most Serene Majesty my child (conceived in London, yet born at Antwerp), the Hieroglyphic Monad, entreating you with all my strength that you may not disdain now to become its second father, and that later, when it is older and more worthy of confidence, it may always serve you in your presence. I wish, that thereafter it will be considered your own, O most merciful King. During the whole time of birth your very pleasing countenance

---

<sup>73</sup> See Susan Doran, *England and Europe in the Sixteenth Century* (New York: St. Martin's Press, 1999), 87 and J.B. Black, *The Reign of Elizabeth 1558-1603* (Oxford: Clarendon Press, 1959), 169.

<sup>74</sup> Josten, 146-7.

seemed to be present before my eyes. You have eased and expedited my labors in bringing forth [this child].<sup>75</sup>

There are several noteworthy things about this passage. The idea of the writer as parent to his text is, of course, an authorial commonplace, but Dee's portrait of the pregnant father, offering his text/child to the patron so he can be a "second father" is both intriguing and strange. In his address to the emperor, one pregnant man dedicates the fruit of his womb of knowledge to another man, who both *will be* the text's future "father" and *has been* a generative influence throughout the text's incubation. In the letter to Willem Silvius, Dee gives his text yet a third father, noting that he has chosen "as a typographical parent to the newborn child you, who can bring it forth and produce it trim and well put together in every way."<sup>76</sup> *Monas* experiences, in Dee's estimation, multiple "births": its passage from the mind of the author to the written page, from manuscript to print, and from newly-printed, as-yet-unread text to widely disseminated and respected treatise. Each of these births has its own parent, a paradoxical agent who both paternally inseminates the text and maternally incubates it.

The imagery of generation and birth through productive union - integral to alchemy in general - recurs throughout *Monas*. Earlier in the preface, Dee describes the rarity and great mystery of his text, posing the question: "Will he not be astonished to behold so big a monadic brood to which no other monad or number could either be joined by addition, or irrelevantly, be applied for multiplication?"<sup>77</sup> The work itself is the "monadic brood," a seemingly oxymoronic phrase, which has been so perfectly

---

<sup>75</sup> Ibid., 146-7.

<sup>76</sup> Ibid., 150-1.

<sup>77</sup> Ibid., 128-9.

constructed by its author/father that no further amplification would be necessary or possible. Not only the text, but also the “actuation” of the principles inherent in the Monad are conceived of in terms of copulative union and conception: “When it has been actuated, it [*sc.* the terrestrial center of the monad] is to be united (in a perpetual marriage) to a generative influence which is lunar and solar, even if previously, in heaven or elsewhere, they [*sc.* the lunar and solar influences] were widely separated from that [terrestrial] body [at the center of the monad].”<sup>78</sup> On a literal level, this cryptic quotation refers to the common concept of the chemical wedding, “the triumphant moment of chemical combination where such opposite states and qualities as sulphur and mercury, hot and cold, dry and moist, fixed and volatile, spirit and body, form and matter, active and receptive, and male and female are reconciled of their difference and united.”<sup>79</sup> The work of physical transmutation here is paralleled with the spiritual work of transforming the reader - and that work is not solitary, but requires generative interaction between author and reader. Taken together with the pregnancy imagery, Dee suggests that the union of author and patron is like the fruitfulness of the chemical wedding.

Dee offers up his textual child both reluctantly and eagerly: desiring to claim ownership over something he considers his *magnum opus*, and yet handing it over to Maximilian for its future growth and nurturing, to be “considered your own.” Reluctance to relinquish control of his work coexists with eagerness to see the work flourish and find understanding and worthy readers. This language underscores the paradox of the pregnant father, as Dee describes his labor pains, made easier through consideration of the

---

<sup>78</sup> *Ibid.*, 134-5.

<sup>79</sup> Lyndy Abraham, *A Dictionary of Alchemical Imagery* (Cambridge: Cambridge University Press, 1998), 35.

emperor's "pleasing countenance." The memory of Maximilian's image has a salutary effect on Dee's writing process, and he furthermore claims that the short "labor" necessary to birth *Monas* (only twelve days) is "thanks to the magnetic power which you exert even from such a distance."<sup>80</sup> Maximilian himself is likened to an occult force, akin to celestial influences or magnetism. Dee means something more literal by "magnetic power" than personal charisma or force of personality. Through action-at-a-distance, the text implies that real (physical, spiritual, or both) emanations emitted by Maximilian help the author to form words to describe his ideas that have been gestating for seven years. Simply from seeing Maximilian once, Dee becomes convinced that the ruler is possessed of the sort of exceptional intellect that will be able to understand and make use of secrets contained in *Monas*.<sup>81</sup> In any case, the attraction that the author feels for the emperor seems powerful and special; above all, Dee literalizes the commonplace pregnancy metaphor, so often articulated in early modern dedicatory epistles, and in doing so, both complicates and reifies the patronage interchange.

Dee's effusive praise of Maximilian's intellect and power is not limited to the dedication, but is interspersed through the rest of the work. The occasional apostrophe to the emperor makes it seem as though the whole thing were actually an extended letter or direct address. In all cases, Dee attributes an almost sublime power and influence to his patron. At the end of his letter exhorting Silvius to print his text accurately and restrict the public readership appropriately, he expresses the hope that printer will accommodate

---

<sup>80</sup> Josten, 146-7.

<sup>81</sup> As far as I know, there is not enough evidence to conjecture whether Dee had any private audience or interaction with Emperor Maximilian. As aforementioned, it is almost certain that he was at the Hungarian coronation, but what he did or saw, and who he met, there remains uncertain. In a note dated 14 June 1564, he does refer to events "after my return from the Emperor's court" ("Compendious rehearsal" 519).

these requests, “at least on account of the heroic virtues of the very wise Maximilian that have nothing in common with the destiny of common men.”<sup>82</sup> Invoking the emperor’s unimpeachable character and imbuing him with totemic significance, Dee shifts the origins of his authorial demands from himself to his patron. Do this, he asks, not because I wish it, but because this book needs to reflect its dedicatee’s spotless virtue.

In Theorem XX, he expresses a striking hope for what may happen if Maximilian achieves an understanding of *Monas*: “Thus we shall attain to the snow-white clarity and to the ornaments of the white garments, O Maximilian, whom God, to the honor of His tremendous name, in times to come may render very great (by this interpretation of mysteries, or [else] some [other] member of the house of Austria.”<sup>83</sup> As Josten footnotes, “ornaments of the white garments” is a reference to Revelation 4:4, “And round about the throne were foure and twentie seates, and vpon the seates I sawe foure and twentie Elders sitting, clothed in white raiment, and had on their heads crownes of golde.” In linking Maximilian with apocalyptic imagery, perhaps Dee alludes to his apocalyptic hopes for Elizabeth; as likely as a match with Charles may have seemed in early 1564, perhaps “some [other] member of the house of Austria” would be not only a Habsburg, but also an offspring of English royalty. The idea that Maximilian’s special understanding of *Monas* will facilitate apocalyptic change need not be incompatible with Dee’s hopes for the preeminence of English interests during the end times.

Dee again invokes Revelation 4:4 in the numerically significant twenty-fourth and final theorem:

---

<sup>82</sup> Josten, 152-3.

<sup>83</sup> Ibid., 184-5.

Thus we shall now at last, in this our twenty-fourth speculation, consummate and terminate the permutations (defined by the number 24) and the metamorphosis of the quaternary, to the honor and glory of Him who (as John, the arch-priest of the divine mysteries, witnesses in the fourth and last part of the fourth chapter of the Apocalypse) sits on the throne [...] Whom also 24 elders, (having cast off their golden crowns) [and] falling prostrate from 24 seats placed in a circle, adore.”<sup>84</sup>

Dee implies that a person who fully and completely understands the mysteries of the monad (becoming a *mens adepta*, or alchemical adept, as Håkansson discusses) will have knowledge akin to those twenty-four elders, with their sublime closeness to and understanding of God. This allusion to Revelation can be connected with the religious agenda revealed by Dee’s choice of patron: perhaps he believes that an intellectual king would be uniquely placed to achieve syncretic transcendence. Reconciliation among the divergent branches of Christianity would be part of the ushering in of the end times, which most early modern thinkers, including Dee, saw as imminent rather than distant. Discussing apocalyptic imagery in *Monas*, Håkansson writes: “The belief that not only man, but the world itself would undergo a reformation when history reached its final end was clearly common in the early modern era,” and he describes Dee’s “conviction of his own role in this cosmic drama.”<sup>85</sup> Not only Dee himself, but the monad, may take part in that “cosmic drama,” as elite readers like Maximilian realize the symbol’s potential and apply its transformative power to the world at large.

This idea of change facilitated by heroic individuals recurs throughout *Monas*. Describing the difficulty of achieving an “understanding of the supracelestial virtues” adumbrated by the Monad, Dee asks the rhetorical question: “Where in the whole world (and in these our most deplorable times) shall we hope that there is that magnanimous,

---

<sup>84</sup> Ibid., 216-9.

<sup>85</sup> Håkansson, 324. Deborah Harkness also discusses Dee’s apocalypticism at length (133-156).



that probably singular hero?”<sup>86</sup> The answer seems to be: in the “house of Austria.”<sup>87</sup> Dee’s language suggests a view of history in which extraordinary, enlightened individuals could change the political, religious, and philosophical landscape. The reference to religio-political change is explicit on the next page, in which he informs Maximilian: “If your Majesty will look at it with attention, still greater mysteries will present themselves (to your consideration) such as we have described in our cosmopolitical theories.”<sup>88</sup>

Benjamin Woolley replaces “it” with “[the book]” in his quotation of this passage, which he uses to argue that Dee’s “[cosmopolitical] theories in some way related to his ideas on imperialism, a vision of the emergence of world government run according to universal Christian principles.”<sup>89</sup> While I agree with the latter statement, in fact the “it” in the quotation is not *Monas* as a whole, but particularly the diagram of the “Pythagorean Y” included on that page (Figure 4). This diagram depicts the two paths

---

<sup>86</sup> Josten, 116-7.

<sup>87</sup> Peter French writes that Dee views himself as the “singular hero” (65). Dee certainly thinks highly of the rarity of his own knowledge, but in the context of the introduction to Maximilian, I suspect that this is a flattering reference to the exalted abilities of his would-be patron.

<sup>88</sup> *Ibid.*, 118-9.

<sup>89</sup> Woolley, 75.

that a person may choose in life, and their respective associations.

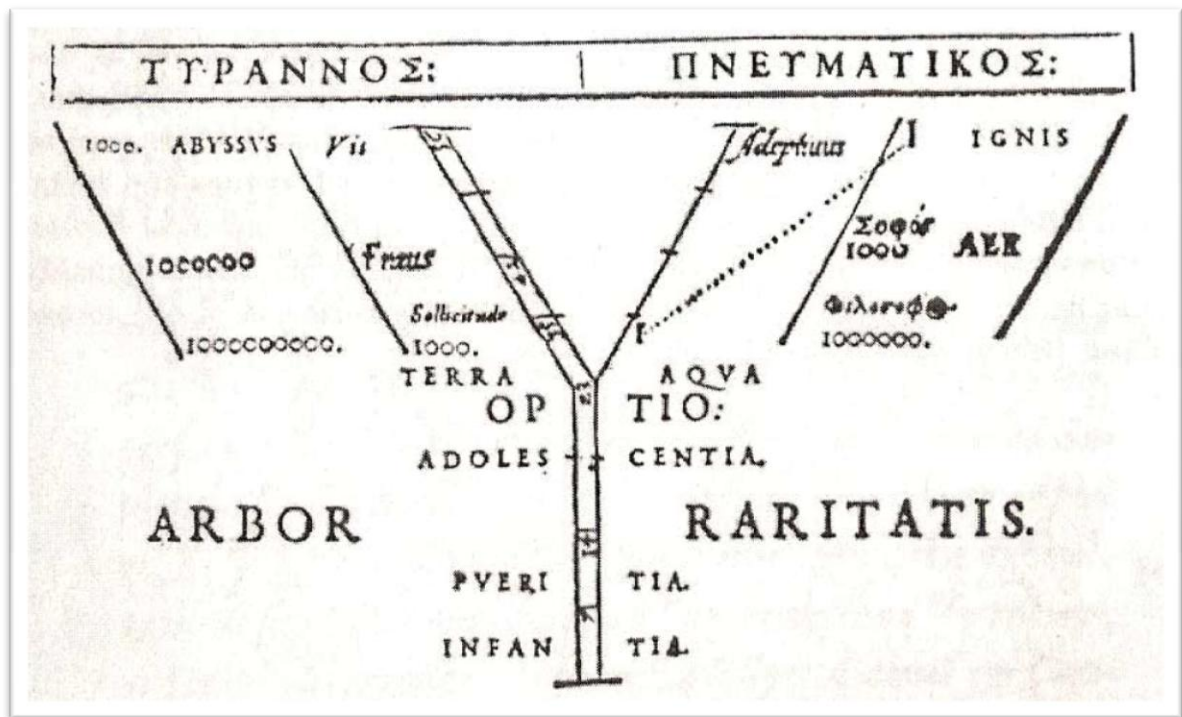


Figure 4: Arbor Raritatis, from John Dee's *Monas Hieroglyphica* (Josten, 118-9)

The larger branch is that taken by ordinary people, a path associated with vice, leading to ordinary knowledge and earthly power (*vis*), but the narrower right-hand path, associated with the elements of air and fire, leads to rare and transcendent understanding. The Pythagorean Y or *Arbor Raritatis* culminates in the knowledge of *adeptivus* in the upper right – the capacity of the *mens adepta* to attain transcendent identification with God.<sup>90</sup> The *Arbor Raritatis* visually represents the singular hero's path, and Dee's exhortation for Maximilian to "look at it with attention" indicates that he hopes the emperor will see his own life in the branching image and aspire to become *adeptivus* through a contemplation of the Monad's mysteries.

<sup>90</sup> See Håkansson, 168-9.

Significantly, Dee tells Maximilian that he will find “cosmopolitical” resonance in this seemingly conventional diagram of the choice of life. The upper left and right branches gesture toward that “cosmopolitical” significance in their contrast between “tyrannos” and “pneumatikos.” The morally-bankrupt left side aligns tyranny with *vis*, power, suggesting that the unworthy ruler accumulates and exerts power for his own corrupt ends. If the emperor can attain that “philosophical rarity,” though, then he will become *pneumatikos*, infused with spirit, perhaps able to transcend confessional boundaries and facilitate the reunification of the Christian church. The model of the “pneumatic” monarch combines the specialized knowledge of the alchemical adept, *adeptivus*, with the transformative power of fire, *ignis*, often figured as the agent of change and purest of the four elements in alchemical literature.

Dee invests Maximilian with all his hopes for heroic individualism effecting change in the world: having “nothing in common with the destiny of common men,” the author hopes that Maximilian will become “very great [...] by this interpretation of mysteries.” If Maximilian can understand the *mystagogia* revealed therein and achieves the private enlightenment promised by *Monas*, then as a powerful ruler, he would be in a unique position to apply that transcendent knowledge to the world at large, to publicly manifest these mysteries in a way that betters the “Christian polity.” Maximilian, Dee suggests, must complete his own transformation by interacting with the monad, and then transform his society. Dee’s address to Maximilian as “heroic,” “*pneumatikos*,” and “*adeptivus*,” then, figures the emperor as a type of alchemist-king whose governance can literally perfect his subjects and the society he governs.

Why, though, would Dee choose to attribute this heroic, transformative power to someone who is not his own ruler? There may be several reasons. First, Maximilian would be in a better position, geographically and politically, to begin religious reconciliation on the Continent. Second, despite his ardent patriotism, Dee does seem to have a less-than-flattering estimation of scholarship in England, and perhaps he anticipates a smaller audience of worthy readers there than elsewhere in Europe. In the “Compendious rehearsal,” he takes pains to enumerate the many Continental scholars, noblemen, and rulers who valued his talents and erudition, implying that those in England have fallen short of understanding his true worth as a thinker. Third, if Maximilian’s brother were to marry Elizabeth, then Europe would be one step closer to the possibility of unity and reconciliation within the Christian polity.

As we have seen, Dee carefully constructs his identity as author, and equally carefully constructs the identity of his readers. These readers have been of several different levels: the common readership, who by virtue of being allowed to purchase *Monas* at all might consider themselves among the intellectual (or alchemical) elite; those privileged readers like Elizabeth whom Dee specifically instructs on his text; and finally, the special case of Maximilian, whom Dee figures not only as the highest reader, but also as co-father. In each of these cases, there is a complex interaction between author, text, and reader. It would be too simple to say that Dee’s rhetoric of readership – his instructions to Silvius, his addresses to Maximilian, his writings about Elizabeth – attempts to construct an ideal reader, to mold his audience into appropriate receptacles for his hieroglyphic message. He certainly does do that, but it is not a unitary action on the part of the author; even in the way Dee describes the text (for example, Maximilian’s

image impregnating his mind and furthering the gestation of the nascent book), we can see that Dee's elite and royal readers and patrons help to shape the structure and message of his work. Although Dee maintains that the hieroglyphic speaks for itself, *Monas* requires a complex balance of intuition and carefully-informed interpretation, and most importantly, it requires self-aware readers who understand that the hieroglyph asks the reader to take his or her own place in the "cosmic drama."

Although Dee refers to that "singular hero," in asking the reader to ruminate upon and emulate Maximilian's admirable qualities, in effect each reader is invited to be heroic. One quality that makes *Monas* unusual for its time is the repeated stress on its novelty, in an era that more often than not saw "novel" as a pejorative term. Dee touts that his book "is woven together by a manner of writing in which up to the present day, as far as I have been able to hear or gather from the [literary] monuments of our forefathers, no work has ever been composed."<sup>91</sup> Many scholarly works of the time (and even others by Dee) rely primarily upon copious citation of classical and medieval authors, calling upon the authority of antiquity and scholarly tradition to validate the meaning of the work. In *Monas*, however, Dee cites other authors only rarely, and the book reads not like a pastiche of scholarly references, but as the new, fresh, pouring-out of Dee's own carefully-cultivated and developed views. Although the hieroglyph itself is composed of familiar astronomical and alchemical symbols, Dee writes that his work imbues these "dead, dumb, or, up to the present hour at least, quasi-barbaric signs" with novel, unique meaning.<sup>92</sup> The focus on novelty and "rareness," like that on heroism, reinforces the idea that *Monas* is a call-to-action, not meant for abstruse scholarly

---

<sup>91</sup> Josten, 120-1.

<sup>92</sup> Ibid., 120-1.

contemplation, but for each reader to glean a message appropriate to his or her station, and to then go out and do something about it.

Yet another level of alchemy suggested by the text is the transformation of the reader him or herself, as Szulakowska puts it, the “restructuring” of the reader’s world to comprehend and encompass the radical transformation hinted at by the Monad. Dee certainly has several levels of alchemy in mind here. His lengthy discussions of the solar and lunar attributes of the hieroglyphic clearly are designed to give specific instructions to practicing alchemical adepts, and finally the triumph of the heroic philosopher suggested by the Pythagorean Y aligns with alchemical transformation of the individual human soul into a *mens adepta*. This invocation of political alchemy reaches out from the individual, suggesting the possibility of systemic religious and social change begun by royal readers like Elizabeth and Maximilian and supported by wise and virtuous subjects among the reading public. Several circumstances intersect to make *Monas* seem topical rather than abstract, with respect to such elite readers: the context of Dee’s travels and interactions in 1563 and early 1564, the possibility of a marital alliance between England and the Holy Roman Empire, and Dee’s apparent hope for religious reconciliation (reinforced by the seeming moderation of Habsburg Catholicism, at least to an English observer). All of these imply that the hieroglyph represents not just the transformation of gold, or even perfection of the individual, but apocalyptic transformation of nations and societies, in a world prepared for the advent of that “Reforming Empress of the Last Days.” In Theorem XXIII, Dee describes what would happen if several people manage to fully comprehend and actuate the Monad:

(Once upon a time) four very famous men, philosophizing together, obtained by [their] work this true effect of it [*sc.* the monad], whereupon, having for a long

time been stunned by the very great wonder of the thing, then at length they devoted themselves entirely to singing and preaching the praises of the most good and great God, who had in this way granted them such great wisdom, power over other creatures, and large dominion.<sup>93</sup>

This fairy-tale-like narration seems to describe less what *has* happened and more what *might* happen if Dee's audience fulfills his expectations. What these four men gain, though, is not just knowledge, but widespread "power over other creatures" and "large dominion." In this way, the religious and socio-political message of *Monas* intersects with the goals of Dee's imperial writings, which envision a preeminent global role for Britain. *Monas* can thus be read as consonant with the broad goals of Dee's scholarship throughout his life, from *Propaedeumata* to the angelic conversations, all of which strive to understand and participate in the crucial, imminent, and apocalyptic transformation of the world.

---

<sup>93</sup> Ibid., 216-7.

## CHAPTER 2

### MAPPING THE HIEROGLYPHIC SELF IN THE LETTERS OF JOHN WINTHROP, JR., AND EDWARD HOWES (1627-1640)

*And all such things as are either secret or manifest: them I knowe.*

-- Wisdom of Solomon 7:21, quoted by Edward Howes  
in a letter to John Winthrop, Jr., January 22, 1627

Seventy years after John Dee published his *Monas Hieroglyphica*, in 1631, a young man filled with both spiritual and alchemical zeal moved from England to Massachusetts. When he did so, he marked his belongings with his personal sign: the now-familiar hieroglyphic monad. Over time, this colonist, John Winthrop, Jr., augmented his substantial library with many volumes purchased from the library of the late John Dee.<sup>1</sup> As goods and letters passed back and forth across the Atlantic, Winthrop continued to identify with Dee's hieroglyph; for instance, his friend Edward Howes later sends a note "concerning your box of books which you shall receive of Mr. Dillingham

---

<sup>1</sup> For information about Dee's influence on John Winthrop, Jr., and Winthrop's book acquisition, see C.A. Browne, 'An Old Colonial Manuscript Volume Related to Alchemy,' *Journal of Chemical Education*, Reprinted in *Microfilm Edition of the Winthrop Papers*, ed. Majorie F. Gutheim (Dec 1928): 1583-1590; William H. Sherman, *John Dee: The Politics of Reading and Writing in the English Renaissance* (Amherst: University of Massachusetts Press, 1995), 84; and Ronald Stearne Wilkinson, 'The Alchemical Library of John Winthrop, Jr. (1606-1676) and His Descendants in Colonial America, Part IV,' *Ambix* 13 (1966), 139-86. On Winthrop's use of the monad, see Walter W. Woodward, *Prospero's America: John Winthrop, Jr., Alchemy, and the Creation of New England Culture, 1606-1676* (Chapel Hill: University of North Carolina Press, 2010), 33-37.



directed to you and marked with [the monad].”<sup>2</sup> Winthrop, son of an eminent colonial leader and future leader himself, could be seen as inheriting the transformative vision adumbrated by John Dee in his *Monas Hieroglyphica*. Winthrop’s historical moment is profoundly different from Dee’s, though: cultural and geographical boundaries are rapidly expanding, and at the same time, doctrinal tensions within Winthrop’s Puritan community and in the larger spiritual landscape are growing. While Dee envisions his alchemical-spiritual scholarship in the service of Elizabeth’s potential empire, Winthrop’s own “cosmopolitical” model focuses on diverse Protestant communities establishing economic, political, and spiritual connections from England to New England and beyond. This chapter explores Winthrop’s unique alchemical philosophy through the lens of his decades-long correspondence with London clerk and mathematician Edward Howes. Howes’s letters to Winthrop participate in a hieroglyphic discourse informed by Dee’s philosophy, and these letters, crucially, stand at a crossroads of private and public, revealing both Howes’s optimism and his anxiety about the possibility of perfecting the individual self, the closed circle of intimate friendship, and the wider network of faithful communities.

On January 22, 1627, Edward Howes closes a letter to his friend John Winthrop, Jr., with the quotation from the apocryphal Wisdom of Solomon that begins this chapter and a geometric diagram consisting of a subdivided triangle inscribed within a circle (see Figure 5). Howes’s biblical reference suggests both conviction and aspiration: conviction that his friend Winthrop possesses an aptitude for acquiring secret knowledge, and

---

<sup>2</sup> *The Winthrop Papers*, in *Collections of the Massachusetts Historical Society*, 4<sup>th</sup> ser., vol. 6 (Boston: Printed for the Society, 1865), 496. Letter dated 1634. Howes’s letters to Winthrop are extant, but unfortunately Winthrop’s replies are not.

aspiration that he may prove likewise worthy. Much as Dee deconstructs and reassembles his monad to explicate its meaning, in this chapter the components of the *Mysterium* hieroglyph provide a roadmap, both individually and in combination, for understanding the multilayered complex of values – alchemical, political, economic, and spiritual – that converge in the epistolary friendship of these two men. The *Mysterium* hieroglyph itself is, like Dee’s monad, an overdetermined symbol; in its combination of text and image, it expresses the complete worldview of its author and at the same time seeks to bring that vision into existence. The phrase below the diagram, “The fyre cannot destroye whats written in the Harte,” suggests that reading this hieroglyph – and the unfolding of its philosophy in subsequent letters – is meant to be a transformative and experiential process, like an alchemical furnace or the biblical “refiner’s fire.” This process, significantly, comes to fruition only through the recursive interaction between the hieroglyph and its reader, or in other words, between the philosophical system that the *Mysterium* diagram points toward and the truths that are already inherent in Winthrop himself, “written in the Harte.”

Unlike Dee’s monad, though, Howes’s hieroglyph appears in a letter rather than in a published book, a model of hieroglyphic reading for an audience of one. The import of these letters, however, goes beyond the purely personal. Winthrop is for Edward Howes as Maximilian II is for John Dee: a catalytic figure standing at a world-altering crossroads. Moreover, both men recognize that letters are only ambiguously private. As we will see, Howes frequently acknowledges the possibility that his letters may be misdirected or read by unintended audiences. Like other hieroglyphic examples in this project, Howes seeks in his letters to make his meaning plain to Winthrop’s privileged

eyes, while concealing it from unworthy eavesdroppers. The central triangle within the *Mysterium* diagram declares “*una clamis ad omnia*” – “one cloak for all things.” This doubly-significant phrase suggests both that Howes’s diagram expresses its author’s complete cosmopolitical philosophy, and that the symbol’s meaning must be wrapped in a hieroglyphic “cloak.” Hieroglyphic expression, thus, is uniquely suited to the publicly-private venue of these letters, offering the worthy audience (that is, Winthrop) direct access to secret knowledge that would not be possible with words alone, while obscuring such knowledge from prying eyes.

Through examining evidence from letters in the thirteen year period following the *Mysterium* letter, I argue that Winthrop and Howes see themselves as participants in a historic moment uniquely conducive to “alchemical” transformation on several levels: at the level of physical materials, individual souls, and socio-political networks. The alchemically-perfected self, informed by the writers’ interest in occult philosophy, becomes equated with Protestant notions of election. As suggested by the upper-left triangle in the *Mysterium* diagram, “*Christus et lapis*” or “Christ and the [philosophers’] stone,” spiritually elite American colonists and “elect” readers of alchemical texts experience a similarly special relationship with (and knowledge of) the divine. Howes’s hieroglyph connects his alchemical philosophy with his interest in the Northwest Passage, “*via ad Indos et Indos*” or “a way to the [East] Indies and [West] Indies,” which for these men represents the site of a triumphant and transformative union between East and West. This vision of geographic union mirrors the dissolution of boundaries between selves in friendship. The bottom triangle gestures toward the potential for individual and interpersonal perfection, implicitly comparing the spiritual-alchemical refinement of the

self to the mathematical activity of “squaring the circle.” In “*quadratur cli. Perpet[ua] motus*” or “the squaring of the circle is continuous motion,” Howes alludes to a model of the self as a bounded and yet infinite circle that he expands upon in later letters. Ultimately, Howes’s letters suggest that spiritual and alchemical election enables Winthrop not only to fashion himself spiritually, but also to forge an intimate bond of friendship that transcends geographic distance and even the boundaries of the physical self.

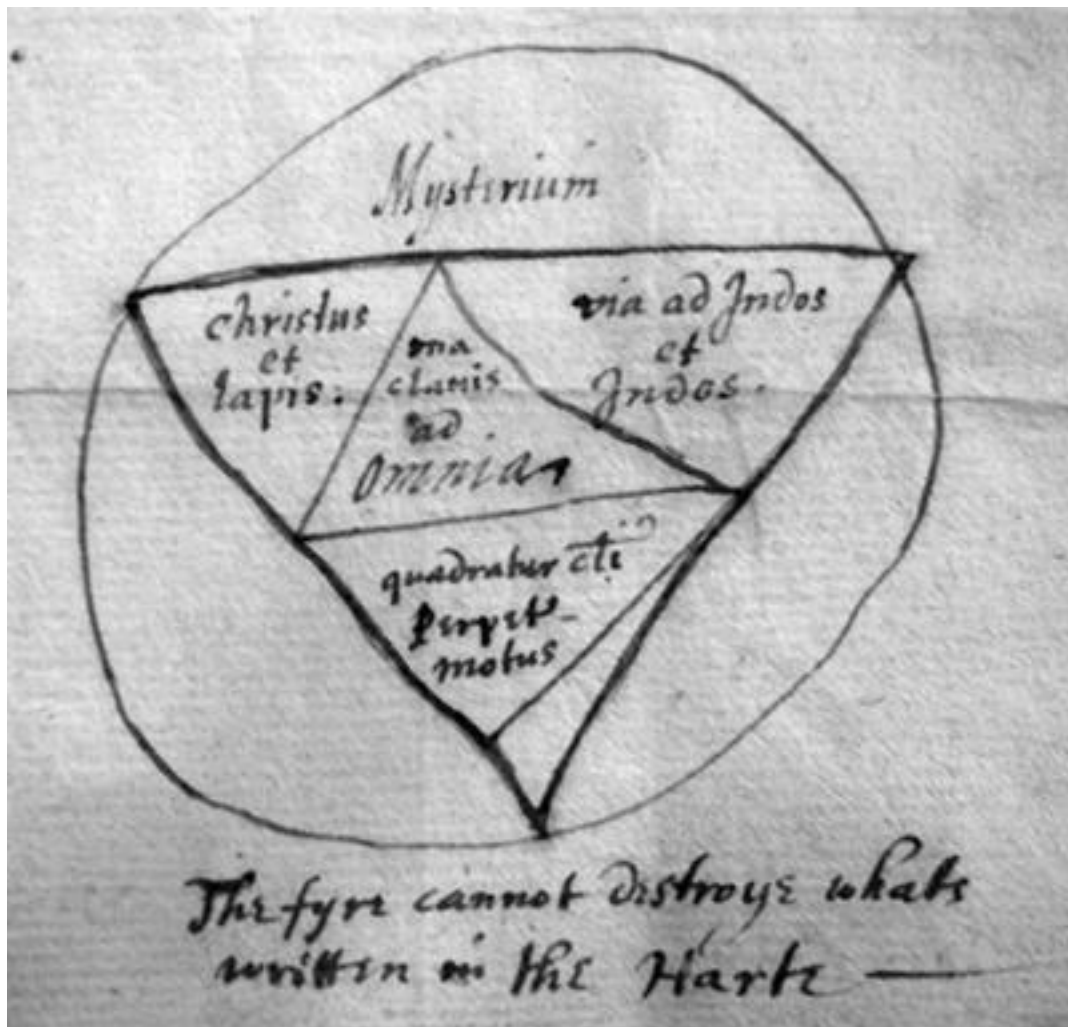


Figure 5: Detail from letter by Edward Howes to John Winthrop, Jr., 22 January 1627. Photograph taken by Katherine Shrieves at the Massachusetts Historical Society, Boston, MA.

These letters contribute to our understanding of the intellectual history of early modern Anglo-American culture, including the growth of scientific inquiry in New England, plans and hopes for English colonial expansion, and changing ideas about personal spirituality. Most importantly for this project, however, the Winthrop-Howes letters provide a working example of hieroglyphic expressive and interpretive practices. Howes's letters expose the process of hieroglyphically-informed communication, offering a window into how two seventeenth-century people perceived their own symbolically-rich *mundus significans*. Howes encompasses his alchemical, epistemological, and geographic program within the *Mysterium* hieroglyph, and frames his spiritual advice to Winthrop in geometrical terms that echo the shape of this image ("I would haue you soe good a Geometritian as to knowe your owne center"). These friends, who met and became close as students, have recourse to a common vocabulary of alchemical and mathematical images, which serves as both subject matter and material for metaphor, both hieroglyphic knowledge and fodder for the construction of hieroglyphs. Moreover, Howes's use of this common vocabulary takes place within the particular context of close friendship. Winthrop participated in many networks of correspondence, of which Howes's letters were only one part, yet these letters distill the larger intellectual community into two intimate friends, ultimately figured as two individuals who share the same soul.

The Winthrop-Howes correspondence has only recently begun to be examined by scholars of early modern literature, history, and culture. The past decade, however, has seen a blossoming of scholarly interest in Winthrop's life, focusing on two issues: identifying Winthrop's specific "brand" of Puritanism, and asserting the centrality of

alchemy in the development of early American culture. In his *Blown by the Spirit*, David Como argues that Winthrop and Howes were both sympathetic to antinomianism, the heretical belief that the elect are governed by God's grace alone and not subject to human laws.<sup>3</sup> Although Neil Kamil and Walter W. Woodward both acknowledge Winthrop's conspicuous absence at the famous antinomian court cases, these critics resist associating Winthrop and his social circle with particular sectarian interests, and instead see him as espousing a "relatively pluralistic and latitudinarian view of the growing confessional diversity of the Protestant world."<sup>4</sup> My own analysis follows Kamil and Woodward in seeing Winthrop and Howes not as covert antinomians, but rather as individuals deeply invested in exploring their own unique models of personal spirituality.

Both Kamil and Woodward have also made the significant scholarly contribution of reassessing the importance of alchemical philosophy and practice in seventeenth-century New England. This chapter does not seek to replicate that work, but instead situates the Winthrop-Howes correspondence within the early modern hieroglyphic tradition. I view the *Mysterium* diagram as a key to understanding the views that Howes expands upon in subsequent letters, and conceiving of this correspondence as a type of hieroglyphic reading and writing enables us to more fully contextualize the kind of

---

<sup>3</sup> See David R. Como, *Blown by the Spirit: Puritanism and the Emergence of an Antinomian Underground in Pre-Civil-War England* (Stanford: Stanford University Press, 2004). Nigel Smith also uses Howes's writing as an example of antinomian thought in *Perfection Proclaimed: Language and Literature in English Radical Religion 1640-1660* (Oxford: Clarendon Press, 1989). For more information on antinomianism and the Antinomian Controversy in Massachusetts, see Larzer Ziff, *Puritanism in America: New Culture in a New World* (New York: Viking Press, 1973), 59-67; Gertrude Huehns, *Antinomianism in English History, with Special Reference to the Period 1640-1660* (London: Cresset Press, 1951); and David D. Hall, ed., *The Antinomian Controversy, 1636-1638: A Documentary History* (Durham: Duke University Press, 1990).

<sup>4</sup> Neil Kamil, *Fortress of the Soul: Violence, Metaphysics, and Material Life in the Huguenots' New World, 1517-1751* (Baltimore: Johns Hopkins University Press, 2005), 9 and Walter W. Woodward, *Prospero's America: John Winthrop, Jr., Alchemy, and the Creation of New England Culture, 1606-1676* (Chapel Hill: University of North Carolina Press, 2010), 47.

individual and collective refinement that Howes envisions.<sup>5</sup> Moreover, little scholarly attention has been given to Winthrop and Howes's friendship – a friendship bond articulated in alchemical and mathematical language, and strengthened in the shared practice of material and spiritual alchemy. Both Kamil and Woodward focus on the collegial relationship between alchemical professionals, but this emphasis on their shared dedication to the alchemical opus downplays the affective rhetoric that is so striking in these letters.<sup>6</sup> Professional and personal are inextricably connected in Howes's hieroglyph. It is through networks of emotional, intellectual, and spiritual intimacy, I argue, that these friends conceive of alchemical refinement “working.”

John Winthrop, Jr. (1606-1676), was just completing his legal studies at the Inner Temple during the first half of 1627, when Howes, also at the Inns of Court, wrote the letter containing the *Mysterium* hieroglyph. As Winthrop's biographer Robert C. Black writes, however, he “quitted the Inner Temple no barrister – either ‘inner’ or ‘utter’ – but an enthusiastic alchemist,” and in the next couple of years Winthrop first joined the ill-fated English naval expedition to aid French Protestants at La Rochelle and afterward secured a position on a merchant ship traveling around the Mediterranean, as far as Constantinople. In August 1631, Winthrop followed the lead of his father, who had sailed

---

<sup>5</sup> The *Mysterium* diagram itself has not been explored fully in recent scholarship. Como alludes briefly to the “geometric emblem” (417). Woodward does not mention the hieroglyph at all. Kamil gives the most comprehensive explanation of the hieroglyph, situating it within the context of the “grand hermetic project” in which both Winthrop and Howes were invested (429).

<sup>6</sup> These scholars' analysis of the power dynamic in the Winthrop-Howes alchemical friendship differs. Kamil emphasizes Howes's view of Winthrop as a specially-talented adept (429). Woodward sees the two as engaged in an “alchemical partnership” (44).

for Massachusetts a year earlier, and moved permanently to New England, where he ultimately became the first governor of Connecticut.<sup>7</sup>

Edward Howes met Winthrop while in the Inner Temple, and both men cultivated their alchemical interests in the apothecary shop of Thomas Fones, where Howes worked as a clerk. Although Howes spoke of a desire to join his friend in New England, he remained in England until his death. His only published work was a mathematical primer, *Short Arithmetick, or, The Old and Tedious Way of Numbers Reduced to a New and Briefe Method* (1659).<sup>8</sup>

The Winthrop-Howes letters range broadly over topics from the practical to the abstract; they discuss for example, books bought by Howes for Winthrop, mining endeavors in New England, alchemical experiments, religious and political gossip in England about the colonists, and more. Winthrop's correspondence suggests that he wants to keep abreast of new publications and developments in natural philosophical theory and practice. For instance, in late 1632 Howes sends his friend a catalogue of recently available works by Robert Fludd, praising in particular their exquisite publication quality, and he expresses his hope that he might soon be able to procure some of these books.<sup>9</sup> On other occasions, Howes sends materials and instruments of scientific

---

<sup>7</sup> See Robert C. Black, *The Younger John Winthrop* (New York: Columbia University Press, 1966), 27-57.

<sup>8</sup> Most evidence about Howes's life comes from his letters to Winthrop. For more information, see R. E. Anderson, "Howes, Edward (fl. 1632–1659)," rev. Anita McConnell, in *Oxford Dictionary of National Biography*, ed. H. C. G. Mathew and Brian Harrison (Oxford: Oxford University Press, 2004).

<sup>9</sup> 24 November 1632, 483-4. Howes enthusiastically recommends Fludd's work: "Here I haue sent you a taste of the famous and farre renoued English man of our tymes, Dr. Fludd, whoe as you may remember published a booke in defence of the weapon salue, before you went ouer, but that is nothinge in comparison of these here menconed, which are all folio books, and full of brasse pieces, the like I neuer sawe, for engines, fortificacions, and a touch of all opperatiue works, as you may conceiue by the titles: yet let me tell you this, that the titles, nor my penn, is not able to expresse what is in those books." Moreover, Fludd's



practice, such as a specially-designed “furnace” used to “boyle in wooden vessels”<sup>10</sup> and a vial of “oyle of vitriol.”<sup>11</sup> This transatlantic exchange of words, books, and objects reflects the diverse intellectual interests of these two friends. The Howes letters reveal an interest not only in the technical practice of alchemy and metallurgy but also in the rarefied search for what Howes calls *terra incognita*: spiritual enlightenment (and possible earthly perfection) that intermingles private alchemical and natural philosophical endeavors with the public economic, political, and religious project of nurturing the New England colony.

Alchemical literature frequently made a connection between Christian redemption and the goal of the alchemical quest. For example, one contemporary alchemical text, Thomas Tymme’s *A Light in Darkness*, explicitly alludes to the spiritual as well as physical dimensions of alchemical practice. In his preface, Tymme defines alchemy as “a Science” not only in which “those Mettalls that are imperfect and corrupted, are altered and changed into true & perfect Gold,” but also in which “Every thing which is indigested, and ordeyned to be digested, & every impure thing, and able to be purified,

---

work may have inspired the *Mysterium* diagram, which Kamil describes as “instantly recognizable by natural philosophers of the late 1620s and 1630s as derived from Fludd’s famous ‘science of pyramids’ (*Pyramidum scientia*), his alchemic representation of the descent into the microcosm and reascent into the macrocosm of the soul” (445).

<sup>10</sup> Howes writes: “Sir Hugh Platts engine that you and I haue bin often hammering about, to boyle in wooden vessels, is now come to light, and I hope wilbe with you as soone as this letter: my master hath bin at the cost of making one, and wee tryed it in our parlor; it will doe verie well, but it being in its infancie, had need of such mature Mathematitians as your selfe to bringe it to perfect proportion & strength” (5 August 1633, 491). Howes was not the only one of Winthrop’s correspondents who shipped him a furnace; his uncle Emanuel Downing also mentions sending to the elder Winthrop’s plantation “a furnace for brewing or boylinge salt or sope &c” (13 August 1633, 41).

<sup>11</sup> Howes writes: “I haue sent you by this ship the oyle of vitriol, that you left behind you. It is directed to your father, because of the more safe conveyance thereof. It is in a little double voyall, bound vp in 2 or three coarse papers” (June 1632, 476).

may be fully digested and purified.”<sup>12</sup> The alchemist mimics in microcosm what God does in macrocosm; the process of breaking down and reorganizing metals in order to purify them echoes the spiritual purification of the soul by the divine alchemist. At the end of time, Tymme writes, all things will undergo “their finall purificacion by alteracion through fire in the day of doome. At which tyme GOD will seperate all the uncleane fæces, & corrupcion that is in the foure Elements & bring them to a Christalline cleerenes.”<sup>13</sup> There are two actors in this analogy: the alchemist, purifying metals, and God, purifying the created world. Christ himself is the spiritual quintessence into which the corrupted, corporeal elements are purified. Tymme’s orthographic choice of “Christalline” underscores this religious parallel.<sup>14</sup>

Alchemy does not merely emulate what God will do at the end of the world, though; it also suggests the tantalizing possibility that the knowledgeable alchemist might be able to transmute the dross of his own corrupted soul into spiritual gold. As David Como writes in *Blown by the Spirit*, Edward Howes equates “Christ with the philosophers’ stone, suggesting that Christ was the savior of the ‘lesser world,’ while the stone was the savior of the ‘greater world.’”<sup>15</sup> In other words, Christ purifies the microcosm of the individual self as the philosophers’ stone purifies corrupted matter in the macrocosmic world. As seen in Tymme’s equation of Christ and the quintessence,

---

<sup>12</sup> Thomas Tymme, *A light in darkness, which illumineth for all the Monas hieroglyphica of John Dee, discovering natures closet and revealing the true Christian secrets of alchemy*, ed. S.K. Heninger (Oxford: New Bodleian Library, 1963), 15.

<sup>13</sup> Tymme, 24.

<sup>14</sup> Variations on both ‘chrystalline/christalline’ and ‘crystalline’ were evident in early modern England, suggesting that Tymme’s spelling may be a deliberate choice.

<sup>15</sup> Como, 425.

alchemical philosophers often metaphorically connect the saving power of Christ and the redemptive process of alchemical transmutation.<sup>16</sup>

Recent historical work on alchemy, particularly the writing of Newman and Principe, proposes that much discussion of spiritual alchemy has been too colored by a genealogy of occult thought originating in the nineteenth-century and influencing much twentieth-century criticism.<sup>17</sup> Recognizing the importance of framing alchemical thought historically, I interpret the content and rhetoric of the words and images of the Winthrop-Howes correspondence by taking into account the ancillary evidence of the objects and books that help paint more complete picture of the intellectual climate of this exchange. Howes uses alchemical language and imagery to describe spiritual concepts, but he also clearly believes that alchemical practice has a spiritual dimension in its own right (and in

---

<sup>16</sup> Stanton J. Linden describes the Christian alchemical analogy concisely: “Imperfect substances used as the proximate ingredients of the stone might be thought to undergo death and corruption in the initial stages of the alchemical process. But following the blackness and death of the *putrefactio* (and continuing the analogy with Christ’s death, resurrection, and man’s salvation), these base materials could appear to be ‘reborn’ in the form of perfect, pure, and incorruptible gold.” Alchemists commonly cite John 12:24 (“...except a corn of wheat fall into the ground and die, it abideth alone; but if it die, it bringeth forth much fruit”) as a biblical reference for this process. See Stanton J. Linden, ed., *The Alchemy Reader: From Hermes Trismegistus to Isaac Newton* (New York: Cambridge University Press, 2003), 16.

<sup>17</sup> For instance, see William R. Newman and Lawrence Principe, “Some Problems in the Historiography of Alchemy,” in *Secrets of Nature: Astrology and Alchemy in Early Modern Europe* (Cambridge, Mass.: MIT Press, 2001); Newman and Principe, “Alchemy vs. Chemistry: The Etymological Origins of a Historiographic Mistake,” *Early Science and Medicine* 3 (1998): 32-65; Hereward Tilton, *The Quest for the Phoenix: Spiritual Alchemy and Rosicrucianism in the Work of Count Michael Maier (1569-1622)* (New York: Walter de Gruyter, 2003), 1-34; and Bruce T. Moran, *Distilling Knowledge: Alchemy, Chemistry, and the Scientific Revolution* (Cambridge, Mass.: Harvard University Press, 2005). Moran sums up Newman and Principe’s argument succinctly: “Later, when alchemy combined with esoteric traditions in the eighteenth and nineteenth centuries, spiritual interpretations of the alchemist’s efforts helped to foster a popular belief that preparation of the Philosophers’ Stone included the spiritual preparation of the alchemist himself. That view – in other words, the notion that personal transformation is somehow connected with doing alchemy – has lingered into the modern era” (67).

this regard he is in the mainstream of medieval and early modern alchemical thought).<sup>18</sup>

My own reading follows Woodward's assertion in *Prospero's America* that Winthrop and Howes conceive of "Christian alchemy" as a merging of praxis and theory, corporeal and spiritual purpose.<sup>19</sup> The philosophy encapsulated in the *Mysterium* hieroglyph, I argue, inscribes political, economic, and spiritual transmutation within one circle.

## I. BUILDING A NEW JERUSALEM

The geometric hieroglyph that Howes includes in his letter gestures toward this intersection of alchemy and religion in the upper left triangle, *Christus et lapis*, which explicitly links Christ with the philosophers' stone. This purification of the created world in the divine alembic, for Howes and Winthrop, is analogous to the spiritual goal of the colonialist project in New England.<sup>20</sup> Moreover, the ethos that permeates the Winthrop-Howes letters suggests an analogy between initiation into the "secrets" of natural philosophy and an assurance that one is among the elect. Winthrop's social circle sees the New England colony as a promised land in which the purified religion may be practiced by godly people as an example for the whole world.<sup>21</sup> Howes writes: "The harts of all

---

<sup>18</sup> As Bruce Moran notes, medieval and early modern natural philosophers "had no problem in thinking of alchemy as both science and religion, as dependent on both reason and revelation, and as embracing both the practical and the divine" (35).

<sup>19</sup> See Woodward, 11-12.

<sup>20</sup> The connection between Puritan theology and alchemical natural philosophy has been well-noted in scholarship on early modern England. For example, P.M. Rattansi discusses the marked increase in Paracelsian medical practice during the Interregnum in "Paracelsus and the Puritan Revolution" (*Ambix* XI (1963): 24-32). See also J. Andrew Mendelsohn, "Alchemy and Politics in England 1649-1665," *Past and Present* 135 (1992), 30-78; Charles Webster, "English Medical Reformers of the Puritan Revolution, a Background to the 'Society of Chymical Physitians,'" *Ambix* 14 (1967): 16-41; Brian Vickers, ed. *Occult and Scientific Mentalities in the Renaissance* (Cambridge: Cambridge University Press, 1984); and others.

<sup>21</sup> Cf. The words of John Winthrop, Sr.'s famous sermon: "For wee must Consider that wee shall be as a Citty upon a Hill, the eies of all people are uppon us." Both the elder and younger Winthrop agreed with

Gods people here are all bent towards our Syon; and from all parts of the land they are goinge vp by flocks to *New Salem* Jerusalem to worship; helpe me to you with your prayers; or, if the Lorde see good, that I may to his glorie suffer here.”<sup>22</sup> Howes imagines New England as a focal point toward which godly people flow and from which the influence of the elect emanates; being far away from Winthrop, then, becomes a source of both emotional and spiritual pain, as well as a divinely-ordained trial to be endured with patience.

Confidence that one is intellectually worthy of receiving and transmitting the secrets of nature – which early modern thinkers universally seem to acknowledge as reserved only for the deserving – is akin to confidence that one’s eternal soul is worthy of salvation. Howes’s wish to ‘helpe me to you with your prayers; or, if the Lorde see good, that I may to his glorie suffer here’ thus takes on a double meaning: he desires to be part of the New World colony of the elect, and he seeks to penetrate the secrets of nature; for both, God must deem him worthy. Winthrop, in Howes’s eyes, has already achieved the former goal: ‘You are become not only a branch in the viniard; but euen a pillar to the new Syon.’<sup>23</sup> Howes perceives his friend as elite even among the elect, not simply one among the Massachusetts crowd, but a foundational influence on his community. We see this connection between Protestant theology and occult philosophy distilled in the *Mysterium* hieroglyph and explicated further in subsequent letters, but it is important to

---

the commonplace assumption that their colleagues were among the elect and their colonial endeavor was particularly blessed by God. As one historian of New England Puritanism writes, “The church [in Mass. Bay Colony] admitted to membership only persons who evidenced signs of being elect” (50). Cf. Larzer Ziff, *Puritanism in America*.

<sup>22</sup> 22 June 1633, 490.

<sup>23</sup> 22 June 1633, 487.

note that that this theological-alchemical philosophy develops both from conversation with each other and from engagement with larger intellectual communities. Both friends are actively reading, discussing, and sharing works that influence these views. The marginalia and annotations in one short book from Winthrop's library enables us to see the processes by which this hieroglyphic knowledge system evolves.

John Winthrop Jr.'s heavily-annotated copy of *A Revelation of the Secret Spirit*, a 1623 book about the philosophers' stone, provides evidence for how individuals who are both religiously- and scientifically-minded might read such an alchemical text, and moreover, how explicit connections between scientific and spiritual election may be drawn. *A Revelation of the Secret Spirit*, written by Giovan Battista Agnello, an Italian expatriate living in London during the reign of Elizabeth, was published twice in England: once in Latin in 1566, and again more than fifty years later in an English translation.<sup>24</sup> Like Winthrop and Howes, Agnello was interested in both the practical and spiritual sides of alchemical endeavor. During his residency in London, he was well-known as one of the specialists consulted in determining the metallurgical properties of a sample of ore brought back from one of Frobisher's expeditions.<sup>25</sup> *A Revelation of the*

---

<sup>24</sup> Giovan Battista Agnello, *Espositione di Giouanbatista Angello Venetiano sopra vn libro intitolato Apocalypsis spiritus secreti A si alto secreto chi s'appressa* (London: Apresso Giovanni Kingston à instantia di Pietro Angeliono, 1566), and Giovan Battista Agnello, *A Revelation of the Secret Spirit Declaring the most concealed secret of alchymie* (London: Printed by Iohn Haviland for Henrie Skelton, and are to be sold at his shop a little within All-gate, 1623). The title page declares: "Written first in Latine by an vnknown author, but explained in Italian, by Iohn Baptista Lambye, Venetian, Lately translated into English by R.N.E., Gentleman." References here are to the 1623 edition.

<sup>25</sup> Michael Wyatt places the dates of Agnello's tenure in London from 1569 to the early 1580's, in *The Italian Encounter with Tudor England: A Cultural Politics of Translation* (Cambridge: Cambridge University Press, 2005), 146. Deborah Harkness discusses Agnello's involvement in the matter of Frobisher's gold at length in *The Jewel House: Elizabethan London and the Scientific Revolution* (New Haven, Yale University Press, 2007), 142-180. See also Harkness, *John Dee's Conversations with Angels* (Cambridge: Cambridge University Press, 1999), 204; Joyce E. Chaplin, *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676* (Cambridge, Mass.: Harvard University

*Secret Spirit* testifies not only to Agnello's technical expertise, however, but also to his theoretical engagement with spiritual alchemy. *Revelation* combines practical advice for distilling and working with the quintessence (e.g. "[...] take the said black substance, and calcine it in a furnace of reuerberation, vntill it become like lime [...]") with meditation on the corporeal and spiritual benefits of the work. Agnello declares that his book will be about the "Spirit of the Quintessence," also called "the soule of the world," a substance that is "container of all things and vertues, and spirituall and chosen about all subcelestiall Spirits."<sup>26</sup> The fruits of alchemy, here are both physical and immaterial; the quintessence produces real change through experimental practice, but it also represents spiritual purification.

Many passages in Winthrop's copy of *Revelation* are underlined, and many also have marginal annotations ranging from substantive comments to concise reminders to "note this."<sup>27</sup> This material evidence of reading practices shows that the Winthrop-era reader emphasizes the spiritual dimensions of this alchemical text and is particularly concerned with questions of secrecy, "worthiness," and access to knowledge. These Puritan readers are engaging with an English translation of a text written by a (probably Catholic) Italian more than fifty years ago, and they bring their own perspective to an active reading of this alchemical work. A number of the underlined and noted passages

---

Press, 2001), 48-57; Lauren Kassell, *Medicine and Magic in Elizabethan London* (Oxford: Clarendon Press, 2005), 108 and 205-6; and Charles Webster, "Alchemical and Paracelsian Medicine," in *Health, Medicine, and Mortality in the Sixteenth Century* (New York: Cambridge University Press, 1979), 305.

<sup>26</sup> Agnello, 3-4.

<sup>27</sup> The author of these annotations is uncertain. The front of the pamphlet is inscribed by Wait Winthrop (son of John Winthrop, Jr.), but given the date of the book, it almost certainly passed to him from his father. The handwriting of many of the annotations is strikingly reminiscent of Edward Howes, and I speculate that this book may be among the many sent to Winthrop by his friend Howes. My quotations retain the underlining from Winthrop's copy.

indicate a concern with questions of secrecy: Who should have access to the alchemical “trade secret” that is the philosophers’ stone? By what criteria should those people be selected, and who chooses? Agnello’s text takes the common stance that only the worthy should have access to powerful secrets like true alchemical knowledge. This stance is not as straightforward as it may seem at first glance, though. In fact, defining worthiness and determining how one achieves it becomes increasingly complex the more closely one examines these questions.

Suggesting a connection between the biblical “pearl of great price” in Matthew 13:45-46 and the object of the alchemical quest, Agnello writes that “many doe seeke, but few doe finde it, for the defiled with vices or polluted, are vnworthy to know such things. Therefore it is not shewne but to the devout, because it is incomparable to all prices.”<sup>28</sup> The attainment of the kingdom of heaven is analogous to the attainment of the philosophers’ stone, which offers intellectual and spiritual purification akin to salvation itself. Moreover, the Winthrop-era reader emphasizes a connection between piety and alchemical knowledge by underlining “the devout.” But who does Agnello believe worthy to “know such things?” At first, the answer may seem simple: the worthy are upper-class individuals, the intellectual elite, who study deeply and can understand the material. He laments:

In this desperate age, that men of euery sort, and some the most ignorant, dare search the hid causes of the Art and Science of this most happy and most high Philosophy, thinking to wrest and steale that blessed stone out of paper tricks, and deceits of some Idiots: For they are Smithes, and Weauers, Carpenters, and such kind of men, desiring to bee inriched without labour.<sup>29</sup>

---

<sup>28</sup> Agnello, 16. The reader notes, “whoe shall haue it.”

<sup>29</sup> Ibid., 72-3. This passage is starred.



Craftsmen are unlikely to be among the alchemical elect, Agnello says, because they are motivated to seek out the secrets of nature for pecuniary and opportunistic motives – to get rich quickly and easily. Agnello’s language suggests that it is presumptuous for lower-class individuals to “dare” to pursue alchemical practice, like a kind of violation of sumptuary laws.

Despite this intellectual and social elitism, Agnello paradoxically notes that understanding of the secrets of nature may come to the undeserving, like divine grace: “Therefore this diuine Science is not purchased by being lettered and learned only, seeing it is the secret of God ... therefore sometimes these things are giuen to the simple which the most studious cannot know.”<sup>30</sup> Defining the alchemical elect proves not to be so black-and-white after all; some “studious” and seemingly worthy people may never understand the *arcana naturae*, while some seemingly ignorant people (perhaps even the smiths, weavers, and carpenters) may be inexplicably gifted with deep understanding. In short, alchemical election may be just as inscrutable as divine election.

Regardless of who constitutes the alchemical elect, texts like *Revelation of the Secret Spirit* are deeply invested in reserving truths like the philosophers’ stone for the worthy audience. The biblical analogy to the “pearl of great price” also offers insight into why authors like Agnello, and readers like Winthrop and Howes, cloak their message in circumlocution, figurative language, and hieroglyphs. In Matthew 13:11-13, when asked why he conceals his message in parables, Jesus tells the disciples:

Because it is given unto you to know the mysteries of the kingdom of heaven, but to them it is not given. For whosoever hath, to him shall be given, and he shall have more abundance: but whosoever hath not, from him shall be taken away

---

<sup>30</sup> Ibid., 74. The reader draws a bracket around these lines.

even that he hath. Therefore speak I to them in parables: because they seeing see not; and hearing they hear not, neither do they understand.

Compare this to a passage from Agnello's *Revelation of the Secret Spirit* beside which the Winthrop-era reader inscribes "note this": "For wheresoeuer we haue spoken plainly, there we haue said nothing, but where vnder riddles and figures wee haue put something, there haue we hid the truth."<sup>31</sup> Similarly, Agnello's description of the quintessence focuses on obscuring that alchemical secret by means of symbolic language and imagery: "...found euery where, knowne by few, by none expressed in his proper name, but couered in numbers, figures, and riddles without which neither Alchymy nor naturall magick can attain their perfect end."<sup>32</sup> Just as Christ cloaked his message in parables, enabling those who should know divine secrets to understand while excluding the unworthy auditor, the alchemical adept must conceal his secrets in hieroglyphic figures. Despite this rhetorical posturing, however, Agnello is participating in a venerable tradition of alchemical texts that paradoxically claim to conceal and disclose their secrets. Agnello's text, mediated through his English translator, claims to give instructions for the creation and use of the philosophers' stone, yet simultaneously acknowledges that these instructions will be obscured by "numbers, figures, and riddles."

Such exclusionary measures are necessary, because if alchemical secrets became commonplace knowledge, "it would be the cause of the ruine of the whole world" because "the study and labour of all men would cease."<sup>33</sup> In *Revelation*, such concerns about exposing alchemical are undercut by the physical nature of the book itself, which

---

<sup>31</sup> Ibid., 73.

<sup>32</sup> Ibid., 26. The reader notes, "[m]agia [natu]ralis."

<sup>33</sup> Ibid., 5. The reader notes, "the reas[on] whie th[is] is not co[m]mon."

as both an English translation of an originally Latin text, and a cheap and portable sextodecimo edition, seems intended to market its secrets to the book-purchasing masses. Nevertheless, Agnello claims that exposing alchemical secrets to the unworthy has apocalyptic implications, and thus a veil of secrecy, “*Una clavis ad Omnia*,” must conceal the hidden message of texts like *Revelation*. The same secrecy applies to hieroglyphs like Howes’s diagram. The unworthy reader may glance at the diagram and not understand it, or may read about the philosophers’ stone yet not be able to replicate it himself. In placing “Una clavis” in the center of his circle, Howes emphasizes the reservation of knowledge for the deserving through difficult, figurative, and symbolic language and images. Kamil describes the diagram’s goal as “unifying dispersed humanity under ‘one cloak.’”<sup>34</sup> The cloak, however, evokes concealment rather than unification.

Howes might have chosen to write “*Una clavis ad Omnia*” (in fact, one printed version incorrectly transcribes it as such), but instead he writes “*clavis*.” The idea of a “key” to natural philosophy and alchemical secrets was not a new one, and indeed it would have seemed completely reasonable. Yet the hieroglyph evokes veiled rather than unlocked knowledge. Howes presents the closed Book of Nature, its occult truths concealed in hieroglyphic language and imagery, and with it asks implicit questions: Are you able to pull away the cloak? Can you both see and understand? Are you among the elect? The subdivided triangle deploys alchemical language both literally and figuratively to represent transformation on physical, spiritual, and social levels, yet the “cloak”

---

<sup>34</sup> Kamil, 429.

concealing these messages from the unworthy also betrays anxiety about who constitutes a worthy knower.

Recent scholarship on early modern intellectual communities has emphasized the social bonds created by shared pursuit of such specialized knowledge. For instance, in *Openness, Secrecy, Authorship*, Pamela Long describes the dynamic of forming intellectual communities in anthropological terms: “Secrecy would have served to reinforce the intense closeness of the group, giving them a bond of shared knowledge from which outsiders were excluded.”<sup>35</sup> For Howes and Winthrop, common alchemical and natural philosophical interests create social networks on a smaller level, between individuals. Not only must such individuals prove amongst the elect, but they must also strive to fashion themselves individually, as worthy audiences of the *arcana naturae*. The Winthrop-circle letters and textual marginalia remind us of a seemingly obvious fact that nonetheless is easy to overlook when thinking about self-defined “elite communities” in the abstract: these communities are comprised of close friends grappling with and sharing intellectual material, influencing and being influenced by each other and the texts they read.

In the *Mysterium* hieroglyph, Howes condenses a network of related ideas into “*Christus et lapis*”: the equation between alchemical and divine election, the desirability of spiritual and material transmutation, and the necessity of reserving such knowledge for the elect. Howes’s ongoing exchanges with Winthrop reflect these interwoven hopes and

---

<sup>35</sup> See Pamela O. Long, *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to Renaissance* (Baltimore: Johns Hopkins University Press, 2001), 63. On secrecy and books of secrets, see also Allison Kavey, *Books of Secrets: Natural Philosophy in England, 1550-1600* (Chicago: University of Illinois Press, 2007) and William Eamon, *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture* (Princeton: Princeton University Press, 1994).

anxieties in various media, and show that these notions did not develop in a vacuum. The material evidence of reading and engaging with Agnello's *Revelation* suggests that Howes passed this well-read book on to his friend, and that this alchemical-spiritual philosophy crystallizes through thoughtful reading and reflective letter-writing. Howes's hieroglyph, in other words, represents both an object for hieroglyphic reading and one stage in the hieroglyphic reading process: a distilled representation of ideas drawn from contemporary alchemical discourse and, to return to Dee's word, a sign for Winthrop to "actuate."

## II. THE PERFECTLY-BOUNDED SELF

The bottom triangle of Howes's diagram, "*quadratur cli. Perpet. motus,*" or "The squaring of the circle is continuous motion," suggests that the alchemical metaphor governing the symbol may be extended to transformation of the individual soul. The concept of "squaring the circle" has two potential meanings. First, it refers to a specific mathematical problem of producing a square and a circle that have equal areas; in his preface to the translation of Euclid's *Geometry*, John Dee describes squaring the circle: "Wherefore, to any Circle giuen, you can giue a Square æquall ... And likewise, to any Square giuen, you may giue a Circle æquall."<sup>36</sup> Squaring the circle has an alchemical as well as a mathematical meaning, though. Stanton J. Linden describes it as "the alchemists' image for the transformation of the four conflicting elements into the

---

<sup>36</sup> John Dee, preface to *The Elements of Geometrie of the most auncient philosopher Euclide of Megara* (Imprinted at London by John Daye, 1570), c.i.v.

quintessence, the completion of the alchemical opus itself.”<sup>37</sup> Bernard, Earl of Trevisam, a medieval alchemist, illustrates the transformation of the elements with an image of a triangle inscribed within a square: “After the Colours have passed, and that which is above is made like that which is below, and that which is below like that above ... thou has a Triangle in a Quadrangle, and a fifth thing which is contained in four.”<sup>38</sup> Here, the inscription of geometric figures within seemingly incompatible shapes represents the paradoxical process of creating the quintessence, a substance whose capabilities exceed the sum of its parts.

Given the alchemical context of Howes’s diagram, it seems likely that he was thinking of the alchemical meaning of squaring the circle – like the philosophers’ stone, unifying the four elements into the quintessence constitutes the “great work” of alchemy. Howes was also a mathematician, though: his only published work is a mathematical primer.<sup>39</sup> Thus, the diagram gestures toward both meanings of squaring the circle, solving a mathematical puzzle and elemental transmutation. The mathematical and alchemical valences of “*quadratur circuli*” have common conceptual ground, though. Both “problems” represent cosmic structures via geometric shapes, and both require the “solver” to acknowledge the paradox of seemingly incompatible forms nonetheless being equivalent.

---

<sup>37</sup> Stanton J. Linden, *The Alchemy Reader: From Hermes Trismegistus to Isaac Newton* (Cambridge: Cambridge University Press, 2003), 145. See also Abraham, 189.

<sup>38</sup> Linden, 137.

<sup>39</sup> Howes, Edward, *Short arithmetick or, The old and tedious way of numbering, reduced to a new and briefe method. Whereby a mean capacity may easily attain competent skill and facility* (London: Printed by R. Leybourne, for H. Blunden, at the Castle in Corn-hill, 1650).

According to Howes, squaring the circle (in the mathematical or alchemical sense) is *Perpet[uus] motus*. Neil Kamil reads the *Mysterium* hieroglyph, and the message about squaring the circle, primarily as indicative of Howes's prophetic hopes for his friend Winthrop: "To square the circle perpetually in history meant that Winthrop himself was the American capable of creating a permanent, active synthesis of macrocosm and microcosm on earth through his own connection to the celestial body and the discovery of Christ's philosophers' stone."<sup>40</sup> I agree with Kamil that Howes sees his friend as uniquely positioned to facilitate alchemical-spiritual transformation in New England, but I argue that "squaring the circle" also represents Howes's model of selfhood: the individual as an alchemical seeker for perfection, a subjective self that paradoxically is already circular and self-contained, yet also perpetually striving for perfection in both divine and human interactions. The act of *attempting* to square the circle is perpetual motion, and the bottom point of the triangle indicates the lifelong search for alchemical perfection, reflecting Howes's hopes for himself as well as for his friend. In order to attain *Christus et lapis, quadratur circuli, or via ad Indos et Indos*, Howes suggests that the individual must be constantly moving and seeking to raise himself upward on the Chain of Being.

This belief in individual agency might seem to conflict with the notion of alchemical-spiritual election that we saw in our exploration of "*Christus et lapis*" and the binding of elite intellectual and spiritual communities through the sharing of hieroglyphic knowledge. As the Winthrop-era annotations in Agnello's *Revelation* suggest, though, individuals like Howes are conflicted and anxious about their own redemptive status. It

---

<sup>40</sup> Kamil, 431.

seems impossible to aspire to alchemical and spiritual worthiness since grace or knowledge might be granted to the undeserving or *not* granted to the deserving, yet Howes cannot help but do so. Even if the mechanisms of election are inscrutable and human effort might be useless, Howes's hieroglyph seems to suggest, the spiritual alchemist should work to better himself and increase his knowledge.

As alchemy promises that humans might change corruptible matter into incorruptible, mathematics leads to contemplation of spiritual geometry – both of which are suggested by the “perpetual motion” of “squaring the circle,” a concept in which the alchemical and mathematical quests intersect. Both disciplines may serve as an avenue to spiritual transcendence; for example, in the *Mathematical Preface*, John Dee writes that the purpose of mathematics is:

...to trayne our Imaginations and Myndes, by litle and litle, to forsake and abandon, the grosse and corruptible Obiectes, of our vtward senses: and to apprehend, by sure doctrine demonstratiue, Things Mathematicall. And by them, readily to be holpen and conducted to conceiue, discourse, and conclude of things Intellectual, Spirituall, æternall, and such as concerne our Blisse euerlasting: which, otherwise (without Speciall priuiledge of Illumination, or Reuelation from heauen) No mortall mans wyt (naturally) is hable to reach vnto, or to Compasse.<sup>41</sup>

Mathematical endeavor, like alchemical work, prepares and transforms the mind of the agent to receive and understand spiritual truths. In this passage Dee suggests that mathematics enables its practitioner to reject the “corruptible” material world and focus instead on the providential order that underpins the universe. Geometry, in particular, offers a hieroglyphic language with which to describe material and spiritual structures that words cannot apprehend. Howes alludes to this connection between mathematics and spiritual enrichment in the preface to his *Short Arithmetick*, which he opens by wishing

---

<sup>41</sup> Dee, *Elements*, clv.



for the reader “*intus et extra salus,/ Supremo Authore salutis*” (“health both inward and outward, from the Supreme Author of health”) and closes with an appeal to “the Almighty LORD who is my Tutor.”<sup>42</sup> Here, mathematics offers not only increased knowledge, but physical and spiritual self-improvement – better living through arithmetic.

The words within the *Mysterium* hieroglyph lead its reader to make the connection between mathematical and alchemical perfection, and its circular shape also emphasizes this experiential, recursive process of refining oneself. In a later letter to Winthrop, Howes uses similar geometric imagery to exhort his friend to strive for a perfectly-bounded and continent self. Howes describes himself as uniquely positioned to offer this advice by virtue of his close friendship: despite the intervening ocean, he writes that he knows his friend thoroughly, “*intus et extra*” (“within and without”), using the same phrase that he will echo ten years later in his published book. To achieve a personal squaring of the circle, Howes suggests that his friend must know his own center and be a “good Geometrician” with a clear understanding of the divine Ruler who “can drawe you straight lynes from your center to the confines of an infinite circumference.”<sup>43</sup> In Howes’s rhetoric, God and Winthrop are both “geometricians”: the former defines the shape of the human self, and the latter seeks to understand that structure.

The circle, a shape whose path describes continuous motion and whose circumference also binds the *Mysterium* hieroglyph, becomes a metaphor for a self that is

---

<sup>42</sup> Howes, a2-a3.

<sup>43</sup> 12 May 1640, 510-11.

simultaneously confining and liberating. Howes advises Winthrop both to understand his own limitations, and to realize that the circumference of the human soul is infinite:

I would haue you soe good a Geometritian as to knowe your owne center. Did you euer yet measure your euerlasting selfe, the length of your life; the breadth of your loue; the depth of your wisdom; and the hight of your light? Let Truth be your Center & you may doe it, otherwayes not. I could wish you would nowe begin to leaue off being altogether an outward man; this is but *Casa Regentis*; the Ruler can drawe you straight lynes from your center to the confines of an infinite circumference, by which you may passe from any parte of the circumference to another, without obstacle of earthe or secation of lynes, if you obserue and keepe but one & the true & only center, to passe by it, from it, and to it. [...] Be within, & keepe within, and all that are within, and keepe within, shall you see, knowe, & communicate with, to the full; and shall not neede to straine your outward sences to see & heare that which is like themselues vncertaine, and too, too often, false; but abiding for euer within, in the Center of Truth, from thence you may behold, conceiue, and understand the innumerable diuerse emanation within the Circumference; and still within; for without are falcities, lyes, doggs, &c.<sup>44</sup>

Howes's concept of the circular, perfectly-bounded individual suggests a model of subjectivity that is both self-contained and expansive. The self has a defined circumference and center, and he wishes that Winthrop would be "soe good a Geometrician" as to be able to define and quantify those. Paradoxically, though, the project of "measuring" the self is impossible – a task for faith and epiphany rather than reason. His rhetorical questions imply that it would be impossible to "measure your euerlasting selfe," and that the circumference of the individual actually corresponds to the circumference of the whole cosmos, which only the divine Ruler may encompass. For Howes, to "keepe within" means to eschew the external senses and seek knowledge entirely through inward meditation, yet this retreat to interiority actually results in the surprising revelation that "self" and "world" are one and the same. "Truth," which seems

---

<sup>44</sup> 12 May 1640, 510-11.

synonymous with mystical revelation, is the actual center of the self, and Howes exhorts his friend to seek oneness with that truth.

In Howes's vision of the perfectly-centered self, the individual's focus should be inward: understand the "Center of Truth" and "keepe within." This inward focus suggests that occult properties are more important than manifest ones; Howes's exhortation argues that an intellectual understanding of invisible forces and divine geometry rather empirical evidence is what enables individuals to attain alchemical-spiritual perfection. From the central point of the circle, the enlightened individual may look outward toward the rest of the world (all that lies within the "innumerable diuerse emanation within the Circumference") and yet remain anchored in eternal, divine truth. Moreover, this centered self perceives and understands the world through intuition and revelation rather than sensory perception.

Despite the mathematical metaphor, the Center of Truth is revelatory rather than rational; it may not be apprehended through the senses, but rather through innate understanding. Howes exhorts his friend to "keepe within" because then he will not need to "straine [his] outward sences to see & heare that which is like themselues vncertaine." *Knowing* is a revelatory experience, coming entirely from internal, revelatory apprehension of the divine, ideally without reference to the deceptive information provided by the senses. In another letter, Howes similarly rejects sensory evidence by posing several rhetorical questions: "Was the bodie made for the soule, or the soule for the bodie? Was the house made for man, or man for the house? ... Must not the fiue

kings be vanquisht & hung vp, before Israell can enter into the rest of the Lord?”<sup>45</sup> Just as the enlightened individual must acknowledge the supremacy of the soul over the body, so to must he overcome the “five kings,” i.e. the five senses. Interestingly, this devaluing of empirical perception nonetheless leads to a deeper understanding of the natural world; knowledge of the secrets of nature, which ultimately spring from God, is figured as revelation rather than observation. Like Clucas’s model of “inspectival knowledge,” for Howes, understanding the world comes through contemplation followed by epiphany. Recognizing the supremacy of the soul over its bodily container, he suggests, enables people to “see” deep providentially-ordered structures, the divinely-inscribed cosmic circumference. “*Quadratur circuli*” or the squaring of the circle reaches beyond the *Mysterium* hieroglyph itself to suggest a hieroglyphic, circular universe perpetually in the process of being “squared” with human understanding.

Furthermore, revelation is the purest form of knowledge not only of the external world but also of the self. His special knowledge of Winthrop allows him, Howes suggests, to recognize his friend’s problems before Winthrop himself knows that anything is wrong. In one strikingly-worded piece of advice, Howes describes his friend as a fractured self, in which the body and the essence it houses have become disconnected:

Me thinkes I nowe see you intus et extra, and talke to you; but you mind me not, because you are from home, you are not within, you looke as if you were careless of your selfe, your hand & your voyce differ, tis my frinds hand, I knowe it well; but the voyce is your enemies; O my frind, if you loue me, get you home, get you

---

<sup>45</sup> 4 August 1636, 502. Como identifies the “five kings” line as an antinomian statement describing the “paradisical domain of spiritual perfection in which the illuminated ones dwelled” and the kings as “representations of internal states, qualities, or events, which needed to be overcome within the soul of each believer before he or she could pass into the land of peace and rest” (421). I suggest instead that the “five kings” are the five senses – worldly perception which must be overcome in order to live spiritually.

in; you haue a frind at home, as well as an enemie; know them by their voices, the one is still driuing or enticing you out, the other would haue you stay within.<sup>46</sup>

Howes's language constructs a strange image of his friend's self: Winthrop's body, represented by the familiar hand, is a fleshly shell that has been vacated by its owner, and the body's new inhabitant is not Winthrop, but an "enemie." Howes reminds Winthrop that the "enemie" is not his only inner voice; like an angel and devil of conscience perched on his shoulders, he has two spiritual advisors. The good voice, the "frind at home," becomes the voice of Howes himself, advising his friend to "stay within." Howes's language constructs an image of his friend's self as porous: the incorporeal essence of Winthrop may choose to dwell within the confines of his body or range outside of it, yet this essence itself is fractured into multiple voices, wise and faulty advocates within. Moreover, this embodied and yet flexible soul may overlap with other individuals, as Howes envisions himself literally dwelling *within* his friend. Interestingly, Howes urges Winthrop to tend to the state of his soul on account of their close friendship: "if you loue me, get you home, get you in." It is for the sake of his friend, not for himself and not for the abstract aim of better self-knowledge, that Winthrop should seek to reconnect with his own "Center of Truth."

If the self is a circle, then friendships between knowledgeable, well-centered individuals form something like a Venn diagram in which the selves intersect. In the case of Winthrop and Howes, their shared intellectual pursuit of the alchemical quest blurs the boundaries of selfhood – both delineating the circumference of the self and asserting that true friends are second selves, blended seamlessly together. Friendships between like-minded alchemists offer an impassioned intellectual camaraderie that at once binds them

---

<sup>46</sup> 12 May 1640, 510-11.

closer and sets them apart from the vulgar masses. This bond has two effects: celebrating the intimate friendship of those bound together by the rarity of their shared insight and elevating their own status by separating them from the mass of unworthy readers for whom such occult knowledge would be foolish or even dangerous. In the “intus et extra” letter, Howes rhetorically aligns himself and Winthrop against the nebulous “enemie,” emphasizing the friends’ shared spiritual and intellectual aims while also emphasizing their affective bond. This suspicion of enemies, though, also underscores the importance of secrecy in the discipline of alchemical knowledge and privacy in medium of personal letters.

Maintaining privacy is an important concern for correspondents, both to protect the special knowledge that they share and to preserve the near-sacred intimacy of friendship. In the Winthrop-Howes letters, Howes mentions that he must couch his insights in obscure language for protection from unwanted readers. Particularly in the case of these letters, the method of their transportation is significant; Winthrop’s correspondents frequently refer to how their letters are being delivered. In an era before organized mail services, letters were often sent with ships delivering provisions to the colonies, or with anyone the sender knew who happened to be traveling to New England.

Correspondents could not necessarily expect privacy:

Deare frind, I desire with all my harte that I might write plainer to you, but in discovering the misterie I may diminish its maiestie, & giue occasion to the prophane to abuse it, if it should fall into vnworthie hands: in many things you haue sympathized with me, and whie not in this?<sup>47</sup>

Here, Howes states that he wishes he could express himself more explicitly, but he cannot, for two reasons: first, the elevated “mysteries” that serve as his subject matter are

---

<sup>47</sup> 4 August 1636, 501.

not well-suited for plain explication; and second, unintended readers might misuse such truths. Echoing Agnello's fears in *Revelation of the Secret Spirit* about the dire consequences of unworthy individuals acquiring alchemical knowledge, Howes fears that his secret insights might be dangerously abused if the letter goes astray. At the same time, his question suggests that he expects Winthrop might object to this lack of clarity, and that he offers this defense to obviate such critiques.

The chance of letters being misdirected or read by others was a real one, and not simply a commonplace rhetorical stance.<sup>48</sup> In other letters, Howes suggests that sending mail across the Atlantic was a precarious undertaking. In one example, he claims to have written a letter that disappeared before it was even sent:

True it is, I about a fortnight since writt a letter for you, but some malignant spirit, knowinge thereof, hath stolne it from me, as I conceiue, it being not endorsed to see to whome it was, & what was in it, and now is ashamed to restore it. Therein was nothinge but common newes, and therefore I lesse care for the losse.<sup>49</sup>

Howes does not know what actually happened to this letter, but he imagines that its disappearance can be attributed to “malignant” individuals or influences. Whether this means an actual thief or the kind of intangible “enemy” that he later urges Winthrop to repudiate seems unclear. Elsewhere, he describes letters being “forgot” by the carrier or mistakenly opened by others.<sup>50</sup> Occasionally, to ensure more reliable delivery, he would even address items to Winthrop's father, perhaps under the assumption that the more

---

<sup>48</sup> On the precarious security of early modern correspondence, see James Daybell, *The Material Letter in Early Modern England: Manuscript Letters and the Culture and Practices of Letter-Writing, 1512-1635* (New York: Palgrave MacMillan, 2012).

<sup>49</sup> 12 October, 1632, 478.

<sup>50</sup> 16 April, 1630, 471.

prominent the recipient, the less likely the item was to be lost or mishandled.<sup>51</sup>

Correspondence, then, can be problematic both materially and conceptually. Because of the ever-present reality that mail could be misdirected or read by unintended eyes either out of malice or accident, Howes is continually poised between revelation and secrecy, restrained by a paranoia that is at least partly justified, and yet wishing to express himself fully.

These physical and theoretical difficulties of letter transmission are significant to a reading of the Winthrop-Howes correspondence, placing the letters in an ambiguous status between public and private. Their content seems intensely private, even intimate, but simultaneously both author and recipient are aware that other eyes may read their letters – perhaps even unworthy eyes. Knowing that his letters may be intercepted and read by others, Howes's frequent praise of his friendship takes on the tone of a semi-public display of intimacy. Like the language of alchemical texts that simultaneously disclose and conceal their secrets, the elevated, metaphorical language of the letters at once excludes the vulgar who may not understand, and creates a bounded space in which the two friends express their affection and attain a mental union. In fact it is through hieroglyphic expression – the actual hieroglyph of the *Mysterium* diagram and the hieroglyphic knowledge expounded in subsequent letters – that Howes seeks to balance the competing demands of public and private inherent in the epistolary medium.

In his reading of the Winthrop-Howes letters, Kamil characterizes their friendship as that of patron and client, figured in alchemical language, likening Winthrop and

---

<sup>51</sup> June 1632, 476.



Howes, respectively, to the commonplace alchemical images of the sun and moon.<sup>52</sup> This characterization of their friendship focuses on Winthrop's status as a member of a prominent family, able to act as a patron to someone like Howes, who "moved through the lower levels of London's natural-philosophical circles with relative anonymity."<sup>53</sup> Howes's rhetoric seems to justify this analysis of their power dynamic by placing himself in a subservient position, but I suggest that Howes's language actually shifts, sometimes figuring their relationship as that of patron and client, but in other places offering advice as one equal to another.

In one letter, for example, Howes uses scientific and geographic imagery to emphasize Winthrop's centrality in determining the course of his life: "Farre be it from me at any tyme to frustrate your expectations, it being the dutie of loue, to be always operatinge towards the beloued; I neede not name you the North Starre, towards which the compasse of myne endeavours constantly inclines."<sup>54</sup> Howes strives to fulfill his friend's expectation of receiving frequent letters from him, and paralitically denies even the need to mention the importance of Winthrop's influence on his life. Winthrop is the "North Starre," whose wishes and interests govern Howes's thoughts and writing. As scholar Dale Kent notes in his examination of Renaissance friendship tropes, the affective value of patron/client friendship "gain[s] intensity by association with the topoi of

---

<sup>52</sup> See Kamil, 423.

<sup>53</sup> Ibid., 423.

<sup>54</sup> 12 October 1632, 478.

romantic love, a longing to see and to serve the beloved.”<sup>55</sup> Although the “North Starre” metaphor does allocate less power to Howes, examples like the “intus et extra” letter (“if you loue me, get you home”), show that this language is fluid. Howes’s language suggests a model of spiritual-alchemical collaboration that is fueled by love: far from being a disinterested intellectual partnership, in fact Howes continually uses the emotional bond between friends to justify his own philosophical endeavors and advise Winthrop in similar pursuits.

Despite this posture of inequality, though, as Kamil notes, the two men are mutual participants in “an international network of correspondence and patronage with natural-philosophical friends.”<sup>56</sup> Winthrop corresponded throughout his life with many scientifically-minded friends, including such men as Samuel Hartlib and George Starkey, but the letters from Edward Howes have a unique affective intensity. Several levels can coexist in their friendship without contradiction: patron/client, intellectual colleagues, and affectionate equals. As Alan Bray notes, early modern masculine friendship is characterized by a “combination of usefulness and affection,” and social or professional utility does not negate the sincerity of an emotive bond.<sup>57</sup> Howes figures this intimate bond not just through typical language of patron and client, but also through language of an alchemical-mystical union. His letters forge the kind of parity that early modern

---

<sup>55</sup> Dale Kent, *Friendship, Love, and Trust in Renaissance Florence* (Cambridge, Mass.: Harvard University Press, 2009), 11. Kent is talking about fifteenth-century Florence here, but his description of the affective language of patron/client friendship seems particularly applicable here.

<sup>56</sup> Kamil, 435. See also Deborah Harkness in *The Jewel House* on natural-philosophical intellectual communities in Elizabethan London.

<sup>57</sup> Alan Bray, “Homosexuality and the Signs of Male Friendship in Elizabethan England,” *History Workshop Journal* 29 (1990): 1-19. See also Dale Kent, who writes, “[T]he differences between affective and utilitarian friendship are much less clear and of less importance than they appear to the modern sensibility” (12).

friendships required by appealing to alchemical transformations and the secrecy of occult knowledge.<sup>58</sup> Howes's letters suggest more than just empty rhetoric about friends sharing one soul; the passion and intimacy of this bond resides in their shared intellectual pursuits, which marks them as like-minded seekers in the hermetic quest.

True friends, both striving to leave behind the body in order to apprehend the Center of Truth, forsake their bodies together, a process by which their souls may commune across vast distances. Howes describes the kind of connection that friends attain through letters in terms reminiscent of the geometrically-hieroglyphic self, rejecting the sensory details of day-to-day news while instead striving to create an intellectual and affective intersection between selves:

To tell you . . . what I heare, what I see, what I knowe, would be as tedious for you to read, as for me to write; but to tell you where I am, & what I doe, & when you shall see me, is a shorter worke. My bodie is at London, my soule in my bodie, and my mind in my soule, &c. and if you will, in mind I am and canbe euery where; while I am writing this lettre, I am with you, and what doe I? Outwardly I am writing, inwardly I am meditating; and still with you, and doe you aske when you shall see me? If you know not I will tell you. When you can see your selfe, or you & I all one; longe since you termed me Alter idem, and will there neuer be an vnion thinke you?<sup>59</sup>

In imagining himself and Winthrop as one shared soul, Howes creates both sides of a conversation in this letter, anticipating Winthrop's questions and his own responses. The material processes of writing and reading letters offer moments of connection: points in time when Howes knows his friend is thinking of him, and he of his friend.

Paradoxically, he asserts that "what I heare, what I see, what I knowe" – the very pieces

---

<sup>58</sup> For a discussion of parity and intimacy in early modern friendships, see Laurie Shannon, *Sovereign Amity: Figures of Friendship in Shakespearean Contexts* (Chicago, University of Chicago Press, 2002). See also Wendy Olmsted on the rhetoric of friendship in *The Imperfect Friend: Emotion and Rhetoric in Sidney, Milton, and their Contexts* (Toronto: University of Toronto Press, 2008), and Christopher Marlow, "Friendship in Renaissance England," *Literature Compass* 1 (2003): 1-10.

<sup>59</sup> 25 Feb 1639, 507.

of information that one might think of as why we write letters – are unimportant. What is important, instead, is reasserting the intangible yet critically-important connection between two individual souls; Howes’s soul nests within his body, but the act of writing frees him to range outside the embodied self and become momentarily one with his friend. The physical boundaries caused both by geographic distance and the bodily boundaries of separate selves are impossible to fully surmount, though; Howes wants to repudiate his body completely, but still he desires a “vnion” with Winthrop. His mind/soul “canbe euerywhere,” yet this is not enough. In a beautiful and poignant turn of phrase, he says that Winthrop can look in a mirror and see Howes, because they are “all one,” yet this imaginative meeting-at-a-distance elicits a sense of longing for real, physical union that cannot be sated by letters alone.

### III. *VIA AD INDOS ET INDOS*

This longing for physical union between friends is individual and private, yet it suggests a parallel the global and public search for a Northwest Passage to facilitate a union between East and West. Howes refers to this subject explicitly in the upper right triangle of his diagram, *Via ad Indos et Indos*: “A way to the [East] Indies and [West] Indies.” Invoking his and Winthrop’s hope that the New England colonists might discover the Northwest Passage, Howes juxtaposes *Christus et lapis* and *Via ad Indos et Indos* to draw parallels between Christian redemption, alchemical transmutation, and geographic discovery. Elsewhere in the letters, he writes interchangeably about the project of finding the Northwest Passage and his personal search for a cryptic “terra incognita” that seems more a mental than physical journey. For Howes, the Northwest Passage is both a symbol of private, inner transformation and a real, physical location.

His equation of these external and internal searches in the *Mysterium* hieroglyph allows us to understand how some contemporary thinkers might understand England's global expansion in spiritual terms but not necessarily as the imposition of a particular sectarian worldview.

Like many New Englanders, Winthrop was genuinely interested in finding the elusive Northwest Passage. In *Fortress of the Soul*, Neil Kamil suggests that Winthrop's alchemical interests and his geographical project to annex territory into the Connecticut colony are both metaphorically and literally connected by the idea of the Northwest Passage:

[Winthrop's] long-held, if finally unsuccessful, plan to absorb New Amsterdam into the Connecticut Colony. The linchpin of this plan was control of the Long Island Sound region. The younger Winthrop concluded – after consulting with European colleagues – that this was the American 'Mediterranean,' a 'middle' gateway to the Northwest Passage, and therefore the philosophers' stone – the ultimate weapon of the skilled elite.<sup>60</sup>

Kamil's assessment, with which I agree, suggests that Winthrop's spiritual, scientific, political, and economic goals are deeply interrelated. Practical and theoretical transformation converge in the idea of the Northwest Passage, and the two men's material exchange of books and letters enables us to more fully contextualize this convergence. Howes sent at least two books related to his friend's geographical search, one of which included extensive commentary and advice, beginning with the note: "Here in closed you shall find a booke of the probabilities of the North West passage."<sup>61</sup> Both of these books

---

<sup>60</sup>Kamil, 9.

<sup>61</sup> 23 September 1632, 480. The short book in question is Dudley Digges, *Of the Circumference of the Earth: A Treatise of the North-West Passage* (London: W. W. for John Barnes, 1632). This was not the only book regarding the Northwest Passage that Howes sent; on another occasion, he also sent a copy of Thomas James, *The Strange and Dangerous Voyage of Captain Thomas James, in his intended discovery of the North West passage into the South Sea* (London: John Legatt, 1633) with the note describing it as "an

were shipped to New England the same year they were published, suggesting that Winthrop and Howes were interested in keeping up with the latest work on the topic (and also, interestingly, suggesting that reading books published in England *about* the Northwest Passage could be a valuable supplement or even substitute for physical exploration).

On the back of the title page of *Of the Circumference of the Earth: A Treatise of the North-West Passage*, Howes writes an inscription that celebrates the economic and spiritual transformation that might be facilitated by the discovery of “the straits of New England”:

Happie, thrice happie should I be, if this little treatise should add any thinge to your knowledge, invention, or industrie, to the atchieuinge of that Herculean worke of the straits of New England [...] The Dutch, O the Dutch, I doubt will prevent your discouerie, for they are the nearest, of any that haue not as yet discovered it. But doubtlesse there is a man, (or shalbe) sett aparte for the discouerie thereby to communicate more freely, more knowingly, and with lesse charge, the riches of the east with the pleasures of the west, and that the east & west, meetinge with mutuall imbracements, they shall soe loue each other, that they shalbe willinge to be disolued into each other; and soe God being manifested in Christ through all the world, and light shininge in thickest darknesse, and that palpable darknesse being expelled, how great & glorious shall that light appeare.<sup>62</sup>

Howes is deeply invested in political competition with the Dutch to discover the Northwest Passage first; one of the major motivations for wishing to discover it and equally importantly, to own the strategically positioned land at the entrance to the Northwest Passage, is to attain “the riches of the east.” Monetary gain is certainly part of the motive for exploration, but not the sole motive. For Howes and Winthrop, the Northwest Passage will connect East and West and facilitate a union between them,

---

exact and large the latest discouery of the North West passage, made by a painfull and industrious gent., Capt. James” (487-8, 22 June 1633).

<sup>62</sup> 23 September 1632, 480.

which Howes describes in mystical terms as union in which both will be “disolued.” East and West unite and blend in “mutuall imbracements” reminiscent of the commonplace imagery of the alchemical wedding; two disparate substances combine and dissolve into one another, forming something new and transcendent.<sup>63</sup> The “mutuall imbracements” suggest a rhetoric of global expansion that draws not on imagery of violent conquest, but on alchemical imagery in which the divine, animating spirit transforms and perfects both East and West alike.

The dissolution of East and West marks a rhetorical move from the political to the spiritual. If the Northwest Passage were discovered, Howes implies, the project of forming a godly community in New England would prosper economically and politically, and thus the divine light would spread throughout the world. Howes’s inscription in *Of the Circumference of the Earth* envisions the Northwest Passage as a conduit through which the enlivening and inspiring spirit of Christ is distributed. The permeable lanes of sea travel, like veins dispersing blood throughout a body, would disperse the spirit of Christ throughout the world. New England, in Howes’s characterization, becomes a nexus for divine influence, like a geographic embodiment of the *Mysterium* hieroglyph written on the global landscape.

As Howes’s inscription moves rhetorically from worldly to spiritual concerns, the language moves toward prophecy; he implies that Winthrop is “a man . . . sett aparte,” destined to help expand the territory and geopolitical stature of New England. For these two friends, the Northwest Passage certainly exists and finding it is not a matter of

---

<sup>63</sup> See Lyndy Abraham on the spiritual implications of the process of *solve et coagula*: “When the metal or matter for the Stone is killed and dissolved (*solve*), its soul or spirit is separated from its body (*separatio*). The body is cleansed of its impurity and the soul (or soul/spirit union) may then be reunited with it” Lyndy Abraham, *A Dictionary of Alchemical Imagery* (New York: Cambridge University Press, 1998), 187.

chance discovery: it requires skill and effort (the “Herculean worke”) but also providential blessing. Nearly a decade later, he characterizes the search for *terra incognita* in even more overtly prophetic terms:

I cannot discover into *terram incognitam*, but I haue had a kenn of it shewed vnto me. The way to it is (for the most parte) horrible & fearefull, the daingers none worse, to them that are not *destinati filij*; somtymes I am traouelling that way, but the Lord knows when I shall get thither, soe many flattering foes are still in the way to preuent me, and diuerte my course. I thinke I haue spoken with some that haue bin there. I am informed that the land lyeth where the sunn riseth, and extendeth it self southward, the northerne people doe account it noe better then a wildernes; and the spies that they haue sent out to discover & view it, haue reported as much: for they knew it was in vaine to reporte better of it.<sup>64</sup>

By this point, the Northwest Passage has become a spiritual allegory as much as an actual locale. Howes’s highly figurative letter conflates several journeys: his own ongoing desire (never fulfilled) to immigrate to New England, Winthrop’s interest in finding the Northwest Passage, and the alchemical quest for earthly perfection. Some people have attained this unknown land, he states, but these individuals are vaguely-defined, at best; he only “think[s]” he may have spoken with “some that haue bin there.” The “flattering foes” that Howes imagines obstruct him are reminiscent of the internal enemies against which he warns Winthrop, and this travel narrative of his quest for *terra incognita* seems to take place entirely within the invisible and infinite circumference of his own self.

Much as it does in the books that Howes shares with Winthrop, the *via ad Indos et Indos* proves elusive. In *Of the Circumference of the Earth*, the author merely proposes that the passage *might* exist, based on calculations of the likely size of the North American continent. *The Strange and Dangerous Voyage of Thomas James* offers a firsthand account of the author’s difficult travels in the northern seas that failed to yield

---

<sup>64</sup> 4 August 1636, 501.



definitive intelligence about the fabled passage. Similarly, Howes describes his own inner journey of discovery as frustrating and ultimately unsuccessful. For Howes and Winthrop, the *via ad Indos et Indos* simultaneously represents the political desire for English dominance over a key location and the spiritual hope for dispersion of Christ's redemptive power throughout the world. Moreover, the idea straddles the boundary between public and private, within and outside the boundaries of the hieroglyphic self: it may be a public discovery of new trade routes, or it may be an alchemically-informed, private epiphany. This physical and metaphorical understanding of the Northwest Passage offers both geographic and spiritual transformation, but like other transformative concepts in his letters, the Northwest Passage is both expansive and limiting.

In a similar paradox, the circular frame of Howes's hieroglyph represents both the "infinite circumference" of the cosmos and the boundaries of the individual self; these boundaries allow a theoretical understanding of the secrets of the infinite cosmos, but in practice, the self's gaze is turned inward, focused within its own geometry. Howes hopes that he and Winthrop may each attain transcendent understanding as well as spiritual union with each other, yet this desire is complicated by real, physical barriers, both geographical and anatomical. The three corners of the triangle encompass several disciplines – alchemy, geography, mathematics – yet these are all brought together in one figure, and all covered with "one cloak," suggesting that the goal of all intellectual endeavor is that Center of Truth and each discipline presents a different path toward the same destination. The cloak unifies but also conceals, however, just as Howes's writings, ambitious in their scope, maintain an undercurrent of anxiety, wondering whether these

disciplines can really be reconciled, whether selves can attain union, whether East and West can meet.

Even defining the nature of this union, reconciliation, and perfection proves difficult; Howes believes that humans often misconstrue the divine essence, that Center of Truth. He describes people's varied apprehension of Christ as a monstrous profusion of conflicting conceptions:

It cannot be denied but we haue conceiued many monstrous imaginations of Christ Jesus, the one imagination says loe, here he is; the other says loe, there he is; multiplicitie of conceptions but is there any one true shape of him? and if one of many produce a shape, tis not the shape of the sonne of God/man, but an vglie horrid Metamorphosis.<sup>65</sup>

Elsewhere he writes that 'there is all good to be found in vnitie, and all evill in duallitie & multiplicitie.'<sup>66</sup> This idealization of "unity" in all its forms is interesting in the light of the increasingly divisive religious situation in England in the first half of the seventeenth-century. Howes cautions against the evils of multiplicity, yet the profusion of sects during his lifetime seems to belie the possibility of religious unity as an achievable goal. He seems aware of this in his pointed observation that there are a "multiplicitie of conceptions but is there any one true shape of him?" Paradoxically, Howes venerates unity but wonders if Christ may even be encompassed in one shape, or if all attempts to define the nature of God are only human folly.

His meditations on Christ's shape call into question whether humans can even apprehend the spiritual Center of Truth, whether they will inevitably produce that "horrid" multiplicity. Similarly, in his discussion of friendship and selfhood, Howes

---

<sup>65</sup> 14 April 1639, 506.

<sup>66</sup> 27 February 1639, 507.

continually strives for transcendent unity with his friend, yet the absence of real, physical contact undercuts the spiritual union he claims to have. In these competing tendencies of hope and anxiety, the Winthrop-Howes correspondence promises intensely powerful, pan-disciplinary knowledge, but attaining this enlightenment may be dangerous, difficult, or even impossible. The *Mysterium* hieroglyph offers nothing less than a map to public spiritual and political transcendence as well as private enlightenment, but the grandeur of this vision is undercut by its ambiguity and lingering worry that the hermetic quest may never be fulfilled. In the geometric hieroglyph, spiritual, alchemical, and intellectual election intersect, yet in correspondence that spans from 1627 to 1640, increasing sectarianism calls the nature and unity of that spiritual truth into question. Howes's letters hint at a syncretic Center of Truth, but the more one tries to define and attain that center, the more elusive it becomes.

### CHAPTER 3

#### SPIRITUAL ALCHEMY THROUGH EMBODIED HIEROGLYPHS IN THE JONSONIAN MASQUE

*Come forth, come forth, prove all the numbers then  
That make perfection up, and may absolve you men.*

-- Ben Jonson, *Mercury Vindicated from the Alchemists at Court* (1615)

In his verse epistle to Aurelian Townshend, Thomas Carew describes witnessing a court masque, Townshend's 1632 *Tempe Restored*, as a wondrous, transformative experience:

It filled us with amazement to behold  
Love made all spirit, his corporeal mould,  
Dissected into atoms, melt away  
To empty air, and from the gross allay  
Of mixtures and compounding accidents,  
Refined to immaterial elements.<sup>1</sup>

Townshend's masque replaces the representative of earthly desire, Circe, with the embodiment of divine beauty, played by queen Henrietta Maria. Here Carew's language figures that transformation as alchemical refinement: Love is disassembled into its component parts, like a metallic "allay of mixtures," and refined into something transcendent. The "corporeal mould" becomes "immaterial," a perfected neoplatonic spiritual essence. Carew speaks for the audience, ventriloquizing their collective wonder,

---

<sup>1</sup> Thomas Carew, "In Answer of an Elegiacal Letter, upon the Death of the King of Sweden, from Aurelian Townshend, Inviting Me to Write on that Subject," in *Ben Jonson and the Cavalier Poets*, ed. Hugh Maclean (New York: WW Norton & Company, 1974), lines 77-82.

but he also implies that the audience partakes in this transmutation by beholding it. The audience members behold an act of spiritual alchemy (which Carew's language ties to another scientific context, that of the anatomical theater, with the reference to dissection), but they also are the material upon which that alchemy works. The spectators will join with the masquers in dance, during which the masquers' perfection spreads to the rest of the court. For observers of the Stuart masque, alchemical refinement was more than a metaphor; it encapsulates the experience of witnessing and participating in the spectacle.

Carew's poem describes a Caroline masque, but now I will step backward to Ben Jonson's Jacobean masques to contextualize more fully the genre's perceived transformative potential. In this chapter, I situate this refinement at the culturally- and historically-grounded intersection of spiritual alchemy and emblem theory by conceiving of the masque as an extended series of multi-sensory and kinetically-charged embodied hieroglyphs. In particular, Jonson's *Mercury Vindicated from the Alchemists at Court* offers a text that both *performs* and *is about* alchemy. Jonson's masques may seem at first to be an entirely different species of symbolic expression from the other hieroglyphic examples in this project: performed rather than written, moving through time rather than seemingly frozen on the page. I suggest, however, that the Jonsonian masque draws upon key features of hieroglyphic expression. As I have shown elsewhere, Jonson's contemporaries perceived hieroglyphs as connoting secret knowledge intended for an elite audience and as reflecting a "natural" correspondence between sign and meaning, two distinctive characteristics that apply to the masque's progression of hieroglyphic tableaux. In *Mercury Vindicated* the transformative process of the masque works, I argue, through the bodies of the noble masquers who "personate" these embodied hieroglyphs

within a theatrical laboratory space, literally mirrored on stage in the alchemical setting, in which the performers and audience members are morally and politically transmuted.<sup>2</sup>

On the surface, *Mercury Vindicated from the Alchemists at Court*, like *The Alchemist*, seems to deride alchemy as a discipline filled with charlatans who erroneously value art over nature and who cozen the foolish or greedy for financial or social gain. Performed at Whitehall on 6 January 1615<sup>3</sup> by the professional actors of the King's Men and twelve male masquers, *Mercury Vindicated* begins in an alchemical laboratory, in which the personified Mercury escapes from a furnace, complains of the many abuses committed against him by alchemists, and begs for King James to save him from his oppressors. While Mercury opines about his situation, the alchemists, led by Vulcan and his assistant Cyclope, attempt to recapture him in two alchemically themed antimasques. Eventually the king's presence banishes the alchemists; a "glorious bower" containing an embodied Nature, accompanied by the masquers and Prometheus, replaces the laboratory; and the performance culminates in the noble masquers joining with the audience in a courtly dance. It is easy to read the alchemical content of *Mercury Vindicated* as an unambiguous condemnation of practical alchemy and a useful satirical tool.<sup>4</sup> In arguing that Jonson only denounces alchemy or calls upon its figurative resonance for poetic

---

<sup>2</sup> In focusing on the importance of the alchemical laboratory and generally rehabilitating Jonson's representation of alchemy, my approach is similar to that of John Shanahan, "Ben Jonson's *Alchemist* and Early Modern Laboratory Space," *Journal for Early Modern Cultural Studies* 8.1 (2008): 35-66.

<sup>3</sup> The date of *Mercury Vindicated* remained ambiguous for some time, since Jonson's folio does not offer one. Herford, Simpson, and Simpson note the lack of certainty about the date, but assign it a date of 1616. Recently, Marcus Nordlund, following Martin Butler and David Lindley, has asserted that *Mercury Vindicated* must have been performed in 1615. See Marcus Nordlund, "The Earl of Somerset Vindicated from the Howards at Court," *The Ben Jonson Journal* 19.1 (2012): 88-104; and Martin Butler and David Lindley, "Restoring Astraea: Jonson's Masque for the Fall of Somerset," *ELH* 61 (1994): 807-27.

<sup>4</sup> See, for instance, Edgar Hill Duncan, "The Alchemy in Jonson's 'Mercury Vindicated,'" *Studies in Philology* 39 (1942): 625-637; Michael Flachmann, "Ben Jonson and the Alchemy of Satire," *SEL* 1500-1900 17.2 (1977): 259-280; and Stanton J. Linden, *Darke Hieroglyphicks: Alchemy in English Literature from Chaucer to the Restoration* (Lexington: University of Kentucky Press, 1996), 131-2.

purposes, such readings neglect the full import of the masque's complex emblematic and alchemical context.

## I. AN INTRODUCTION TO SPIRITUAL/THEATRICAL ALCHEMY

Jonson's audience would have understood alchemy as a spiritual construct as well as a technical practice. In the previous chapters, I considered spiritual alchemy from an insider perspective; Dee, Winthrop, and Howes were all particularly knowledgeable about and interested in alchemical theory and practice. As practitioners, these men conceived of the spiritual dimension of alchemy as integral with its material dimension. In Dee's *Monas Hieroglyphica*, we saw a model of hieroglyphic reading that expected different results for different readers: dramatic personal transformation for the alchemical adept, "cosmopolitical" transmutation for other elite readers. In the Winthrop-Howes correspondence, the economic and political development that might be made possible via both alchemical practice and geographic exploration were bound together with a vision of personal and collective transformation situated in the letter-writers' particular spiritual community. Jonson's *Mercury Vindicated*, in contrast, is a performance by alchemical "outsiders" for other outsiders that nonetheless deploys notions about spiritual alchemy not only to satirical ends but also to provide a model for the substantive transformative the masque was thought to bring about in its audience and participants.

The widely-held belief in spiritual alchemy enables a better understanding of both the masque genre's overall focus on refining the masquers, and *Mercury Vindicated's* particular thematic focus on the tension between nature and artifice figured as legitimate and illegitimate alchemical creation. Although I have already discussed the historical and conceptual underpinnings of spiritual alchemy in previous chapters, some recapitulation

here will be helpful in emphasizing its relevance to the masque. In the Winthrop-Howes correspondence, the equivalence between alchemical and Christian election underscored the specifically religious resonance. In contrast, alchemical transformation in the masque refers not necessarily to spiritual purification but instead to personal refinement: fashioning courtiers into more accomplished and gracious political subjects. Early modern alchemical writing often acknowledged the discipline's efficacy for perfecting the individual in a variety of ways. For instance, Agnello's treatise on the philosophers' stone that I discussed in Chapter 2, *The Revelation of the Secret Spirit*, describes the alchemical quintessence as a substance that not only refines metal and endows individuals with health and longevity, but also "yeeldeth love, dissolveth hatred, chaseth away sadnesse, bringeth in mirth, and generally removeth all evils."<sup>5</sup> Application of alchemical principles, for Agnello and his English translator Samuel Daniel, results in personal refinement, purging negative emotions and removing "evils" both physical and intangible. In *Truth's Golden Harrow*, Robert Fludd claims that the philosophers' stone, among other more typical abilities like curing disease and transmuting gold, "rectifies the spirit of man."<sup>6</sup> Sixteenth- and seventeenth-century audiences understood alchemy as a discipline enabling the perfection or transmutation of the individual practitioner. Thus, one main argumentative thread in this chapter is that for Jonson and his collaborators in producing masques like *Mercury Vindicated*, courtly theatrical performance not only uses alchemy as a metaphor but also *acts* alchemically to transform the "practitioners."

---

<sup>5</sup> Giovan Battista Agnello, *A Revelation of the Secret Spirit Declaring the most concealed secret of alchymie*, trans. Samuel Daniel (London: Printed by Iohn Haviland for Henrie Skelton, and are to be sold at his shop a little within All-gate, 1623), 4.

<sup>6</sup> Robert Fludd, *Robert Fludd*, ed. William Huffman (Berkeley: North Atlantic Books, 2001), 150.



Alchemy's spiritual resonance was not limited to such personal refinement, however. In fact, many of Jonson's contemporaries held alchemy to be a kind of unified theory enabling the comprehension and manipulation of the divinely-created natural world. Anglican minister Thomas Tymme, whose thoughts on the "Christalline" nature of the philosophers' stone I discussed in Chapter 2, describes the wide-ranging spiritual import of the discipline in the dedicatory epistle to his 1605 translation of a Paracelsian medical treatise. His letter introduces and explains the seeming paradox that alchemy and theology have much in common:

Thus (right Honourable) you see a *Paradox*, no *Paradox*, & a *Hieroglyphick* plainly deciphered. For *Halchymie* tradeth not alone with the transmutation of metals (as ignorant vulgars thinke: which error hath made them distaste that noble Science) but shee hath also a chirurgical hand in the anatomizing of every mesenteriall veine of whole nature: Gods created handmaid, to conceive and bring forth his Creatures. For it is proper to God alone to create something of nothing: but it is natures taske to forme that which he hath created.<sup>7</sup>

For Tymme, as for many of Jonson's other contemporaries, alchemy is more than metallic transmutation or even individual spiritual refinement. Just as God's initial creation of the universe, Tymme suggests, was an alchemical act, so too is all natural inquiry that seeks to understand, manipulate, and transform the world; alchemy enables people to dissect the hidden inner parts of nature, evoked by the "mesenteriall veine" that literally resides within the gut. Despite his bodily metaphor, the alchemy Tymme describes is essentially spiritual: the alchemical practitioner gains special knowledge about the divinely-crafted natural world and harnesses nature's own transformative powers to "form that which [God] hath created" – including, potentially, himself. This conception of spiritual alchemy distinguishes between an elite and a common

---

<sup>7</sup> Joseph Du Chesne, *The Practise of Chymicall, and Hermeticall Physicke, for the Preseruation of Health*, trans. Thomas Tymme (London, 1605), A3v-A4r.

understanding, suggesting that worthy readers will be able to recognize the discipline's true value, while "ignorant vulgars" reduce it to materialistic practices and aims.

Alchemical practice, then, becomes an elevated process for apprehending natural secrets.

In ascribing to alchemy such a central role in understanding the natural world, Tymme intermingles nature and alchemical art, an opposition that resonates with the thematic concerns of Jonson's *Mercury Vindicated*. We might expect alchemical art to oppose nature, or to dominate it, but in this model of spiritual alchemy, there is no clear victor. Nature's workings, Tymme suggests, are a kind of divinely instantiated art in which the human alchemist justly partakes. Nature and art, divine and human agency, blend together within an alchemical framework that is both natural – because "it is natures taske to forme that which he [God] hath created" and artificial – because every act of "anatomizing" nature is a kind of alchemy. Tymme leaves this "*Paradox*, no *Paradox*" in a state of generative tension rather than clear resolution, and in labeling it "a *Hieroglyphick* plainly disciphered," he acknowledges a close association between hieroglyphic and alchemical discourse, both of which deal with understanding and manipulating hidden essences. Their shared reliance upon hieroglyphic discourse serves as another point of contact between alchemy and the masque genre. As we have seen in previous chapters, alchemical texts (like the court masque's progression of elaborately symbolic imagery) often represent their meanings either in richly figurative language or in "hieroglyphic" images.

Tymme's portrait of the intimate relationship among alchemy, religion, natural philosophy, and symbolic discourse was commonplace in the sixteenth and early seventeenth centuries. Alchemy, in short, entailed much more than chrysopoeia, or the

making of gold: it included spiritual transformation both personal and global, both divine and divinely-sanctioned. Within this broader context of spiritual alchemy, I argue that *Mercury Vindicated* does not use alchemy simply as a controlling metaphor or figurative trope, but actually works like an alchemical process. Like an alchemical practitioner who seeks to perfect himself spiritually by working through the physical process of metallic transmutation, the masquers seek to perfect themselves by enacting the verbal, visual, and kinetic “process” of the masque. The physical performance space becomes a theatrical alembic in which the noble masquers and their elite audience dance, and then are refined by the benevolent light of James I.

*Mercury Vindicated* has received less scholarly attention than other works like *The Masque of Blackness*, and recent scholarship has often focused on either the political occasion or allusions to specific alchemical texts. In an example of the former, Marcus Nordlund’s discussion of *Mercury Vindicated* unfolds how the masque’s imagery makes coded references to the rivalry between George Villiers and Robert Carr for the king’s favor, and the role of the influential Howard family in these courtly power dynamics. In the latter category, Stanton J. Linden’s reading argues that Jonson draws explicitly upon the work of the Polish alchemist Sendivogius in order to underscore James’s divinely sanctioned power.<sup>8</sup> While acknowledging the importance of such specificity in masque scholarship, this chapter focuses on neither the occasion for which *Mercury Vindicated* was performed nor Jonson’s interaction with particular alchemical texts. Instead, I suggest that combining a close-reading of the masque with a culturally- and historically-grounded understanding of spiritual alchemy and hieroglyphic discourse can lead us to a

---

<sup>8</sup> See Stanton J. Linden, *Darke Hieroglyphicks: Alchemy in English Literature from Chaucer to the Restoration* (Lexington: University of Kentucky Press, 1996) and “Jonson and Sendivogius: Some New Light on *Mercury Vindicated* from the Alchemists at Court,” *Ambix* 24.1 (1977): 39-54.

deeper understanding of how the collaborative enactment of the masque was understood to refine its participants individually and collectively, binding them in an ephemeral yet real moment of idealized socio-political solidarity. My methodology incorporates and revises the seminal scholarly model of Stephen Orgel and Roy Strong, which emphasizes the masque genre's integration of the aesthetic and political, and the masque's imagery as one star among a constellation of early modern emblematic forms.<sup>9</sup> Placing masque hieroglyphs within the context of spiritual alchemy, however, problematizes the laudatory, rational context focused on by such earlier scholarship.<sup>10</sup> Like Tymme's "*Paradox, no Paradox*," the masque's transformative hieroglyphs can affirm the triumph of Nature and the king while also acknowledging the essential role of artifice.

To understand *Mercury Vindicated* as embodied hieroglyph, it is necessary to consider the masque's hybrid audience, authorship, and character. Jonson consistently privileges the enduring poetic "spirit" of the masque over its occasional and ephemeral "body," but to an early modern audience the sets, costumes, dances, location, performer, audience composition, and other elements would have been just as important as the text. Although scholarly readings must inevitably draw most of their evidence from Jonson's text and commentary, my goal is not an archaeology of Jonson's intentions, but a reading of the masque as a collaboratively-constructed sensory experience. Reconstructing the

---

<sup>9</sup> See, for example, Stephen Orgel and Roy Strong, *Inigo Jones: The Theatre of the Stuart Court* (Berkeley: University of California Press, 1973); Stephen Orgel, *The Jonsonian Masque* (Cambridge: Harvard University Press, 1965) and "The Poetics of Spectacle," *New Literary History* 2:3 (1973): 367-389; Roy Strong, *Art and Power: Renaissance Festivals 1450-1650* (Berkeley: University of California Press, 1984).

<sup>10</sup> Strong, for example, describes the masque as an unqualified celebration of divine right: "the ideal vehicle for the Stuart kings to exhibit their divinity to their court in a series of emblematic tableaux, in which the masquers as various personifications of neoplatonic ideas vanquished all opposition to the crown and its policies" (*Art and Power* 59). Orgel describes the masque as a "scientific" genre that "projects a world in which all the laws of nature have been understood and the attacks of mutability defeated by the rational power of the mind" ("Poetics" 387). For a recent study on the political significance of court theater, see J.R. Mulryne and Elizabeth Goldring, eds., *Court Festivals of the European Renaissance: Art, Politics, and Performance* (Burlington, VT: Ashgate, 2002).

masque's hieroglyphic and alchemical context enables us to focus not on any one individual's role or response (Jonson, Jones, James, audience members, etc.) but on the totalizing and unique verbal, visual, aural, and kinetic occasion through which the participating courtiers and audience members were thought to *actuate* the masque's hieroglyphic imagery and become refined or perfected versions of themselves.

One touchstone for this project overall is John Dee's concept of *actuation*, drawn from his description in *Monas Hieroglyphica* of the symbol as possessing secret meaning "hidden away in its innermost centre"; for the worthy reader, the monad supposedly "teaches without words, by what divine force [that meaning] should be actuated."<sup>11</sup> In the Jonsonian masque, too, the verb *to actuate* seems more apt than watch, interpret, or participate in, even though it includes all of those activities, since meaning is communicated in a similar way in the masque experience. The masquers and audience members together, under the catalytic gaze of James, actuate the masque hieroglyphs through their intellectual engagement and active participation, culminating in the final dance. This transformative actuation, like Tymme's distinction between good readers and "ignorant vulgars," is also a process of community-building that unifies and perfects the courtiers through their shared capacity to access elite, hidden knowledge.

In *Mercury Vindicated*, the nature and method of this hieroglyphic actuation is implicitly addressed through the masque's thematic focus on the tension between art and nature. Although the structure of *Mercury Vindicated* seems to replace the artificial alchemical laboratory with the beautiful artlessness of Nature's bower, in fact Nature gives her blessing to the ritualistic and highly artificial dance performance – and

---

<sup>11</sup> C.H. Josten, "A Translation of John Dee's 'Monas Hieroglyphica' (Antwerp, 1564), with an Introduction and Annotations," *Ambix* 12 (1964): 135.

furthermore the presence and guidance of Prometheus destabilizes Nature's seeming triumph. Through the alchemical "fixation" of Mercury's character and the refining of the masquers, the progression of imagery in *Mercury Vindicated* reveals James as the alchemical catalyst whose governance perfects his subjects through politically sanctioned social mobility. James's transformative effects contrast with the illegitimate and subversive social mobility sought by the alchemists and their followers. Although Jonson claims the masques as part of his literary legacy through their publication, in actuality the printed editions function more like descriptions of an alchemical procedure that has already occurred – only the bodily presence of the masquers in the unique space and time of the court, enacting specific motions, can actually accomplish what the masque claims to do.

## II. "PERSONATING" HIEROGLYPHIC KNOWLEDGE IN THE MASQUE

Early modern playwrights themselves make the association between hieroglyphs and the masque genre and suggest that they are aware of the complex interpretive problems evoked by such imagery. In the letter to Lucy, Countess of Bedford, that introduces his 1604 *Vision of the Twelve Goddesses*, Samuel Daniel describes the masque as "Hieroglyphicqs for our present intention," noting that "though these Images haue oftentimes diuers significations" or even "mysticall interpretations," he nonetheless insists that in this context they should be interpreted only with regard to the "one propertie that fitted our occasion."<sup>12</sup> Daniel concedes that the imagery he presents could, under other circumstances, be ambiguous, but that the unique occasion evokes a singular correct interpretation. To avoid the "tract of confusion" that comes with interpretive

---

<sup>12</sup> Samuel Daniel, *The Complete Works in Verse and Prose of Samuel Daniel*, ed. Alexander B. Grosart (New York: Russell & Russell, 1963), 3:188.

ambiguity, Daniel's letter spells out the meaning of the twelve goddesses, beginning with Juno as "the Hieroglyphick of Empire & Dominion" celebrating James's accession to the throne.<sup>13</sup> Daniel stalwartly insists that the allegorical figures he presents here can have only one meaning and one laudatory purpose.

Five years later, in the quarto edition of *The Masque of Queens*, Ben Jonson suggests a more complex attitude toward audience interpretation of masque imagery in his commentary on the entrance of the antimasque of witches:<sup>14</sup>

For [the witches] to have made themselves theyr owne decipherers [...] had bene a most piteous hearing, and utterly unworthy any quality of a *Poeme*: wherein a *Writer* should alwayes trust somewhat to the capacity of the *Spectator*, especially at these *Spectacles*; Where Men, beside inquiring eyes, are understood to bring quick eares, and not those sluggish ones of Porters, and Mechanicks, that must be bor'd through, at every act, with Narrations.<sup>15</sup>

An essential part of watching the masque, to Jonson, includes intelligently interpreting what one sees; the symbolism, he suggests, should not be obviously or tediously univalent or transparent. In staking a claim for the literary value of the masque as poem, he also wishes to challenge his aristocratic audience intellectually and aesthetically: through the process of interpreting difficult imagery, the audience will both enjoy itself and improve itself. Jonson's inevitable focus on his own poetic text, however, omits how the masque only functions fully as a multimodal combination of image, sound, and

---

<sup>13</sup> Ibid., 188-9.

<sup>14</sup> See also John C. Meagher, who contrasts Daniel's and Jonson's ideas as expressed in his commentary on *Hymenæi*: "The most obvious conclusion is that Daniel and Jonson were in radical disagreement on the question of the nature of a masque, Daniel insisting that it was a group of shows gracefully linked with a text that doesn't get in the way, and Jonson maintaining that it was a unified production whose body is spectacle and whose soul is poetry" (20). John C. Meagher, *Method and Meaning in Jonson's Masques* (Notre Dame: University of Notre Dame Press, 1966).

<sup>15</sup> Ben Jonson, *Ben Jonson*, ed. C.H. Herford, Percy and Evelyn Simpson (Oxford: Clarendon Press, 1941), 7: lines 100-110.

movement. It is the masquers' bodies rather than the poetic text that proves to be the most critical variable in this equation.

The embodied hieroglyphs of the Stuart masque are an outgrowth of the same two interrelated intellectual threads that I traced earlier in this project: the revival of interest in Egyptian hieroglyphic writing and the popularity of emblems and similar forms of symbolic expression. In order to consider how the category of "hieroglyphic expression" applies to the masque, let us revisit some of the writings on language and emblem theory, with a particular eye toward what these texts suggest about the performative hieroglyphs of the masque. Emblem theorists describe hieroglyphs as representing essential, otherwise unknowable truths about the objects or concepts they signify, yet the very instability of this category makes it a useful site to consider the expression, production, and interpretation of meaning in the masque. Considering more closely the distinction between hieroglyphs and other emblematic forms enables us to better understand how enacting the masque's embodied hieroglyphs was thought to bind the courtly audience and participants into an elite community and to refine that community through shared access to transformative knowledge.

As we have seen earlier, in his explanation of the nature and origins of writing in *The Advancement of Learning*, Francis Bacon groups hieroglyphs with gestures as two methods of recording human thought in which there is a direct correspondence between meaning and sign:

For as to Hieroglyphics (things of ancient use, and embraced chiefly by the Egyptians, one of the most ancient nations), they are but as continued impresses and emblems. And as for Gestures, they are as transitory Hieroglyphics, and are to



Hieroglyphics as words spoken are to words written, in that they abide not; but they have evermore, as well as the other, an affinity with the things signified.<sup>16</sup>

Bacon's definition calls attention to the fact that hieroglyphs, unlike emblems or *imprese*, can be formed into sentences and can represent an extended series of ideas. The embodied hieroglyphs of the masque, in fact, are extended and complicated examples of Bacon's gestural "transitory Hieroglyphs." Jonson's progression of significant tableaux combines text, visual elements like costume and setting, music, and movement into an extended symbolic sequence activated by the bodies of the performers moving in the courtly space beneath the king's gaze. The publication of Jonson's poetry supplemented by authorial commentary and description of the performance fossilizes the embodied hieroglyphs, yet fails to completely replicate their original meaning and power. Like Bacon's gestural hieroglyphs, the masque's embodied hieroglyphs "abide not," because they only attain their full significance in the moment of performance.

As Bacon's definition suggests, early modern thinkers understood hieroglyphic meaning as inherent rather than arbitrary and hieroglyphs as natural signs, having "an affinity with things signified," a distinction that also resonates with the aesthetic and epistemological concerns of the masque genre. This categorization of hieroglyphs as "natural" was far from uncomplicated in early modern emblem theory, though. In his *Symbolicæ Philosophiæ*, a treatise on the creation of *imprese*, Abraham Fraunce notes that some might object that "hieroglyphs are the invention of the Egyptians, not of nature," and he counters this objection by noting that many hieroglyphs "find their source

---

<sup>16</sup> Francis Bacon, *Francis Bacon: The Major Works*, ed. Brian Vickers (Oxford: Oxford University Press, 2002), 231.

in the most secret inward parts of nature herself.”<sup>17</sup> Fraunce suggests that those wishing to craft *imprese* should reject those hieroglyphs “which are more abstruse and contain some Egyptian mysteries or other, but have no connection with the workings of nature.”<sup>18</sup> Fraunce’s critique of the hieroglyphic tradition questions whether having a “natural affinity” means that hieroglyphic signs directly represent an otherwise unknowable, unseen essence; some hieroglyphs, he suggests, might reflect only the culturally-bound conventions of their creators.

This tension between natural and conventional signs is echoed in the tension between nature and artifice inherent in the masque genre, and as I will show, explicit in Jonson’s *Mercury Vindicated*, in which the masquers personate the “Sons of Nature,” exemplars of ideal courtly virtue. The masque’s elaborate allegory purports to reflect the natural nobility of the masquers, to outwardly display the virtues of their “secret inward parts” and discover them as worthy political subjects. At the same time, much like the objections Fraunce raises to certain hieroglyphs, one might object that the masque’s embodied hieroglyphs “have no connection with the workings of nature.” After all, the procession of hieroglyphic images is an elaborate artifice carefully crafted by Jonson, Inigo Jones, and other artistic collaborators. But the idealized representation of the courtiers is aspirational rather than actual. Paradoxically, the masque’s symbolism purports both to offer a window into the true nature of James’s court and to perfect that nature. In masque hieroglyphics, then, there is a porous boundary between reflecting and creating meaning.

---

<sup>17</sup> Abraham Fraunce, *Symbolicæ Philosophiæ Liber Quartus et Ultimus*, ed. John Manning and trans. Estelle Haan (New York: AMS Press, 1991), 34-5.

<sup>18</sup> *Ibid.*, 35.

Like Dee's monad that "teaches without words," hieroglyphs in general, and masque hieroglyphs in particular, reflect a different kind of meaning, one which cannot be read or even simply seen, but must be experienced. Moreover, the embodied hieroglyphs of the masque are different from other symbolic forms like *imprese* or even some of the other hieroglyphic examples in this project in that they do not express the intent of a single individual, but rather construct their meaning as part of a collaborative enterprise. Although Jonson's commentary privileges his own literary contribution, his authorial intention complements rather than dominates the intentions of others who take part in commissioning, planning, and executing the masque. Furthermore, as active participants rather than passive spectators, both the masquers and the audience create and actuate the multimodal hieroglyphic "text" through their physical presence, and most particularly in their dances.

Unlike a printed hieroglyph that invites silent contemplation, the embodied hieroglyphs of the masque can be fully understood only through bodily experience.<sup>19</sup> Jonson's own authorial commentary on the masques, in his attempt to devalue non-poetic elements, actually emphasizes the masque's collaborative authorship as well as the crucial integration of material and verbal in the hieroglyphic bodies of the masquers. He argues more than once that his poetry is more important than any other aspect, describing his text as the eternal and meaningful "spirit" to the masque's corporeal "body" of set, music, and dance. Jonson and Inigo Jones famously quarreled over whose contribution to the masque was more important, and Jonson's commentary published with the masque texts makes this body/spirit analogy explicit, configuring Jonson's poetry as timeless

---

<sup>19</sup> In this way, the masque's embodied hieroglyphs share with Pamela Smith's "artisanal epistemology" a similar mode of knowledge acquisition through material experience. See *The Body of the Artisan* (Chicago: University of Chicago Press, 2004).

compared to the “body” created by Jones, which, as Jonson notes in *The Masque of Blackness*, is customarily (even ritualistically) destroyed immediately after the performance: “But (when it is the fate, even of the greatest and most absolute births, to need, and borrow a life of posteritie, little had beene done to the studie of *magnificence* in these, if presently with the rage of the people, who (as a part of greatness) are privileged by custome, to deface their *carkasses*, the *spirits* had also perished.”<sup>20</sup> Here Jonson justifies his publication of the masque, privileging the textual over the non-textual, as a preservation of its ineffable literary “spirit” after the less valuable “body” of its scenery has been torn down.<sup>21</sup> Costume, set, music, and dance, he suggests, are all part of the corruptible and mortal “carcass,” but the words have become part of Jonson’s *Works*.

Jonson also uses the body/spirit analogy in his commentary on *Hymenæi*, making a distinction between “things subjected to understanding” and “those which are objected to sense,” in which the former are aligned with the soul and the latter with the body:<sup>22</sup>

It is a noble and just advantage, that the things subjected to *understanding* have of those which are objected to *sense*, that the one sort are but momentarie, and meerely taking; the other impressing, and lasting: Else the glorie of all these *solemnities* had perish’d like a blaze, and gone out, in the *beholders* eyes. So short-liv’d are the *bodies* of all things, in comparison of their *soules*. And, though *bodies* oft-times have the ill luck to be sensually preferr’d, they find afterwards, the good fortune (when *soules* live) to be utterly forgotten.<sup>23</sup>

Jonson again compares the physical spectacle of the masque to the body and the textual

---

<sup>20</sup> Jonson, 7: lines 3-9.

<sup>21</sup> On the customary destruction of the masque scenery, see Clare McManus, “Defacing the Carcass’: Anne of Denmark and Jonson’s *Masque of Blackness*,” in *Refashioning Ben Jonson: Gender, Politics, and the Jonsonian Canon*, ed. Julie Sanders, Kate Chedgzoy, and Susan Wiseman (New York: St. Martin’s Press, 1998).

<sup>22</sup> This is possibly the most analyzed piece of Jonson’s prose commentary on the masques. Scholars who have written about this passage include: Ann Cline Kelly, David Lindley, Clare McManus, John C. Meagher, Rafael Vélez Núñez, Stephen Orgel, Alison Scott, Roy Strong, and many more. Clare McManus notes that it is “often read as Jonson’s definitive statement on the masque genre” (97).

<sup>23</sup> Jonson, 7: lines 1-10.

content to the soul. As in the commentary on *Blackness*, Jonson implies that, since the occasion of performance has passed, the spectacle itself has “perished like a blaze and gone out in the beholders’ eyes.” The text is immortal and spiritual because it remains when the occasional aspects have passed – the dances are over, never to be repeated by those individuals, the music is forgotten, and the set has been torn down. Only Jonson’s publication preserves the masque’s memory now. He suggests, in fact, that it is “good fortune” for the material features of the masque to be “utterly forgotten,” a sentiment that is undercut by Jonson’s own scrupulous physical descriptions of the setting, appearance, and placement of the masquers.

Jonson’s use of the body/spirit analogy does not simply suggest that his poetry is lasting while the non-textual elements are ephemeral; he also suggests a judgment about the relative value and effect of each element. The things “objected to sense” are “momentary and merely taking,” while the things “subjected to the understanding” are “impressing and lasting.” In this chiasmus, “momentary” contrasts with “lasting,” referring to the fleeting performance that the printed edition preserves. The other contrast between “merely taking” and “impressing” requires more explication, though. “Taking” in this context means something “that takes the fancy or affection; captivating, engaging, alluring, fascinating, charming, attractive.”<sup>24</sup> The transitory physical spectacle is charming and diverts the onlooker’s interest for the duration of the performance, but has little lasting impact. The direct contrast between “taking” and “impressing” suggests that the non-textual masque elements (*diverting* or *fetching* might be a better contemporary

---

<sup>24</sup> *OED Online*, s.v. “taking, adj.,” <http://www.oed.com/view/Entry/197175?rskey=03bQ1A&result=2&isAdvanced=false> (accessed January 09, 2013).

equivalent for *taking*) merely delight the senses, but Jonson's poetry actually *gives*, imprinting its meaning upon the onlooker. This distinction presents only one possible – and obviously biased – schematic of where meaning inheres and how it is transferred from text to “reader,” deliberately undervaluing the non-textual aspects of the masque to make an argument about the relative contributions of Jonson and Jones.

This dismissal of the delightful sensory parts of the masque is complicated even by Jonson's own use of the body/spirit analogy and his consideration of sign and meaning in other contexts. In *Timber, or Discoveries*, Jonson underscores his view of the primacy of the written text, yet at the same time acknowledges that visual art may be superior in certain situations. He writes that poetry and visual art are similar because they are both concerned with “imitation,” but poetry is superior: “Yet of the two, the pen is more noble than the pencil; for that can speak to the understanding, the other but to the sense.”<sup>25</sup> Nonetheless, Jonson argues that right-thinking people will not deprecate visual art: “Picture is the invention of heaven, the most ancient and most akin to nature. It is itself a silent work, and always of one and the same habit, yet it doth so enter and penetrate the inmost affection (being done by an excellent artificer) as sometimes it overcomes the power of speech and oratory.”<sup>26</sup> Pictorial arts can silently “enter and penetrate” the viewer's understanding: like Dee's hieroglyphic monad, a picture can make an immediately powerful semantic impression. Despite the primacy of poetry over visual art, of the pen over the pencil, Jonson nonetheless concedes that occasionally “picture” can “overcome” the capacity for speech, and that sometimes images even obviate the

---

<sup>25</sup> Ralph S. Walker, ed., *Ben Jonson's Timber or Discoveries* (Syracuse: Syracuse University Press, 1953), 34.

<sup>26</sup> *Ibid.*, 34.

necessity for explanation.

Elsewhere in *Timber*, Jonson applies the body/soul analogy to a consideration of rhetoric:

In all speech, words and sense are as the body and the soul. The sense is as the life and soul of language, without which all words are dead. Sense is wrought out of experience, the knowledge of human life and actions, or of the liberal arts [...] Words are the people's; yet there is the choice of them to be made [...] They are to be chosen according to the persons we make speak or the things we speak of.<sup>27</sup>

Here he suggests that the *meaning* of words is their soul, and the words themselves are the body by which that soul is conveyed. The material signs of the words themselves are temporary and subject to rhetorical choices; the referents are the soul, the ideas drawn from experience or study to which the words refer. Jonson's philosophy of language implies that *sense* is like a neoplatonic ideal that the words themselves only imperfectly approximate. Moreover, the same "soul" might have a different "body" depending on the circumstances; the same idea might be clothed in different words, since the proper way to convey a particular meaning varies depending upon the audience.<sup>28</sup>

Even within Jonson's commentary on rhetoric, the location where meaning inheres cannot reliably be pinned down. He wants his poetry to be the most important part of the masque, yet is forced to acknowledge that image has a certain rhetorical power and, in fact, may express some ideas more perfectly without words. He wants the masque text to express its meaning with crystalline purity, yet acknowledges that meaning and word do not have such an unambiguous relationship. If language can approach the ineffable sense of a word, but not necessarily perfectly encapsulate it, we cannot unambiguously

---

<sup>27</sup> *Ibid.*, 41.

<sup>28</sup> Jonson has much to say about appropriate rhetoric in *Timber*. Overall, he champions moderation in rhetoric: use of figurative language appropriate to the occasion, but not inconsistent or over-the-top, formality or informality of register appropriate to the speaker and audience, employment of varied rhetorical techniques enough to make the language interesting, yet not novel for its own sake (45-47).

privilege the language of the masque. Jonson asserts that the masque should be thought of as primarily a printed text, yet his deployment of the body/spirit analogy complicates any simple ideas about the location of meaning. The important thing for the masque, ultimately, is that meaning is generated by the confluence of word and non-word: the embodiment of collaboratively-authored, multimodal hieroglyphs.

I argue that focusing exclusively on either Jonson's text or Jones's visual design fails to acknowledge the significance of the holistic, performative experience. Jonson's own references to the body/spirit destabilize the contrast between the two and suggest that it is only in concert that both are fully meaningful. He insists that "all words are dead" without their enlivening sense and that the non-verbal components of the masque are similarly "carcasses," but in fact it is the bodies themselves that validate the performance and act as vehicles for its transformative meaning.

The language in Jonson's commentaries emphasizes the noble masquers bodying forth a series of living hieroglyphs. For instance, both *The Masque of Blackness* (1605) and *Chloridia* (1630) begin with a declaration that the masques are "personated" by their royal performers. His use of "personated," in contrast to other frequently-chosen verbs like "presented" or "celebrated," calls attention to the masquers' bodies. "Personate," according to the *OED*, can refer not only to playing a role in a theatrical production or impersonating another individual, but also "to represent or imagine as a person; to give a human form or nature to" and "to signify; to symbolize; to represent in a personal or bodily form."<sup>29</sup> Like written hieroglyphs, the masquers' bodies strive to act as direct

---

<sup>29</sup> *OED Online*, "personate, v.."

<http://www.oed.com/view/Entry/141493?rskey=xuZLT3&result=2&isAdvanced=false> (accessed January 09, 2013). My discussion of "personation" in court theater resonates interestingly with Terry G. Sherwood's call for renewed attention to "personhood" in early modern literature. Sherwood writes that



conduits to the abstract essence of the mythological figures and virtues that they embody. In Jonson's commentary on *The Masque of Queens*, this correspondence between the outward appearance of the masquers and the ineffable truths they signify is made even more explicit: "Here they lighted from theyr *Chariots*, and daunc'd forth theyr first *Daunce*; then a second, immediately following it: both right curious, and full of subtile, and excellent Changes, and seem'd performed with no lesse spirits than of those they personated."<sup>30</sup> The queen and her ladies, Jonson's rhetoric suggests, are perfect hieroglyphs of the "secret inward parts," to borrow Fraunce's phrase, of the group of legendary and historical queens they personate, creating through their personation an embodied link between meaning and sign.

Jonson's commentary on *Hymenæi* acknowledges the critical role of hieroglyphic "personation" even while he insists on the supremacy of his poetic text:

This it is hath made the most royal *Princes*, and greatest *persons* (who are commonly the personators of these actions) not onely studious of riches, and magnificence in the outward celebration, or shew; (which rightly becomes them) but curious after the most high, and heartie *inventions*, to furnish the inward parts: (and those grounded upon *antiquitie* and solide *learnings*) which, though their *voyce* be taught to sound to present occasions, their *sense*, or doth, or should always lay hold on more remov'd *mysteries*.<sup>31</sup>

Here Jonson claims that the "personators" themselves value his poetic "inventions" more than the sumptuous spectacles they enact. These spectacles celebrate and befit the masquers' elevated social positions, but the real value of the masque, Jonson insist, lies in the special knowledge that the text gestures toward. This argument, though, subverts

---

term "person" has been notably absent in critical writing about early modern subjectivity, which more often uses terms like "self" or "subject." See *The Self in Early Modern Literature: For the Common Good* (Pittsburgh: Duquesne University Press, 2007), 4.

<sup>30</sup> Jonson, 7: lines 731-735.

<sup>31</sup> *Ibid.*, lines 10-19.

itself. It is only because these noble personators are “curious” after Jonson’s poetry that it has value, and it is only when channeled through the masquers’ bodies in the “present occasion” of the performance that the hieroglyphic “text” becomes complete and the “remov’d mysteries” can be fully apprehended.

Jonson also suggests elsewhere that the aristocratic masquers’ physical presence validates the quality of the masque. At the end of *Blackness*, Jonson declares: “*So ended the first Masque: which (beside the singular grace of Musicke and Daunces, had that successe in the nobilitie of performance, as nothing needes to the illustration, but the memorie by whom it was personated.*”<sup>32</sup> Here Jonson suggests, in contrast to his emphasis elsewhere on the eternality of poetry, that in fact the seemingly transitory aspects of the performance constitute a monument to the masque’s greatness. Furthermore, for those who were not privileged to be in the original audience (like those who purchase and read the published text), simply remembering the illustrious bodies of the performers suffices to affirm the performance’s quality.

If the most important masque participants were the noble masquers, these also were the least verbal, since they typically did not have speaking parts: the impact of their “personating” occurs purely through physical appearance and skilled movement. Significantly, this enactment of embodied hieroglyphs is not just visual and verbal, but also kinetic, participating in what Skiles Howard calls the “kinetic discourse” of dance that constitutes a “system of bodily aesthetics that privileges the elongated and enclosed aristocratic form, and endows it with magical powers.”<sup>33</sup> Through ritualized dance (not

---

<sup>32</sup> *Ibid.*, lines 362-365.

<sup>33</sup> Skiles Howard, *The Politics of Courtly Dancing in Early Modern England* (Amherst: University of Massachusetts Press, 1998), 47 and 3-4. Howard argues that early modern dance came to function, like

unlike ceremonial magic), both audience and masquers act out a hieroglyphic performance, and through their motions are transformed. Although the dances form the masque's semantic heart, Jonson's texts gloss over them, often indicating them only briefly with descriptions like the following from *Mercury Vindicated*: "*The maine dance. Then dancing with the ladies; then their last dance.*"<sup>34</sup> In the dances, the static verbal and visual hieroglyphs become dynamic, strung together in multimedia "sentences" whose semantic import becomes more than the sum of each individual sign. Returning to Bacon's comparison between written hieroglyphs and transitory gestures, the progression of imagery in the masque partakes in both categories yet fully adheres to neither.

The end of the typical masque structure includes a final dance in which the performers and the audience intermingle, which also intermingles the idealizing allegory of the masque with the actual population of courtiers. Elizabeth Cook and others describe this formal and ritualistic conclusion as a transformative moment:

The culminating moment to which the court masque moved was the moment of the dance: a moment at which the spectators, having witnessed the Ideal versions of themselves on the stage, are joined by the masquers. The barriers between spectators and wonderful spectacle are broken down at this moment and the real is assimilated into the Ideal.<sup>35</sup>

---

verbal and visual rhetoric, as a political tool that could be used both to emphasize and subvert power relationships. He contextualizes dance not simply as an ornamental aesthetic expression or a bodily mirroring of celestial harmony, but as a form through which individuals and groups could exercise political agency. In particular, he suggests that dance in early Stuart masque enacts colonial expansion and the assimilation of difference or otherness into normative courtly forms. See also Blair Hoxby, "The Wisdom of their Feet: Meaningful Dance in Milton and the Stuart Masque," *ELR* 37.1 (2007): 74-99. On the perceived neoplatonic significance of dance, see also Julia Sutton, introduction to *Courtly Dance of the Renaissance: A New Translation and Edition of the Nobiltà di Dame (1600)*, by Fabritio Caroso (New York: Dover Publications, 1995).

<sup>34</sup> Jonson, 7: lines 245-7.

<sup>35</sup> Elizabeth Cook, "'Death Proves Them All but Toyes': Nashe's Unidealising Show," in *The Court Masque*, ed. David Lindley (Manchester: Manchester University Press, 1984), 18. See also Orgel and Strong, who write that "every masque moved toward the moment when masquer and spectator merged, joining in the great central dance, affirming thereby the identity of the fictive and the real" (*Inigo Jones* 2). Stephen Kogan puts it in more mystical terms: "As if to top the limits of the sublime, every performance

The impact of this erasure of boundaries between theatrical and real space cannot be captured in a printed edition, even with Jonson's insistent reminder of "the memorie by whom it was personated." Jonson's publication, rather than dismissing the "carcass" of the masque, seeks to recreate verbally a series of living hieroglyphs, yet there is no equivalent to witnessing the performance. Moreover, the original spectators were also participants, drawn into the hieroglyphic tableau in the final dance.

The process of enacting and interpreting embodied hieroglyphs, epitomized by the dance, is a form of spiritual alchemy made possible by the masque's unique circumstance. Since both the masquers and audience participate in the performance, the only true spectator of the masque is the king, whose silent observation catalyzes the transformative process and enables the purging of the antimasque as well as the refinement of the masquers. Alchemy is not just a metaphor for the action that occurs when readers engage with masque hieroglyphs; rather, hieroglyphic actuation in the presence of the king is, in itself, a kind of alchemy. As we will see in *Mercury Vindicated*, James, then, becomes associated with Mercury, the force that fuels the alchemical process, and the masquers and audience together are both the alchemists and the matter that is transformed – an idea that is consonant with the early modern understanding of spiritual alchemy as personal refinement.<sup>36</sup>

---

reached a point when the masquers took out partners from the audience in dance, so that the spectators and the meaning of the spectacle eventually flowed into one another, while the eye and mind were guided toward infinity and the image of a cosmic revelation." See *The Hieroglyphic King: Wisdom and Idolatry in the Seventeenth-Century Masque* (London: Associated University Presses, 1986), 29.

<sup>36</sup> Douglas Brooks-Davies argues that, in *Mercury Vindicated*, James supplants the alchemical Mercury by becoming a representation of another Mercury, Hermes Trismegistus. See *The Mercurian Monarch: Magical Politics from Spenser to Pope* (Manchester: Manchester University Press, 1983), 90-1. In contrast, my reading suggests James remains a spectator rather than actor: that in providing the "light" that redeems Mercury from the alchemists, the masque positions James as the Mercurial force that makes spiritual-alchemical transformation possible.

This process of active, transformative meaning-creation also seeks to perfect the participants and cement them into a political whole. The tension between revelation and concealment in the masque's embodied hieroglyphs emphasizes the participants' shared political allegiance and effaces their differences.<sup>37</sup> As we have seen in the different contexts of Dee's *Monas Hieroglyphica* and the Winthrop-Howes correspondence, the awareness of one's own ability to discern concealed meaning – and the recognition of this ability in one's peers – defines a community of elite observers at the same time as that process of hieroglyphic interpretation supposedly refines that community. For example, Jonson's commentary on *The Masque of Queens* distinguishes between the apt interpretive capacities of aristocratic audience members and the “sluggish ones of Porters and Mechanicks,” suggesting that Jonson believes his hieroglyphic imagery is accessible to noble observers but would baffle a less “worthy” audience.<sup>38</sup> Recalling the critique of alchemically-inclined “Smithes, and Weauers, Carpenters” that we saw in Chapter 2, masque hieroglyphs thus seek to create and reinforce an elite community of the initiated, concealing meaning from the unworthy and revealing it to the worthy.

Emblem theorists regard hieroglyphs as a powerful, yet paradoxical, type of sign: allegedly natural and yet fully meaningful only within highly specific cultural contexts, carefully mediated and seemingly direct or unmediated. Jonson has a vexed relationship to this category of hieroglyphic expression; his well-known emphasis on the lasting value of poetry over the ephemeral totality of the masque tends to neglect the embodied

---

<sup>37</sup> As Pamela Long notes, cloaking arcane knowledge within specialized, symbolic discourse establishes community bonds among like-minded thinkers. See *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to the Renaissance* (Baltimore: Johns Hopkins University Press, 2001), 63.

<sup>38</sup> Jonson, 7: lines 108-9.

hieroglyphic experience, yet at the same time, his rhetoric suggests that he sees transformative power in that very experience.

### III. ACTUATING HIEROGLYPHS IN *MERCURY VINDICATED*

In *Mercury Vindicated*, this transformative experience is one of social mobility, figured as the contrast between the politically threatening self-advancement aligned with the alchemists and the divinely sanctioned elevation facilitated by the king's influence. The masque equates the capacity to effect socio-political advancement with the capacity to "fix" – in other words, *actuate* – the meaning of Mercury's hieroglyphic character. Mercury's complaint is ultimately one of semantic ambiguity: the alchemists define and redefine his qualities so liberally that he becomes empty of meaning. The alchemical/rhetorical torture to which the alchemists subject Mercury also becomes aligned with corrupt and corrupting artifice against "natural" practices. Mercury's solution is to implore the king – champion of nature against artifice – to "fix" his meaning, to enable the transmutation of which the alchemists are incapable. As the masque progresses, the boundaries between alchemical laboratory and court collapse, and Mercury's fixation is echoed in the final refinement of the noble masquers in Nature's bower, a scene that seems to underscore the triumph of Nature over alchemical artifice but in fact reveals the ongoing tension between these two poles. Mercury's diatribe in the antimasque and the subsequent "discovery" and refinement of the masquers, I suggest, functions not as an indictment of practical alchemy, but as an exploration of competing models of spiritual alchemy. Rather than banishing artifice completely, the conclusion offers a model of naturalized alchemy: personal transformation that, while artificial, takes place beneath the king's gaze and within the accepted hierarchy.

The personified Mercury hieroglyphically represents this social mobility, through both physical and verbal slipperiness. The action of the antimasque literally consists of Mercury eluding the alchemists and their representatives by running around the laboratory, and the masque's opening monologue recapitulates Mercury's semantic fluidity in both content and rhetoric. Mercury begins his attack on deceptive alchemical artifice by caustically mocking the alchemists who torture him in their laboratories, and he ends with invective against the courtly alchemy of those who try to bilk others and improve their financial, social, and political standing through deception. Mercury's symbolic ambiguity, in fact, is the weakness the alchemists use to exploit him: "I am their Crude, and their Sublimate; their Præcipitate, and their Unctuous; their male and their female, sometimes their *Hermaphrodite*; what they list to stile me."<sup>39</sup> To these alchemical charlatans, Mercury's changeable identity makes him susceptible to abuse; he can simultaneously be male, female, and in-between; unrefined and refined; solid and liquid, depending upon what the alchemists desire. Mercury's tirade suggests that an overabundance of meanings paradoxically empties him of meaning. In alchemical theory and practice, the element of Mercury is ubiquitous, functioning as "simultaneously the matter of the work, the process of the work, and the agent by which the work is effected," a plasticity that is often reflected in representations of Mercury as hermaphroditic.<sup>40</sup> In the courtly context of the masque rather than in an alchemical laboratory, these positive connotations of flexible ubiquity become instead a potentially threatening ambiguity. The

---

<sup>39</sup> Jonson, 7: lines 51-4.

<sup>40</sup> Lyndy Abraham, *A Dictionary of Alchemical Imagery* (Cambridge: Cambridge University Press, 1998), 125.

alchemists fail to connect Mercury as an embodied hieroglyph to a fixed meaning – they are, in a sense, deliberately “bad readers.”

As an embodied hieroglyph Mercury reveals the slippery correspondence between meaning and sign: his inherent ambiguity leaves him vulnerable by displaying in his rhetoric the very flexibility that the alchemists and courtiers abuse. Midway through Mercury’s opening monologue, the character turns his attention from alchemists to courtiers, accomplishing this shift in focus by means of a clever analogy between the “philosophical circle” (the cycle of alchemical processes) and a “turn-spit” for cooking meat:

One, two, three, foure and five times an houre ha’ they made mee dance the *Philosophicall* circle, like an Ape through a hoope, or a dogge in a wheele. I am their turne-spit indeed: they eat or smell no rost-meate but in my name. I am their bill of credit still, that passes for their victuals and house-roume. It is through mee they ha’ got this corner o’ the Court to coozen in [...] and all upon *Mercuries* security.<sup>41</sup>

Mercury complains that the alchemists exploit his multivalent potential, but the progression of imagery that he offers in this passage shows how that flexibility can easily be used to move from one venue to another, from laboratory to court, and from lower social levels to higher ones. The “philosophical circle” of alchemical processes becomes associated with animals jumping through hoops, then with hoops or circles in general, then with the circular motion of a rotisserie. The turn-spit then becomes an emblem of food, which in turn represents the alchemists earning their livelihood through alchemical work. In a final rhetorical move, the work becomes “cozening” and the setting transforms from the laboratory to the court. Mercury’s imagery uses circular motion not to remain in

---

<sup>41</sup> Jonson, 7: lines 63-72.



one place, but, like a wheel, to roll forward and upward, demonstrating the same transformative possibilities that he asks James to close off.

Metaphorically associating alchemical con men with the socio-political deceptions and maneuvers of courtiers, Mercury continues his lengthy chain of association, moving from Vulcan's laboratory, to the servants' domains, to the higher echelons of James's court. He first mocks the lower class denizens of the court who hope to profit from the alchemists' work, such as a "poore *Page* o' the Larder" who hopes to become "*Phisician* for the Houshold" by acquiring a "quantity of the quintessence" and then moves upward in the courtly social sphere, transitioning from the "petty Engagements" of servants to certain courtiers, whose attempts to seem younger, more fashionable, and more virtuous are likened to alchemical deception.<sup>42</sup> His monologue finally expands outward from the court to critique aristocratic society as a whole: "Get all the crack'd maiden-heads, and cast 'hem into new Ingots, halfe the wenches o' the town are *Alchymie*."<sup>43</sup> These deceptive ladies are not alchemists, but rather, they "are *Alchymie*," a surprising choice of metaphor. *Alchemy*, as portrayed in Mercury's monologue, is above all *motion*: in the fluidity of both his rhetoric and his physical form, Mercury's complaint reflects a fear that alchemical practice will enable illegitimate social mobility rather than a skepticism about alchemical efficacy in general.

The seeming transformations Mercury satirizes, both alchemical and courtly, are only skin deep, yet they still threaten to undermine the socio-political hierarchy by usurping the refining power that belongs legitimately to James, source of alchemical light. Those reprehensible inhabitants of the court who seek to conceal their moral

---

<sup>42</sup> *Ibid.*, lines 72-92.

<sup>43</sup> *Ibid.*, lines 103-4.

bankruptcy with alchemical art or to lift themselves above their designated social station are equated with the alchemists who claim to outstrip the glory and generative capacity of the sun, challenging the natural order itself.<sup>44</sup> Mercury accuses them of attempting to “wrest the *Caduceus* out of my hand, to the adultery and spoile of *Nature*,” and says it is the “height of impudence, in mankind” that the alchemists “professe to outworke the *Sunne* in vertue, and contend to the great act of generation, nay, almost creation.”<sup>45</sup> The ultimate endeavor to “outwork the sun,” according to Mercury, is the effort to artificially create humans in alchemical vessels in the laboratory, the creation of “*Paracelsus man*” (l. 146). Recalling the moment in *The Masque of Blackness* in which Ethiopia declaims that Britannia’s ruling sun can “salve the rude defects of every creature,” the alchemists challenge the sun, which the masque links with Nature as an emblem of James’s royal authority and power.<sup>46</sup> The “imperfect creatures” of Vulcan’s “fire and art” are contrasted explicitly with “the excellence of the sun and Nature” embodied in James’s divinely sanctioned power. Mercury mocks the impossibility of success in either the alchemists’ or courtiers’ endeavors, yet his complaint suggests that there is genuine transformative power that should only be wielded by the king. The alchemists and deceptive courtiers fail not because transmutation is impossible, but because their base motives render them unworthy of success.

---

<sup>44</sup> The masque’s critique of dangerous alchemical charlatans, in fact, recalls the rhetoric that alchemists themselves have long adopted of elevating their own supposedly pure practice above others whom they characterize as false and wrongly motivated. Dee, for example, excoriates those “vulgar” practitioners whose efforts undermine not only their own reputations and the reputation of alchemy as a discipline, but also have dire religious and political ramifications, since they “have at various times done great harm to the Christian polity” (Josten 143).

<sup>45</sup> Jonson, 7: lines 123-34.

<sup>46</sup> Jonson, 7: line 257.

The masque figures the harnessing of this transformative power as “fixing” the character of Mercury, a concept that in alchemical literature “is frequently symbolized by the capturing and taming of the volatile Mercurius so that it can be used in the production of the philosopher’s stone.”<sup>47</sup> The first antimasque literalizes this process by showing Vulcan and his alchemists chasing Mercury and unsuccessfully attempting to capture him. Mercury begs for James’s assistance in escaping the abusive alchemists: “You that are both the *Sol* and *Jupiter* of this sphere, *Mercury* invokes your majesty against the sooty Tribe here; for in your favour onely I growe recover’d and warme.”<sup>48</sup> Mercury seeks to escape the control of the alchemists for the more exalted process of sublimation under James’s beneficent light. The only genuine and lasting transformation, the masque suggests, is that which occurs not in the furnace, but under the influence of the king’s sun. In his role as masque spectator, the king facilitates Mercury’s “fixation” as an embodied hieroglyph that recursively signifies James’s own transformative power.

Within the semantic framework of the masque, alchemical fixation becomes hieroglyphic interpretation, and the act of assigning meaning to an ambiguous hieroglyph becomes politically charged. Mercury pledges himself to James and then commands Vulcan to “Vanish ... that all who have but their senses may see and judge the difference

---

<sup>47</sup> Abraham, 78. See also Martin Ruland, *A Lexicon of Alchemy* (London: John M. Watkins, 1964). Ruland writes, “Fixation is an operation upon a volatile subject, after which it is no longer volatile, but remains permanent in the fire, to which it is gradually accustomed. It is performed by calcination, or by slow decoction, taking place daily, or by frequent sublimation and coagulation, or by the addition of a fixed matter” (147). See also Duncan, 630.

<sup>48</sup> Jonson, 7: lines 107-9. This identification between James and the alchemical sun is not unique to *Mercury Vindicated*. In his discussion of *The Masque of Blackness*, Rafael Vélez Núñez notes: “James symbolizes the sun; this star provides light, but also heat, an eternal heat that can cure and transform” (260). Also like *Blackness*, in which the sun paradoxically blanches rather than tans, the sun in *Mercury Vindicated* rescues the eponymous element from the already-blackened “sooty tribe.” See “Beyond the Emblem: Alchemical Albedo in Ben Jonson’s *The Masque of Blackness*.” *Sederi* 8 (1997): 257-262.

betweene thy ridiculous monsters and his absolute features.”<sup>49</sup> The king’s “absolute” fixation of Mercury contrasts with the alchemists’ multivalent readings and “ridiculous monsters”; in the latter phrase, Mercury’s rhetoric deflects the political threat of unsanctioned alchemical-courtly transformation by labeling it risible or “ridiculous.” In language that underscores the equation between hieroglyphic interpretation and courtly hierarchy, James’s “absolute features” connote both absolute power and the power of correct reading – the legitimizing force, in other words, that enables the masquers to actuate the hieroglyphic imagery they personate.

Ascribing special efficacy to the king’s influence also resonates with the early modern understanding of spiritual alchemy, recalling the wide-ranging powers that Dee ascribes to Holy Roman Emperor Maximilian II in his *Monas Hieroglyphica*. Dee calls upon the king as a “witness” to affirm the rare value of his work, writing that “nobody could adduce a witness of sharper judgment” by virtue of Maximilian’s special status as a divinely-ordained monarch.<sup>50</sup> Moreover, he claims that Maximilian influenced him while his “mind was pregnant” with the contents of *Monas*, “thanks to the magnetic power which you exert even from such a distance.”<sup>51</sup> By simply existing and being king, Dee’s language suggests, Maximilian exerts a transformative force that enables the creation of this work and validates its quality after its “birth.” In a book that is actually *about* spiritual alchemy, Dee invokes a kind of spiritual alchemy to describe his own writing process. In a similar fashion, Jonson and his collaborators on *Mercury Vindicated* ascribe generative and transformative power to James as a uniquely positioned “witness” to the

---

<sup>49</sup> Jonson, 7: lines 189-95.

<sup>50</sup> Josten, 140-1.

<sup>51</sup> *Ibid.*, 146-7.

masque. Through his status as a privileged spectator, the king exerts a force that enables Mercury's fixation and offers a legitimate alternative to the alchemists' subversive generation.

If the scene in Vulcan's laboratory shows the political dangers of alchemical-social transformation, the final scene then claims to offer a safe alternative in the revelation and refinement of the noble masquers. After Mercury's final fixation occurs, the alchemical laboratory is banished and "*the whole Scene changed to a glorious bowre, wherein Nature was placed, with Prometheus at her feete; And the twelve Masquers, standing about them. After they had bene a while viewed, Prometheus descended, and Nature after him, singing.*"<sup>52</sup> Jonson's language emphasizes the self-conscious act of witnessing and interpreting; immediately before the scene changes, Mercury beckons the audience to "see and judge," and Jonson's commentary calls attention to the temporal gap between the unveiling of "glorious bower" and the beginning of Nature's first speech, in which the new hieroglyphic tableau poses silently for the audience's "viewing." Once again, the masque calls attention to itself as a progression of mercurial hieroglyphs in need of fixation or actuation. Edgar Hill Duncan dismisses the closing scene as a simplistic reminder of the contrast between bad alchemical art and good Nature.<sup>53</sup> I argue, on the contrary, that the conclusion offers a politically- and divinely-endorsed blending of Nature and artifice that is crucial to a fully-contextualized understanding of *Mercury Vindicated*. By positioning alchemical artifice in the service of Nature, the final scene both resolves and complicates the tension between nature and artifice and the vexed parallel between hieroglyphic interpretation and alchemical-political refinement.

---

<sup>52</sup> Jonson, 7: lines 196-200.

<sup>53</sup> Duncan, 637.

The appearance of the “glorious bower” superficially seems like an unequivocal triumph of Nature, yet the interplay between Nature, the Chorus, and Prometheus calls into question the naturalness of the masque and the masquers themselves. The “sons of Nature” are not born, but are artificially “made” by Nature herself and James, naturalizing and legitimizing one variety of the alchemically-created humans that Mercury earlier disparaged. Nature’s first words are to assert that the twelve masquers are in fact her children, unlike the unnatural homunculi that the alchemists seek to create:

How yong and fresh am I to night,  
To see’t kept day, by so much light,  
And twelve my sonnes stand in their Makers sight?  
Helpe, wise *Prometheus*, something must be done  
To shew they are the creatures of the Sunne,  
That each to other  
Is a brother,  
And *Nature* here no stepdame, but a mother.<sup>54</sup>

Nature identifies the masquers as the children of Nature and the sun/king, aligned by their parentage against alchemical artifice. Jonson’s language continues to play with the idea of the king’s creative power, with the “creatures of the sun” implicitly contrasted to the alchemists’ “imperfect creatures.” Nature’s language calls attention to the masquers’ literal dependence upon James as “maker,” a monarch whose proclivity for expanding the ranks of nobility through the granting of aristocratic titles was well known. Moreover, her lines imply that the natural brotherhood of the masquers is itself an artificial construct: they must be reminded of their shared parentage or allegiance to the king, suggesting that otherwise the courtiers might tend toward discord rather than fraternal affection. Nature’s rhetoric fails to completely obscure the occasional context: that the human “creation” achieved in the masque constitutes socio-political advancement, and that the masquers

---

<sup>54</sup> Jonson, 7: lines 201-8.

are politically distinct (even competing) individuals rather than anonymously perfect exemplars of courtly virtue.

Nature's speech also calls attention to the performative elements of the masque genre itself, which underscores the porous border between natural and unnatural ennoblement or "creation." After all, the scenes presented before the noble audience are all about artifice, celebrating the ingenious devices of scenery, music, and dance, as well as the elaborate and stylized costumes, manners, and personae of the courtiers themselves. Nature praises the artificiality of the masque setting, "kept day by so much light," referring both to the metaphorical "light" of the king's gaze and the brightly lit, sumptuously decorated hall. The artificial brightness, in fact, enables Nature to appear particularly "young and fresh" on this occasion, suggesting that properly-deployed artifice can enhance Nature rather than detracting from her or threatening her. Nature's "glorious bower" is no less artificial than Vulcan's laboratory, yet that artifice now glorifies Nature and the king.

The invocation of the final dance similarly positions the masquers and their performance as supremely natural, yet calls attention to the formal artificiality of the masque. Nature, the Chorus, and Prometheus exhort the masquers to join with the audience in dance:

*Chorus.* Move, move againe, in formes as heretofore.

*Nature.* 'Tis forme allures.

Then move, the Ladies here are store.

*Prometheus.* *Nature* is motions mother, as she is your's.

*Chorus.* The spring, whence order flowes, that all directs,  
And knits the causes with th'effects.<sup>55</sup>

---

<sup>55</sup> *Ibid.*, lines 239-44.

The speakers in these lines identify Nature as “motion’s mother” and “the spring whence order flows,” emphasizing the naturalness of orderly, formal structures. Jonson’s language, moreover, continually evokes movement, naturalizing social mobility that is enabled by the king while condemning that which is achieved through alchemical deception. This celebration of spectacular natural order and motion contrasts implicitly with the shabbiness, noise, and chaos of the alchemical antimasques. Considered generically, in many ways the masque is all about form rather than content, a socio-political hierarchy that is orderly, yet in motion, through the enactment of highly structured hieroglyphic tableaux and the formal opposition between antimasque and masque. Although Nature sanctions these alluring forms, they are nonetheless ritualized and highly artificial dances, just as the acting of noble masquers and professional actors alike is a form of ceremonial posturing. In short, calling attention to the artless and yet formal choreography paradoxically undercuts its *sprezzatura*.

Furthermore, Prometheus’ mythological history, alluded to in the final scene, complicates his status as Nature’s champion. Prometheus calls to mind his rejection of the god’s “gift” of the woman Pandora when he encourages the male masquers to overcome their reluctance and choose partners for their dance: “I woman with her ills did flie,/ But you their good, and them denie.”<sup>56</sup> Prometheus gently mocks the masquers, contrasting his wise rejection of a troublesome woman with the masquers’ foolish rejection of virtuous and beautiful courtly ladies. Nature refers to another of Prometheus’ mythic deeds, his theft of fire: “But shew thy winding wayes and artes,/ Thy risings, and

---

<sup>56</sup> Ibid., lines 254-5.



thy timely startes/ Of stealing fire, from Ladies eyes and hearts.”<sup>57</sup> In both of these cases, Jonson redirects Prometheus’ transgressive behavior into acceptable social channels, glossing over his challenge to divine authority and redefining him as a guide for courtly lovers. He encourages the masquers to pair up with ladies from the audience and teaches them the “arts” of evoking emotion through the “winding ways” of stylized dance. Nature exhorts Prometheus to employ his artifice in her service: artifice in motion, the “risings” and “timely starts” of courtly dance. This artifice is nonetheless necessary: Nature begs for Prometheus’s aid and depends upon “wise *Prometheus*” to accomplish her ends.

One more of Prometheus’ legendary accomplishments hangs unspoken over the final scene: creating the first humans out of clay. In fact, Mercury earlier mentioned the “deedes of *Deucalion* or *Prometheus*” in his critique of the alchemical generation of humans.<sup>58</sup> Both the fire-stealing and creation of humans are reminiscent of the alchemists’ politically charged crimes: Prometheus challenged Zeus’s authority, like the alchemists seek to out-achieve “the *Sol* and *Jupiter* of this sphere,” and his legendary creation of humans echoes the alchemists’ desire to “produce men.” In pairing Prometheus with Nature, the masque seeks to strip him of dangerous or subversive qualities - instead he encourages the decorous, courtly dance with which the masque concludes and reinforces the primacy of Nature and her children. The Promethean impulse to social mobility, which seems aligned with the goals of the alchemists, is not completely rejected, but it must be sanctioned and naturalized within the context of the courtly hierarchy. Prometheus could easily be a hieroglyph for subversive artifice, but the masque attempts to rehabilitate him, to realign him with Nature and the divinely

---

<sup>57</sup> Ibid., lines 213-5.

<sup>58</sup> Ibid., lines 136-7.

sanctioned order headed by James. Yet unlike Daniel's insistence that masque hieroglyphs have only "one propertie that fitted our occasion," Jonson's rhetoric in the concluding section of *Mercury Vindicated*, in leaving more up to the audience's discernment, also allows for Nature to subsume rather than banish alchemical artifice, complicating rather than fully resolving the contrast between the two.

This tension is further complicated by the masquers' transformation through the choreographic alchemy of the dance. Along with Nature and Prometheus, the Chorus also encourages the masquers to dance: "Come forth, come forth, prove all the numbers then/ That make perfection up, and may absolve you men."<sup>59</sup> The Chorus' language suggests that the masquers are "proven" – put to the test and thus refined – through the ritual of the dance, whose formal enactment under the watchful and beneficent "sun" of James becomes a more efficacious version of Vulcan's laboratory. The commonplace alchemical rhetoric of male and female conjugation is literally enacted in the coupling of male masquers and female audience members whom the artificial motion of the dance "absolves" – completes or perfects.<sup>60</sup> Just as Mercury becomes fixed under James's influence, so too do the masquers become fixed or brought to completion as "men." In a redemptive parallel to the unnatural Paracelsian generation that Mercury earlier condemned, James's light catalyzes the creation of humans in the alchemical laboratory of the court.

---

<sup>59</sup> *Ibid.*, lines 210-1.

<sup>60</sup> The applicable *OED* definitions for "absolve" are: "To accomplish, complete, bring to completion; to discharge or acquit oneself of (a task, etc.)." *OED Online*, s.v. "absolve, v.," <http://www.oed.com/view/Entry/693?redirectedFrom=absolve> (accessed January 09, 2013).

*Mercury Vindicated* explicitly contrasts nature and artifice in the context of a critique of alchemical practice, and thus the masque also implicitly explores whether masque hieroglyphs are natural or artificial signs. They seem to fall neatly into neither category: although the masque's rhetoric insists that figures such as the Sons of Nature and Prometheus unveil essential truths, in fact they – along with Mercury himself – only fully acquire meaning in the unique space and time of the masque's performance, a meaning whose import cannot be fully preserved by Jonson's publication. Furthermore, the meaning of these embodied hieroglyphs is actuated only through the blending of verbal, visual, musical, and kinetic elements in a spiritual-theatrical alchemy that is inevitably and self-consciously artificial, even while the masque ultimately positions artifice as a servant than a rival of Nature.

## CHAPTER 4

### “THE HIEROGLYPHIC OF THE WORLD”: QUINCUNCIAL READING IN SIR THOMAS BROWNE’S *GARDEN OF CYRUS*

*To thoughtful observers, the whole world is a phylactery, and every thing we see an item of the wisdom, power, or goodness of God.*

-- Sir Thomas Browne, *Christian Morals*

*Syons Calamitye or Englands Miserye Hieroglyphically Delineated*, a broadside published in May 1643, depicts the current state of civil strife with an arrangement of symbolic images accompanied by a verse explanation written by A. Jackman (Figure 6).<sup>1</sup> The broadside is dedicated by Jackman to Algernon Percy, 10th Earl of Northumberland, a prominent Parliamentarian who in the spring of 1643 led an unsuccessful peace delegation to Charles I, and who had prominently supported reconciliation.<sup>2</sup> The image and its accompanying poem seem to be from the perspective of a Parliament-sympathizing advocate of peace, since the imagery depicts the Church of England beset by radicals and corrupt influences on all sides, and the poem exhorts the king to “yeeld to Reason” to end the strife. Like the other hieroglyphic examples this project has examined, *Syons Calamitye* hopes to

---

<sup>1</sup> A. Jackman, *Syons Calamitye or Englands Miserye Hieroglyphically Delineated* (London: 1643).

<sup>2</sup> “Percy, Algernon, tenth earl of Northumberland (1602–1668),” George A. Drake in *Oxford Dictionary of National Biography*, ed. H. C. G. Matthew and Brian Harrison (Oxford: OUP, 2004); online ed., ed. Lawrence Goldman, January 2008, <http://www.oxforddnb.com/view/article/21923> (accessed November 29, 2012).

change the reader through engagement with symbolic discourse. Unlike a more arcane text like Dee's *Monas Hieroglyphica*, this broadside is directed toward the general public and spells out its message quite clearly, literally labeling the various parts of the image with letters that form a key to the explanatory poem. The existence of a text like *Syons Calamitye* suggests that hieroglyphic discourse - the crafting and interpretation of hieroglyphs - can and does have political valence during the Civil War period. In fact this mode of expression so thoroughly permeates seventeenth-century English culture that this document deploys the representational and transformative potential of hieroglyphs in the equivalent of a blog post.



Figure 6: Detail from *Syons Calamitye or Englands Miserye Hieroglyphically Delineated* (London, 1643), <http://eebo.chadwyck.com/>.

The images in *Syons Calamitye* depict England as bounded yet porous, beset by problems external and internal. The central panel represents the castle of “Poore England” as

a seamlessly walled fortress with a closed portcullis; warring armies face off within the walls, and outside, neighboring nations stand ready to take advantage of the country's weakened state. England's internal disorder, though, spills out of the seemingly impermeable barrier: topical hieroglyphs depict particular problems leading up to the First Civil War surround the castle, and England's citizens are both inside and outside the walls. Within the castle walls, England's representatives are tangled in a net set by malevolent-looking councilors, while Astrea, personification of divine justice (and one of the allegorical names frequently used to refer to Elizabeth I), tries to free them. In the accompanying poem, Jackman describes the scene of ensnarement:

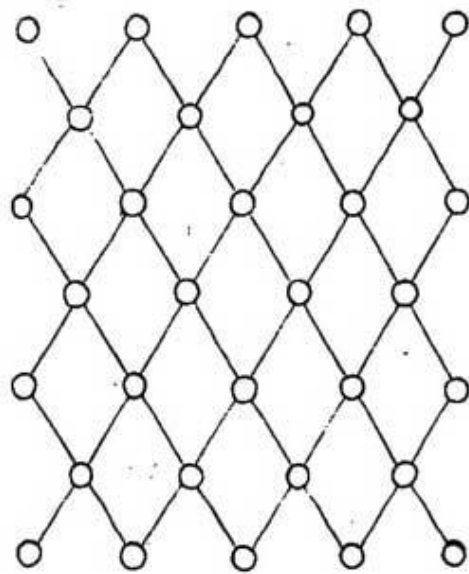
Conscience and justice late  
The Props and Pillers of thy Glorious State  
Have been Intangled in a Subtile Snare  
By Evill Counsels; Soe that now they are  
Scarce able to Releive thee: though the Care  
And Providence of Astrea doth not Spare  
To breake this stronge Compacted Nett asunder  
To give them power to cheare thee...

"Conscience and justice" are within the net, represented by three figures rather than the two we might expect. Although a fallen sword lays on the ground beside the blindfolded figure of Justice, she does not pick it up but instead tends to the distressed, screaming Conscience, a woman in deshabille with wild, unbound hair. The "Evill Counsels" and providential Astrea both grip the net, and the latter's raised sword suggests the possibility, although not yet the actuality, of freeing the ensnared figures.

Around the same time that Browne publishes his famously tolerant, learned, and reflective *Religio Medici*, Jackman's broadside represents the nation's problems in the form of "hieroglyphs." Significantly, in *Syons Calamitye* the central emblem of England's turmoil takes the form of a net, an image of constriction binding the "Glorious State" and making it

vulnerable to abuses. Fifteen years later, in *The Garden of Cyrus*, Browne rehabilitates the net: rather than representing the triumph of injustice and violence, this new net represents the benevolent natural order underlying all things (Figure 7). Rather than constricting possibility, the quincuncial network opens it up. Both nature’s providential bounty and human achievement are enhanced by an understanding of the orderly framework that engirds everything natural and artificial. Rather than “miserye” or “calamitye” hieroglyphically delineated, Browne’s *Cyrus* offers aesthetic solace and intellectual energy. In a decade that might have seemed, to Browne, to warrant polemic like *Syons Calamitye*, he instead praises

the merits of a close and thoughtful observation of networks.



**Figure 7: Illustration of the quincunx from Browne's *Garden of Cyrus* (1658), <http://eebo.chadwyck.com/>**

I begin with *Syons Calamitye* not to suggest a direct influence upon Browne, but rather to suggest that in a cultural moment so deeply attuned to hieroglyphic resonances, the quincunx inevitably has political as well as natural philosophical import. The past 30 years have seen a renewed critical effort at situating Browne within his own time and place rather than

seeing him as an intellectual country doctor living in seclusion from the religious and political turmoil of his time.<sup>3</sup> Beginning with Michael Wilding’s “*Religio Medici* in the

---

<sup>3</sup> This restitution of the “political Browne” might be said to have started long before new historicism, though. In his seminal 1950 biography, Jeremiah S. Finch cautioned against viewing Browne in the 1640s and 1650s as a “sequestered antiquarian,” and called instead for attention to the evidence showing that he was “a staunch

English Revolution,” *Religio Medici* has been read more-and-more as necessarily imbricated in “the circumstances of revolution and civil war.”<sup>4</sup> Reid Barbour and Claire Preston’s recent collection, *Sir Thomas Browne: The World Proposed*, continues this historicized approach, “revisit[ing] more productively Browne’s relationship to contemporary religious divisions, his place in civil-war debates, and his intervention in a witchcraft trial.”<sup>5</sup> While Barbour and Preston praise the recent critical impulse to contextualize Browne, they also caution scholars against taking for granted “the neo-historicist claim, inaugurated by Michael Wilding’s engaging essay, that Browne’s complex thought is reducible to an essentially oppressive conservatism.”<sup>6</sup> Following their admonition, my reading of *Garden* will seek to avoid dogmatism and acknowledge the nuances of Browne’s philosophy.

Scholars have been slower to politicize *The Garden of Cyrus* than *Religio Medici*, perhaps because, in the case of the latter, religion and politics seem inextricable, and in the case of the former, the book’s overt content seems more to do with science than politics. Anne Cotterill, however, has recently suggested that *Cyrus* should be read as a text with

---

Royalist in the predominantly Puritan county of Norfolk, openly supporting the King’s cause and using his influence to further it as opportunity permitted” (128). See *Sir Thomas Browne: A Doctor’s Life of Science & Faith* (New York: Henry Schuman, 1950).

<sup>4</sup> Michael Wilding, “*Religio Medici* in the English Revolution,” in *Approaches to Sir Thomas Browne*, ed. C.A. Patrides (Columbia, MO: University of Missouri Press, 1982), 100 and *Dragons Teeth: Literature in the English Revolution* (Oxford: Clarendon Press, 1987). Much recent scholarship has discussed the inextricably entwined religio-political and intellectual circumstances of *Religio Medici*, including Ingo Berensmeyer, “Rhetoric, Religion, and Politics in Sir Thomas Browne’s *Religio Medici*,” *SEL, 1500-1900* 46.1 (2006): 113-32; Reid Barbour, *Literature and Religious Culture in Seventeenth-Century England* (Cambridge: Cambridge University Press, 2001); and Achsah Guibbory, *Ceremony and Community from Herbert to Milton: Literature, Religion, and Cultural Conflict in Seventeenth-century England* (Cambridge: Cambridge University Press, 1998).

<sup>5</sup> Reid Barbour and Claire Preston, introduction to *Sir Thomas Browne: The World Proposed* (Oxford: Oxford University Press, 2008), 5.

<sup>6</sup> *Ibid.*, 4.



unavoidable political overtones.<sup>7</sup> Comparing the garden retreat in *Cyrus* to that in country-house poems like Marvell's *Upon Appleton House*, Cotterill argues that the quincunx suggests a hidden order akin to both secret Royalist and Anglican meetings and to a nostalgic hope for political restoration. She focuses on Browne's digressive content and style, claiming that the "fertile quincunx" contrasts both with Puritan emphasis on overly-literal scriptural interpretation and with the Interregnum focus on agricultural reforms for moral, economic, and patriotic purposes. Drawing genre-based comparisons between *Cyrus* and other contemporary horticultural texts, Cotterill argues: "Access to the spiritual world's unseen seminal principles comes through careful, close seeing and reading of nature's (and Browne's) book: an intellectual and religious, an aesthetic and political, position that opposes a one-dimensional, literal world of reading and writing associated with zealous Protestant suspicion of rhetorical arts or of imagery not capable of being translated directly into moral lessons."<sup>8</sup> In other words, Browne's stylistically digressive mode of describing the quincunx aligns with a worldview that values complexity and layered meaning.

Rather than placing *Cyrus* in the context of seventeenth-century writing on orchard cultivation as Cotterill does, I suggest that the tradition of hieroglyphic expression that I have traced from Dee to Browne enables us to more fully understand the epistemological,

---

<sup>7</sup> Anne Cotterill, *Digressive Voices in Early Modern English Literature* (Oxford: Oxford University Press, 2004). Claire Preston notes, "To write about gardens in 1656-8 is hardly a neutral act." See *Thomas Browne and the Writing of Early Modern Science* (Cambridge: Cambridge University Press, 2005), 179. For other scholars who read Browne's *Urn Buriall* and *The Garden of Cyrus* in their context of political and religious strife, see James Turner, *The Politics of Landscape: Rural Scenery and Society in English Poetry, 1630-1660* (Oxford: Blackwell, 1979); Frank L. Huntley, "The Garden of *Cyrus* as Prophecy," in *Approaches to Sir Thomas Browne*, 132-42; Jonathan F.S. Post, *Sir Thomas Browne* (Boston: Twayne Publishers, 1987); Michael Wilding, *Dragon's Teeth: Literature in the English Revolution* (Oxford: Clarendon Press, 1987); Aschah Guibbory, "'A Rationall of Old Rites': Sir Thomas Browne's *Urn Buriall* and the Conflict over Ceremony," *Yearbook of English Studies* 21 (1991): 229-41; Michael Stanford, "The Terrible Thresholds: Sir Thomas Browne on Sex and Death," *ELR* 18 (1988): 413-23.

<sup>8</sup> Cotterill, 161.

spiritual, and political valences of the quincunx. Unlike a country-house poem or horticultural treatise, *Cyrus* offers not a bounded estate, but an expansive mode of perception and understanding. The quincuncially-ordered cosmos is less a horticultural retreat than a hieroglyphic lens through which to see, read, understand — and thus transform — the natural world.

Spiritual alchemy has been a guiding analogy in previous chapters, and it is an important subtext in my reading of *The Garden of Cyrus*. In his discussion of Browne and alchemy, Stanton J. Linden claims that the scattered evidence in Browne's writings suggest a belief in alchemy as "an imaginative and authoritative model for spiritual transformation and regeneration."<sup>9</sup> I agree with Linden's assessment of Browne's attitude toward alchemy; *Cyrus* contains little if any overtly alchemical content, but the structural pairing with *Urn Buriall* certainly suggests such regenerative possibilities. As Browne writes in the dedicatory letter, "Since the verdant state of things is the Symbole of the Resurrection, and to flourish in the state of Glory, we must first be sown in corruption."<sup>10</sup> *Cyrus* is thus framed from the beginning as a text about transformation: the rejuvenating counterpoint to his meditations on death in *Urn Buriall*.

This chapter, thus, will explore several broad questions: How does the quincunx relate to Browne's ideas about hieroglyphs and the "hieroglyphic tradition" as a whole? And how might the quincunx be read and *used*? That is, how do the text and its central image operate upon the reader, and what does its transformative potential entail?

---

<sup>9</sup> Stanton J. Linden, "Smatterings of the Philosopher's Stone: Sir Thomas Browne and Alchemy," in *Mystical Metal of Gold: Essays on Alchemy and Renaissance Culture* (Brooklyn: AMS Press, 2007), 350. Linden's essay primarily considers *Religio Medici* and evidence from Browne's letters.

<sup>10</sup> Sir Thomas Browne, *The Works of Sir Thomas Browne*, ed. Sir Geoffrey Keynes (Chicago: University of Chicago Press, 1964), 1:177.

My answer to the latter questions has been informed by Jennifer Richards' notion of "instrumental book-use," that is, the direct and even embodied effect of contemplative reading. In her article about sixteenth-century medical self-help books, Richards argues that thoughtful and critical intellectual digestion of medical texts (that is, not just the practical application of their advice) is in-and-of-itself intended to have a salubrious effect on the reader.<sup>11</sup> *The Garden of Cyrus* may seem unlike Richards' self-help manuals, but this chapter will suggest a similar use-value, centered in what Richards describes as "the thoughtful and critical rumination that [such books] invite."<sup>12</sup> Browne teaches the reader not only to *see* the quincunx in nature but also to *apply* it, reporting both the ways in which past civilizations have adopted quincuncial order in their material objects as well as a contemporary method of harnessing the quincunx in something like natural magic. In learning such practical lessons as well as theoretical ones about the significance of the quincunx, readers come to understand themselves and the world better — an understanding that has political implications.

Browne's *Cyrus* trains the reader to be a "careful observer," to see and think hieroglyphically, in a way that implicitly agrees with the author's Royalist sympathies. Despite scientific changes, religious strife, and political turmoil, the quincunx offers the reader a deep universal structure that promises both stability and flexibility. Browne's quincuncial worldview, I argue, is not simply nostalgic or reactionary. In the natural philosophical content of *Cyrus*, Browne balances Baconian empiricism with a continued adherence to ideas like correspondence theory, a "both/and" rather than "either/or" approach to the new philosophy that belies simple delineations of the "Scientific Revolution."

---

<sup>11</sup> Jennifer Richards, "Useful Books: Reading Vernacular Regimens in Sixteenth-Century England," *Journal of the History of Ideas* 73.2 (2012), 247-271.

<sup>12</sup> *Ibid.*, 270

Moreover, in excavating and renewing divinely-instantiated hierarchies during the Interregnum, Browne teaches a quincuncial “reading” strategy that suggests religio-political as well as scientific efficacy. Elsewhere, he laments the damage to Norwich Cathedral during the Civil War period and views the execution of Charles I as a great national sin to be expiated through continual penance and remembrance.<sup>13</sup> The quincuncial network obliquely promotes these views and encloses the human and natural worlds securely within providentially-ordered structures, but it also bends to accommodate the new philosophy. Unlike the violent and restrictive net in *Syons Calamitye*, the quincunx is both a hieroglyph inherent in all things, rehabilitating rather than jumbling up the natural socio-political order, and a liberating framework within which humans can exercise and perfect their intellectual capacity.

*Using the quincunx is a mode of hieroglyphic reading that is embodied yet expansive. The Garden of Cyrus* transforms readers and their communities through teaching them to apply an interpretive framework that, crucially, already exists inside themselves. In *Cyrus*, Browne figures the physiological and mental mechanisms of vision — seeing and processing what we see — as mirroring the shape of the quincunx. Because of this, the parallel processes of reading and interpreting a text and observing and understanding the natural world intersect in the idea of the quincuncial eye. Everything we see is mediated through this shape, a hieroglyphic lens through which we perceive the world. In locating the quincunx within the

---

<sup>13</sup> Jeremiah S. Finch, *Sir Thomas Browne: A Doctor's Life of Science and Faith* (New York: Henry Schuman, 1950), 168. See Browne's *Repertorium* for a minute accounting of memorials, decorations, and objects in Norwich Cathedral. For example, Browne notes nostalgically that the “fayre and large” organ was, “in the late tumultuous time . . . pulled downe, broken, sould, & made away” and that a number of “richly embroydered” vestments were burned in the marketplace. See *Works*, 3:140-1. On Browne's response to Civil War-era iconoclasm, see Kevin Killeen, “The Politics of Painting: *Pseudodoxia Epidemica* and Iconoclasm,” in *Sir Thomas Browne: The World Proposed*, Reid Barbour and Claire Preston, eds. (Oxford: Oxford University Press, 2008).

human body as well as outside, Browne naturalizes the politicized worldview that his symbol represents. The embodied quincunx suggests that human experiences of perception — corporeal and intellectual — will be similar rather than different; indeed, that it is natural for us to come to similar conclusions about the world, because we each apply the quincuncial network when we look at the world, even as we seek to find that network around us.

### I. THE QUINCUNX AS HIEROGLYPH

In the works this project has examined so far, hieroglyphs might best be defined as signs that take on an unusually heavy symbolic weight, that encapsulate nuanced philosophies in a single image or series of images. Although each example has also been deeply imbricated in its own particular historical moment, Dee's monad, Howes's *Mysterium* diagram, and the hieroglyphic tableaux in Jonson's *Mercury Vindicated* each in their own way promise a transformative interchange between reader and sign: the hieroglyph itself contains the possibility for a hieroglyphic reading experience.

The word "hieroglyph" is scarcely mentioned in *The Garden of Cyrus*, though, so one might sensibly object: why should I classify the quincunx with these preceding signs? Grouping *Cyrus* with these other hieroglyphic works, I argue, better illuminates the repercussions of Browne's text beyond its immediate natural philosophical message. Like Dee's monad, the quincunx has rich "cosmopolitical" significance: while Dee's symbol condenses the universe into a single sign, Browne's hieroglyphic network expands infinitely to encompass a universe of otherwise shifting signs and systems. The quincunx, while not explicitly labeled a hieroglyph by Browne, nonetheless matches with the complex understanding of hieroglyphs evinced both in *Cyrus* and in his earlier *Religio Medici*.

Many critics have used the term "hieroglyphic" to describe the figure, and my reading

follows this critical tradition in identifying the quincunx as a hieroglyph. Rosalie Colie writes that “the hieroglyphical language of the Creator himself” is “taken for granted as signs of order in a multitudinous, varied, fragmented creation.” Janet E. Halley describes the quincunx as “the certain and irreducible hieroglyph that all things paradisiacal imitate.” In *Thomas Browne and the Writing of Early Modern Science*, Claire Preston describes “Browne’s signaturism” in reading natural hieroglyphs as connected with hermetic neoplatonism, Paracelsian medicine, and the hieroglyphic tradition, among other strands of early modern thought. Thomas C. Singer places *The Garden of Cyrus* firmly within the “hieroglyphic tradition,” connecting the quincunx with contemporary interest in natural language, hermetic philosophy, and Egyptian wisdom.<sup>14</sup> In many of these cases, though, “hieroglyphic” either becomes generally synonymous with “symbolic” or it becomes an epistemological category whose primary significance is philosophical rather than historicized.

Singer, for example, argues that the quincunx participates in the early modern revival of interest in hieroglyphs by mapping a wondrous underlying natural and spiritual structures:<sup>15</sup>

Far from being occasional pieces responding to the disruption brought about by civil war, *Urn Burial* and *The Garden of Cyrus* are meant to present a microcosmic image of the natural and supernatural orders and of man’s place within them. Browne introduces the quincunx to resolve the problem of symbolic representation posed by

---

<sup>14</sup> Rosalie L. Colie, *The Resources of Kind: Genre-Theory in the Renaissance* (Berkeley: University of California Press, 1973), 83; Janet E. Halley, “Sir Thomas Browne’s *The Garden of Cyrus* and the Real Character,” *ELR* 15.1 (1985), 103; Claire Preston, *Thomas Browne and the Writing of Early Modern Science* (Cambridge: Cambridge University Press, 2005), 197-8; Thomas C. Singer, “Sir Thomas Browne’s ‘Emphaticall Decussation or Fundamentall Figure’: Geometrical Hieroglyphs in *The Garden of Cyrus*,” *ELR* 17.1 (1987), 86.

<sup>15</sup> See also Singer’s thorough survey of the “hieroglyphic tradition” and its philosophical significance, “Hieroglyphs, Real Characters, and the Idea of Natural Language in English Seventeenth-Century Thought,” *Journal of the History of Ideas* 50 (1989): 49-70.

his project: how is man to read the book of creation and then rewrite it?<sup>16</sup>

In other words, Singer writes that Browne's *Cyrus* uses the quincunx to describe cosmic structures and interrogate the relationship between symbolic language and the natural world. Singer dismisses the political context as less important than the philosophical one, suggesting that reading *Cyrus* as an "occasional piece" would diminish its significance. I argue instead that the political and epistemological contexts are inextricably connected. Browne does work through a "problem of symbolic representation" informed by contemporary scholarly interest in hieroglyphic knowledge, but the insights about the "natural and supernatural orders" that the quincunx reveals may best be understood as integral with the occasion rather than separate from it. Calling once again upon Dee's extremely useful word, the quincunx is a "cosmopolitical" hieroglyph.

Even the few references to the hieroglyphic tradition in *Cyrus* suggest that such symbols invoke the integration of cosmic and civic order. Variations on the word "hieroglyph" appear three times in *Cyrus*: twice with regard to Egyptian or supposedly Egyptian hieroglyphs, and once with a more general symbolic connotation.<sup>17</sup> In this latter example, Browne discusses the disposition of ancient orchards, noting that ancient peoples were methodically attuned to the significance of "situation, aspect, manner, form, and order" in architecture, and thus they were similarly careful in their agricultural design. He writes that some "groves" demonstrated a quincuncial order that "might Hieroglyphically speak as much, as the mysticall *Statua* of *Janus* in the Language of his fingers."<sup>18</sup> Here, the

---

<sup>16</sup> Singer, "Emphaticall Decussation," 86.

<sup>17</sup> Browne, *Works*, 1: 182, 185, 204.

<sup>18</sup> *Ibid.*, 1: 185. A marginal note cites Pliny on a statue set up by "King Numa ... with his fingers so disposed that they numerically denoted 365."

“hieroglyphic” ordering of an orchard represents the complete annual cycle, a calendrical representation that Browne likens to Roman king Numa’s statue of Janus. The simile portrays the quincunx as representative of natural order, and it also invites the reader to consider the possible symbolic resonance of the the “mysticall *Statua of Janus.*” Browne’s source, Pliny’s *Natural History*, describes Janus as a deity “worshipped as indicating war and peace.”<sup>19</sup> Another classical source, Plutarch’s *Lives*, describes Janus as “a patron of civil and social order” whose double-faced representation symbolized “that he brought men’s lives out of one sort and condition into another.”<sup>20</sup> The statue of Janus represents not only the passage of the year but also transformation from savagery to civilization, a hieroglyph of social order instated by a legendary king. Browne’s analogy encourages us to consider layers of simultaneous meaning; the quincuncial groves “Hieroglyphically speak as much” about orderly progressions and hierarchies not only in nature but also in civic life. For Browne, thus, “hieroglyphs” evoke not only ancient Egyptian logographic writing but also overdetermined signs in general and a hieroglyphic mode of interpretation that suggests religious and political order within a network of cosmic correspondences.

This notion of the hieroglyphic quincunx deepens and complicates ideas about interpreting natural hieroglyphs that begin to develop in both *Religio Medici* and *Pseudodoxia Epidemica*. Browne’s brief mentions of hieroglyphs in *Religio* may be summed up in two ideas: first, hieroglyphs enable humans to reconstruct an ancient, even prelapsarian, apprehension of divinity in nature; and second, such markers grant access to the “invisible

---

<sup>19</sup> Pliny the Elder, *Natural History*, ed. and trans. H. Rackham, Vol. 9 (Cambridge, Mass.: Harvard University Press, 1952), Book 34, Chapter 16, 153.

<sup>20</sup> Plutarch, *Plutarch’s Lives*, trans. Bernadotte Perrin, vol. 1, Loeb Classical Library (New York: Macmillan, 1914), 373.



world” of figurative meaning. These two ideas focus on identifying and understanding natural hieroglyphs rather than human writing.

In *Religio*, Browne famously asserts that the Book of Nature is “that universall and publik Manuscript, that lies expans’d unto the eyes of all.”<sup>21</sup> By interpreting the hieroglyphic language of that manuscript, humans can begin to understand providential order through the contemplation of nature. He suggests that a true understanding of these natural signs requires the observer to shed preconceptions; in this way, primitive humans were paradoxically better equipped to read the Book of Nature: “the ordinary effects of nature wrought more admiration in them, than in the other all his miracles; surely the Heathens knew better how to joyne and reade these mysticall letters, than wee Christians, who cast a more carelesse eye on these common Hieroglyphicks, and disdain to suck Divinity from the flowers of nature.”<sup>22</sup> In keeping with early modern understanding of hieroglyphs as a kind of ur-writing, the interpretation of natural hieroglyphs comes naturally to pre-Christians, for whom such signs constituted their everyday writing.<sup>23</sup> With a naive, but intelligent and admirable, eye, heathens are better equipped to perceive divine signatures in the natural world, unlike “wee Christians,” who cast a jaded and weary eye even on miracles. Browne’s description of reading the Book of Nature in this passage seems nostalgic for a time of lost innocence or pristine learning that has been obscured by the accumulation of knowledge. The “ordinary effects of nature,” expressed in “mysticall letters,” reveal a specifically Christian truth that heathens could in fact read more clearly than their Christian descendants but were unable to

---

<sup>21</sup> Browne, *Works*, 1: 25.

<sup>22</sup> *Ibid.*, 1: 25.

<sup>23</sup> See, for example, Francis Bacon’s description of hieroglyphs as “things of ancient use, and embraced chiefly by the Egyptians, one of the most ancient nations.” See *Francis Bacon: The Major Works*, ed. Brian Vickers (Oxford: Oxford University Press, 2002), 231.

fully appreciate.

This hieroglyphic text encompasses a divinely-designed cosmic plenitude; Browne's *Religio* ecstatically celebrates providential order in nature, noting that "there are no *Grotesques* in nature; nor any thing framed to fill up empty cantons, and unnecessary spaces."<sup>24</sup> In *Religio* Browne identifies and praises the hieroglyphic Book of Nature, but in *Cyrus* he considers more specifically what it means to seek out and interpret that order. *Cyrus* offers a primer for reading that "universall and publik manuscript," yet reading natural hieroglyphs does not simply mean recovering the naive, primitive perspective of the "Heathens." Browne's explication of the quincunx models a hieroglyphic reading that partakes in both ancient wisdom informed by a Christian perspective and the "new philosophy." The ability to read the Book of Nature requires reforming our "carelesse eye" with a renewed attention to details and patterns: a mind aware that providential order is revealed in natural patterns, and an eye attuned to careful observation.

The kind of observation that Browne advocates in *Cyrus* is simultaneously democratizing and expansive, because "the eyes of all" might examine the natural world, and specialized and limiting, because Browne requires a tremendous wealth of knowledge from all fields, ranging from scientific, medical, and anatomical knowledge, to minute details from obscure historical texts. Reading natural hieroglyphs, in other words, is complicated. Like other forms of hieroglyphic knowledge and interpretation that I have explored in this project, Browne's ideas about "how to joyne and reade these mysticall letters" encompass both untutored, intuitive "admiration" and close observation mediated by copious learning. Browne's model of hieroglyphic reading in *Cyrus* does not contradict but rather complicates

---

<sup>24</sup> Browne, *Works*, 1: 24.

that in *Religio*. *Religio* invokes the image of ancient people, pre-Christian and yet somehow closer to a prelapsarian understanding of divinity-in-nature, but *Cyrus* suggests that Browne's contemporaries cannot escape reading natural hieroglyphs *as themselves* rather than recapturing an ancient perspective. If hieroglyphic reading is vexed, so is the knowledge gained thereby. Browne associates hieroglyphs in *Religio* with the "invisible world" of allegorical meaning:

Thus is man that great and true *Amphibium*, whose nature is disposed to live not onely like other creatures in divers elements, but in divided and distinguished worlds; for though there bee but one [world] to sense, there are two to reason; the one visible; the other invisible, whereof *Moses* seems to have left [no] description; and of the other so obscurely that some parts thereof are yet in controversie; and truly for those first chapters of *Genesis*, I must confesse a great deale of obscurity, though Divines have to the power of humane reason endeavoured to make all goe in a literall meaning; yet those allegoricall interpretations are also probable, and perhaps the mysticall method of *Moses* bred up in the Hieroglyphicall Schooles of the Egyptians.<sup>25</sup>

People, in other words, are capable of both literal and allegorical interpretation, and moreover the Bible lends itself to allegorical possibilities. Theologians, Browne suggests, have unsuccessfully attempted to corral scripture into purely literal meanings, yet a "mysticall" reading influenced by the "Hieroglyphicall Schooles of the Egyptians" remains equally probable.<sup>26</sup> As Browne points out many times in *Religio*, humans are unable to fathom the totality of divine purpose and design, the "invisible world" of figurative meaning included. Words are contrasted with hieroglyphs in this passage; words mean what they say,

---

<sup>25</sup> *Ibid.*, 1: 45.

<sup>26</sup> Other scholars have noted Browne's emphasis on multi-layered symbolic reading. Stanton J. Linden notes that Browne's epistemological approach values "multiple levels of meaning and truths that cannot be fully apprehended by means of a single-perspective approach." See "Smatterings of the Philosopher's Stone: Sir Thomas Browne and Alchemy," in *Mystical Metal of Gold: Essays on Alchemy and Renaissance Culture* (Brooklyn: AMS Press, 2007), 346. Kevin Killeen writes, "Exegetical error involves, typically for Browne, taking an idea which is in some fashion 'hieroglyphic,' symbolic or metaphorical and reading it without any figurative dimension." See Kevin Killeen, *Biblical Scholarship, Science and Politics in Early Modern England: Thomas Browne and the Thorny Place of Knowledge* (Burlington, VT: Ashgate, 2009), 11.

while hieroglyphs hint at meanings that are beyond words. The existence of the hieroglyphic level of meaning, Browne suggests, breeds controversy. Humanity is “that great and true *Amphibium*,” equally at home with the literal and allegorical, yet Browne’s language suggests not comfort with these “divers elements,” but anxiety: the emphasis is on the “divided and distinguished” interpretive modes, as Browne ruefully admits that hieroglyphic “obscurity” breeds controversy. Indeed, in the late 1630s when Browne was probably writing *Religio*, theological controversy must have seemed not merely a topic for scholastic debate, but a crucial issue in a landscape of increasing sectarian foment.

Just as biblical exegesis fails to yield clarity because hieroglyphic meanings contradict one another, so too does interpretation of the Book of Nature become difficult and obscure in *Cyrus*. Hieroglyphic knowledge, like the natural signs read so easily by the ancients in *Religio*, seems to promise clarity but instead delivers a generative confusion. Tracing the quincunx may seem like a faulty effort to “make all goe” in one direction — to force nature into a pattern or claim to find echoes of that pattern everywhere — but the Book of Nature, like the Book of Scripture, keeps overflowing the boundaries of its signs. As we will see in *Cyrus*, Browne notes many negative examples in which the quincunx fails to apply wholly or partly. Like Moses’ language clouds divine meaning while claiming to reveal it, the process of “reading” quincunxes both reveals and complicates the providentially-ordered natural world. Speaking about the benefits of harmonious music in *Religio*, Browne says “it is an Hieroglyphicall and shadowed lesson of the whole world” that leads to contemplation of divine order.<sup>27</sup> Hieroglyphic reading and knowledge complicate theological certainty in *Religio Medici* in the way that the quincuncial “hieroglyphicall and

---

<sup>27</sup> Ibid., 1: 84.

shadowed lesson” complicates scientific observation in *The Garden of Cyrus*.

In *Pseudodoxia Epidemica*, Browne similarly treats hieroglyphs as epistemologically problematic: capable of expressing profound truths, yet also at times confusing or misleading to readers because of their complexity. Turning his attention from hieroglyphic signatures in nature to signs invented by humans, he describes the origins, drawbacks, and benefits of Egyptian hieroglyphic communication. In the spirit of pointing out errors, Browne notes on more than one occasion that ancient hieroglyphs “obliquely confirmed many falsities.” That is, such errors result unintentionally, from “framing the story” in such a way that future generations and cultures misunderstand it, stretching from the Greeks to present day “symbolicall writers, Emblematistes, Heraldes and others.”<sup>28</sup> One way such errors might occur, Browne suggests, is that people interpret something literally that ought to be read symbolically.

Ancient Egyptians also propagated errors themselves, though. In “Of the Hieroglyphicall pictures of the Egyptians,” Browne particularly criticizes the Egyptians for hieroglyphically depicting hybrid animals that do not exist in nature and for giving hieroglyphs of some existing animals “significations not inferrible from their natures.”<sup>29</sup> Yet even in these errors, Browne suggests that the fault lies more with the foolish and untrained reader than with the hieroglyphic scribe. Hieroglyphs of hybrid animals like wyverns or basilisks, he writes, can be useful to “the prudent Spectator, but are lookt on by vulgar eyes as literall truths, or absurd impossibilities.” In other words, the people who receive the brunt of Browne’s critique of faulty hieroglyphic interpretation are those who cannot understand

---

<sup>28</sup> Sir Thomas Browne, *Pseudodoxia Epidemica*, ed. Robin Robbins (Oxford: Clarendon Press, 1981), 1:55-6.

<sup>29</sup> *Ibid.*, 1: 419.

symbolic resonances, like the exegetes who insist upon a purely literal interpretation of Genesis.

Despite these imperfections and potential for misinterpretation, hieroglyphs are nonetheless special by virtue of their content and form; Browne suggests that their nonverbal nature makes them uniquely suited to express secret knowledge. Like many of his contemporaries he associates Egyptian wisdom with mystical insight into the workings of nature, describing hieroglyphs as repositories of “the profound and mysterious knowledge of Ægypt; containing the Arcana’s of Greek Antiquities; the Key of many obscurities, and ancient learning extant.”<sup>30</sup> It is, in fact, the purely *written* but *nonverbal* quality of hieroglyphs that enables them to communicate these arcana. He claims that the Egyptians actually “spoke” to each other in hieroglyphs: “They invented a language of things, and spake unto each other by common notions in Nature, whereby they discoursed in silence, and were intuitively understood from the theory of their Expresses.”<sup>31</sup> Hieroglyphs, in this model, comprise a “language of things,” embodied signs that point toward “common notions” of great symbolic import. They seem to be an entirely intuitive discourse, but even here the exact mode of interpretation is paradoxical. It relies upon revelatory insight, yet also some grounding in “theory” to understand what Browne calls their “complexed significations.”<sup>32</sup> Here we can see exposed clearly the tension between intuitive and learned interpretation that runs throughout the hieroglyphic examples in this project.

Browne’s ethnography of Egyptian hieroglyphs in *Pseudodoxia* combines with his

---

<sup>30</sup> Ibid., 1:56.

<sup>31</sup> Ibid., 1:419.

<sup>32</sup> Ibid., 1:419.

ideas about natural hieroglyphs in *Religio* to deepen our understanding of how the quincunx functions and what its potential may be as a “complexed signification.” From *Religio* we learn that natural hieroglyphs enable contemporary humans to understand nature’s mysteries, that they require attentive observation to uncover, and that they gesture toward multiple layers of symbolic meaning. From *Pseudodoxia* we learn that hieroglyphic writing requires a similar attention to figurative significance and that such signs offer a complex nonverbal connection from the reader to the sign’s “mysterious” meaning. The quincunx falls somewhere in between natural and artificial hieroglyphs. Browne of course describes humans employing quincuncial structures in their creations; in the natural world it is at times clearly present, but at others seems more like an ordering concept imposed by human perception. These earlier writings on hieroglyphs enable us to understand the quincunx as fully participating in Browne’s complex and paradoxical understanding of the hieroglyphic tradition.

## II. QUINCUNCIAL OPTICS AND HIEROGLYPHIC “OBSERVATORS”

Browne’s description of humanity as a “great and true *Amphibium*” also applies to the quincunx, which slips between categories of natural and artificial. Unlike the hieroglyphic Book of Nature or the Egyptian written language, though, the quincunx occurs within the human body and mind itself. Browne’s hieroglyph then becomes not only a signature to find in the natural world but also a framework of perception that humans cannot help but apply. This intimate connection between perception and the quincunx can be seen in several interconnected locales: the eye’s anatomy, the external visual “rays,” the nerve structures in the brain, and the conceptual frameworks of intellect and memory. First, the optical model offered in *The Garden of Cyrus* describes the organs of sight and the

mechanics of vision themselves as quincuncial, because eye's structures cause the rays that comprise our vision to cross in a decussation.<sup>33</sup>

For all things are seen Quincuncially; For at the eye the Pyramidal rayes from the object, receive a decussation, and so strike a second base upon the Retina or hinder coat, the proper organ of Vision; wherein the pictures from objects are represented, answerable to the paper, or wall in the dark chamber; after the decussation of the rayes at the hole of the hornycoat, and their refraction upon the Christalline humour, answering the foramen of the window, and the convex or burning-glasses, which refract the rayes that enter it.<sup>34</sup>

Browne's description neatly sums up the early modern understanding of optics and reflects new advances from the first half of the seventeenth-century by scholars such as Kepler and Descartes (see Figure 8). In this theory, called the *intromission* model of optics, objects send out rays that are received and processed by the eye. Rays from the object pass through the "hornycoat" or cornea and are refracted by the lens or "Christalline humour," which then projects an image on the retina in the back of the eye. The image on the retina, as Browne notes, is like an image on a "wall in a dark chamber," i.e. like the image created by a camera obscura.<sup>35</sup> The quincuncial "decussation" occurs when the anatomical structures in the eye refract visual ways, causing them to form the quincuncial network of crossed lines (see Figure 3).

Visual rays outside the eye also create imperfect quincunxes. Browne writes:

---

<sup>33</sup> The unusual term "Decussation" is one of the words Browne uses most frequently to describe the quincunx. The *OED* defines it as: "Crossing (of lines, rays, fibres, etc.) so as to form a figure like the letter X; intersection."

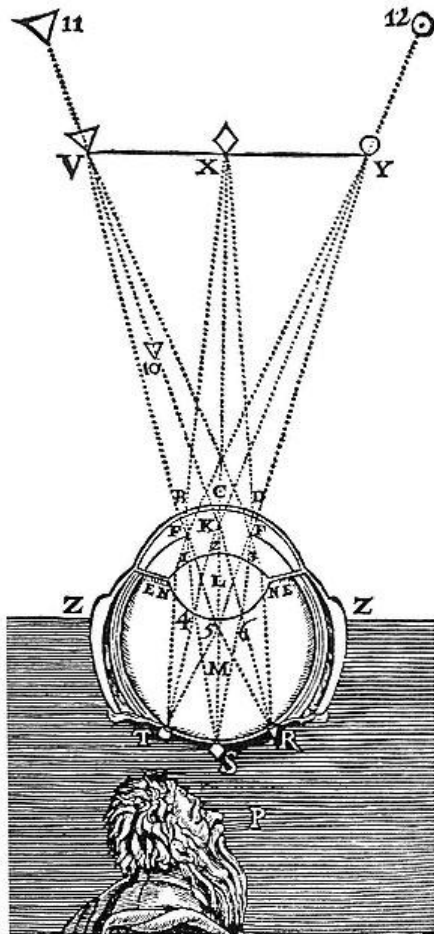
<sup>34</sup> Browne, *Works*, 1:219.

<sup>35</sup> For historical overviews of theories of vision, see A.C. Crombie, *Science, Optics, and Music in Medieval and Early Modern Thought* (London: The Hambledon Press, 1990) and David C. Lindberg, "The Science of Optics," in *Science in the Middle Ages* (Chicago: University of Chicago Press, 1978), 338-68. For a basic introduction to optical theory from classical antiquity onward, see Lael Wertebaker, *The Eye: Window to the World* (Washington, D.C.: U.S. News Books, 1981).



And this not only observable in the Laws of direct Vision, but in some part also verified in the reflected rayes of sight. For making the angle of incidence equal to that of reflexion, the visual raye returneth Quincuncially, and after the form of a V, and the line of reflection being continued unto the place of vision, there ariseth a semi-decussation, which makes the object seen in a perpendicular unto it self, and as farre below the reflectent, as it is from it above; observable in the Sun and Moon beheld in water.<sup>36</sup>

Here Browne calls upon two optical concepts: the Law of Reflection and the properties of



**Figure 8: Illustration from René Descartes, *La Dioptrique* (1637). See *Oeuvres Complètes*, ed. Jean-Marie Beyssade et Denis Kambouchner (Gallimard, 2009), 3:174.**

images in a plane-mirror. The Law of Reflection, which was first posited by Euclid, describes the relationship between the ray of light coming from an object to a reflective surface (called the incident ray) and the ray of light that bounces off that surface to create the reflected image (called the reflected ray). Physics describes these rays as creating a V-shape, identified by Browne as quincuncial, since two connected V's form the X-shape of the quincuncial decussation. The other concept Browne explains here are the unique features of specular reflection: the fact that images in a mirror match the reflected objects' size as we see them, or to put it another way, they appear to be the same distance behind the mirror as they are in front of them; and the fact that images in a mirror appear to be left-right reversed, "perpendicular unto it self."<sup>37</sup> These qualities

<sup>36</sup> Browne, *Works*, 1:219.

<sup>37</sup> For a basic summary of the optical physics behind these ideas, see *Geometric Optics: Reflection*. Films Media

of specular reflection again demonstrate a crossing of visual rays. Browne's lesson in the physics of mirrors is particularly interesting because the quincunx is not a perfect fit for the natural phenomenon he describes; he takes pains to note that the shape, a "semi-decussation," can be seen only "in some part." Phenomena that might only seem partially quincuncial are mentioned because they evince the significant correspondence between shapes external to the human body and those within. The likeness between these two modes of reflection — reflection in a plane like a pool of water and reflection within the physical structures of the eye — again demonstrates the providential unity and orderliness of the natural world. Browne deploys his sophisticated, contemporary understanding of optics and vision in a way that actually affirms (although in a qualified way) the ancient notion of microcosmic/macrocosmic correspondences.

The quincunx significantly pervades not only optics but also cognition. Not only are the rays that we receive from the outside world in the form of a quincuncial decussation, according to Browne, but also what happens inside our heads with those rays is a similar crossing "within the optick or visual nerves in the brain."<sup>38</sup> Even the way that our brains process sensory perception, the "intellectual reception" of thought and memory, is quincuncial, as Browne describes "things entring upon the intellect" and "thence into the memory" crossing in another example of the "decussation."<sup>39</sup> Everything that we see is visually mediated by the quincuncial network and then mentally processed through another series of decussations both in cerebral structures and in the figurative architecture of memory

---

Group, 2006. *Films On Demand*. H.264, <http://digital.films.com/PortalPlaylists.aspx?aid=4059&xtid=36390>. (accessed December, 18 2012); Paul Zitzewitz, *Physics: Principles and Problems* (McGraw-Hill, 2004), Chapter 17; Lionel Laurence, *General and Practical Optics* (London: School of Optics, 1920), Chapter 3.

<sup>38</sup> Browne, *Works*, 1:219.

<sup>39</sup> *Ibid.*, 1:219.

and cognition.

By connecting his hieroglyph explicitly to the mechanisms of perception and understanding, Browne implicitly suggests that the quincunx is central to *reading* and *interpretation*. Reading material enters through the eyes and thus goes through the same quincuncial physical and cognitive transformation as any visual input. Moreover, this quincuncial optical model demonstrates the hybrid intellectual models of Browne's natural philosophy, complicating a clear delineation of the "Scientific Revolution." These two ideas — the quincunx as a lens for reading and as a sign poised between old and new philosophies — intersect in the ultimately didactic purpose of *Cyrus*. Browne teaches readers to recognize quincunxes within and outside themselves, and in doing so, naturalizes his own particular scientific approach. Perceiving the world as Browne does, from within his own hermeneutic framework, suggests that it is quite literally *natural* to adopt the author's own scientific (as well as religious and political) stances.

A reader might be tempted to object to all these quincunxes and suggest that we only find such hieroglyphs because we expect to do so. What if the seeming ubiquity of quincunxes is in fact a distortion caused by subjective human perception? Browne even hints at this objection, noting, "it is no wonder that this Quincunciall order was first and still affected as gratefull unto the Eye" since perception works via quincuncial systems.<sup>40</sup> In order to analyze how Browne would address this objection, let us consider quincuncial optics as a response to the critique of perception offered by Bacon in his concept of epistemological idols and the "enchanted glass." By considering Bacon's critique of perceptual bias, we can see Browne's philosophy of science more clearly as occupying a liminal space in which he

---

<sup>40</sup> Ibid., 1:218-9.

values close and accurate observation, but rejects the idea that humans should seek to erase themselves from the observational work they do.

Bacon's analysis of fallacies of perception in *Novum Organum* (1620) and *The Advancement of Learning* (1605) rely heavily on optical imagery, making it easy to read Browne's model of quincuncial optics as a refutation. In *Novum Organum*, Bacon describes the Idol of the Tribe as inaccurate perception tainted with subjective distortions:

All perceptions of sense and mind are built to the scale of man and not the universe. And the human intellect is to the rays of things like an uneven mirror which mingles its own nature with the nature of things, and distorts and stains it.<sup>41</sup>

In other words, ideas about human nature color humanity's understanding of the natural world; humans think about nature in a way that centers on themselves. Bacon's "irregular" rays become warped by innately human perceptual frameworks, and one imagines that, if Bacon were talking to Browne, the former would say that the quincuncial structures of perception are in fact biological inhibitors of our ability to perceive accurately objective truths about nature.

In the similar Idol of the Cave, Bacon narrows from humanity as a whole to the individual's own prejudices:

For everyone (besides the errors common to human nature in general) has a cave or den of his own, which refracts and discolors the light of nature, owing either to his own proper and peculiar nature; or to his education and conversation with others; or to the reading of books, and the authority of those whom he esteems and admires; or to the differences of impressions, accordingly as they take place in a mind preoccupied and predisposed or in a mind indifferent and settled.<sup>42</sup>

Perception, according to Bacon, is narcissistic and idiosyncratic, distorted by the individual mind's preferences and predispositions. Again he uses imagery from the field of optics to

---

<sup>41</sup> Francis Bacon, *The Instauration Magna Part II: Novum Organum and Associated Texts*, ed. Graham Rees and Maria Wakely (Oxford: Clarendon Press, 2004), aphorism 41, 81.

<sup>42</sup> *Ibid.*, aphorism 42, 81.

describe this fallacy. Instead of a “false mirror,” visual rays are distorted by refracting upon the wall of each individual’s “cave or den,” invoking both the famous Platonic allegory of the cave and an image of the cavities within the human body, like the interior of the eye sockets, as a cave-like space. In his earlier *Advancement of Learning*, Bacon describes the processes of perception and understanding with figurative language of rays and mirrors: “For the mind of man is far from the nature of a clear and equal glass, wherein the beams of things should reflect according to their true incidence; nay, it is rather like an enchanted glass, full of superstition and imposture, if it be not delivered and reduced.”<sup>43</sup> The human mind is an “enchanted glass”: even more pernicious than a “false mirror,” here the mind’s understanding may bear no resemblance to sensory perception but instead reflect the interior of the self, the individual’s beliefs and expectations. The way to “reduce” or overcome these tendencies is to recognize them and strive for “the formation of ideas and axioms by true induction”: that is, not to apply one’s own presuppositions to nature, but rather to build axioms from particular observations.<sup>44</sup>

Bacon’s plan for epistemological reformation relies upon acknowledging and mitigating errors in perception that lead to a fallacious understanding of the natural world, and the way he visualizes these problems relies upon optical imagery. Bacon likens understanding to both a mirror and a lens. In either case, sensory perception consists of “receiving rays” from the natural world. In the mirror analogy, the human self does not accurately reflect such rays, but instead “distorts and discolors” them. The “enchanted” mirror, rather than depicting what’s actually in front of it, reflects something else. In the lens

---

<sup>43</sup> Bacon, *Francis Bacon: The Major Works*, 227.

<sup>44</sup> Bacon, *Novum Organum*, aphorism 40, 79.

analogy, the rays pass through our system of understanding and comprehending the natural world, and are refracted in the process of comprehension.

For Bacon, the “enchanted glass” is a metaphor for how the mind processes sensory perception and understands the world, but Browne’s quincuncial optics is more than a metaphor. As a hieroglyph, the quincunx is both a physical representation and an interpretive framework; as Browne suggests in *Religio*, hieroglyphs operate on multiple semantic levels and can be *simultaneously* literal and figurative. Bacon argues that we should acknowledge and set aside our human biases, but in coopting and literalizing Bacon’s optical language, Browne suggests that such biases are inevitable and, to some extent at least, should be embraced. Bacon’s rhetoric of the “enchanted glass” blends together the physical process of sensory perception and the abstract, mental process of assimilating and comprehending such sensory input. Browne distinguishes carefully among these anatomical and mental processes, arguing that a theory of perception that acknowledges the quincuncial lens, far from distorting our vision, allows us to see and understand deep structures of the natural world as they truly are.

Bacon thinks that if only we could divest ourselves of our human biases, we would be able to perceive the world as it actually is, “according to [its] true incidence.” For Browne, it is not necessary or desirable to efface the human element in scientific observation, and incidences of the quincunx do not, as Bacon might say, suggest confirmation bias in our observation. The human body and mind *contain* the same true pattern that Browne identifies in the natural world, reinforcing the integration of human observer and surrounding world. When he writes, “It is no wonder that this Quincunciall order was first and still affected as gratefull unto the Eye,” Browne actually refutes rather than confirming Bacon’s critique of

subjectivity. According to Browne, because the mechanics of vision are in themselves quincuncial, the shape of the quincunx will naturally appeal to humans, who find aesthetically pleasing those shapes and processes that mirror the shapes and processes within their own bodies. We are pleased to find these markers of providential order in the natural world because they remind us of the same patterns within ourselves, but finding them does not mean we are lying to ourselves, because Browne is utterly convinced that these patterns are *true*.

Browne's optics offers a complex model of processing visual input that embraces both careful empirical observation and attunement to mystical structures and correspondences. Rather than striving to efface human subjectivity, as Bacon does, Browne suggests that acknowledging the hieroglyphic lens through which we perceive the world will result in a fuller, more accurate understanding of natural and human orders. In describing quincuncial anatomy and cognition, Browne suggests that human can indeed understand a great deal about the world. *The Garden of Cyrus*, I suggest, ultimately teaches readers to see and interpret as Browne does.

Although *Cyrus* seems optimistic about the potential for human understanding, in his earlier writing in *Religio* he expresses doubt about what humans can know about themselves and the world and what remains fundamentally unknowable. In one of his many expressions of tolerance and nonjudgmental philosophy, Browne writes: "No man can justly censure or condemne another, because indeed no man truly knows another ... Further, no man can judge another, because no man knowes himselfe."<sup>45</sup> Truly understanding another person's interiority, in other words, is impossible, calling into question the limits of knowledge in

---

<sup>45</sup> Browne, *Works*, 1:76-7.

general: if even one's own real character is a mystery, how can we claim to understand the natural world?

This extreme claim about the impossibility of true knowledge seems less to represent Browne's fixed philosophy, though, and more to be one of a series of philosophical observations that sometimes contradict another. Elsewhere, Browne champions the usefulness and humane benefits of scholarship, suggesting that the accumulation of a "treasure of knowledge" enriches all of society.<sup>46</sup> Moreover, shortly before suggesting that people's inner lives are unknowable, he claims that the outward appearances of living things give providentially-designed clues about their true nature:

There are mystically in our faces certaine characters which carry in them the motto of our Soules, wherein he that cannot read A.B.C. may read our natures. I hold moreover that there is a Phytognomy, or Physiognomy, not only of men, but of Plants, and Vegetables; and in every one of them, some outward figures which hang as signes or bushes of their inward formes. The finger of God hath set an inscription upon all his workes, not graphicall or composed of Letters, but of their severall formes, constitutions, parts, and operations, which aptly joyned together make one word that doth expresse their natures.<sup>47</sup>

This "inscription" of the "finger of God," visible in natural shapes and structures, certainly seems like a precursor of Browne's ideas about the quincunx. These mystical "characters" indicating a correspondence between outward appearance and inner qualities evoke the wordless hieroglyphic communication in *Pseudodoxia* as well as the omnipresent providential network in *Cyrus*. The words Browne uses here — character, motto, figure, sign, inscription — all dance around around the notion of hieroglyphs. Browne's supreme hieroglyph, though, is not simply an image, like the representations of animals in Egyptian hieroglyphs. Rather, like the mysterious "signs" he describes here, the quincunx is primarily

---

<sup>46</sup> Ibid., 1:74.

<sup>47</sup> Ibid., 1:72.



“not graphicall or composed of letters” but rather a structural or schematic representation of deep underlying order. Although it can (and is) illustrated in *Cyrus*, it is a hieroglyph as organizing principle rather than single image.

By the time Browne writes *Cyrus*, then, he seems more optimistic about the possibility of gaining insight through observation. In part, *Cyrus* is simply a different kind of text with different goals: while *Religio* is a personal, inward-focused expression of belief, *Cyrus* is an extended scientific-philosophical essay designed to teach its audience how to read the natural world. *Cyrus* assumes, on a basic level, that a “studious observator” can understand things.<sup>48</sup> It follows, then, that such observators practice not only perception and understanding, but judgment. They learn to see the world like Browne does, a model of perception that, unlike Bacon’s, does not strive for complete objectivity but instead recognizes that subjectivity is both inevitable and essential. Quincuncial perception and understanding — or, to put it slightly differently, quincuncial reading practices, are nonetheless not relativistic. Browne’s most important subtext in *Cyrus*, I suggest, is that quincuncially-mediated understanding yields accurate or true insight into natural and naturalized order.

But what lessons about observing, reading, and interpreting does Browne teach in *Cyrus*? Readers understand that the hieroglyph they seek is like a master trope for interpreting the natural world and organizing knowledge; thus, quincuncial reading requires both close observation to find hidden patterns and creativity to “connect the dots.” Let us first consider one unusual Brownian noun, “observator.” This word, unlike the more conventional “reader” or “observer,” marks quincuncial reading as, crucially, a different kind of

---

<sup>48</sup> Ibid., 1:206.

observational and interpretive practice. In being an observator, the well-informed reader actively and thoughtfully scours the world-as-text for examples that affirm quincuncial structures, while still acknowledging a complex plenitude that may not always seem to fit into that framework.

Let us first consider the observator's role in discovering providential order. After identifying quincuncial shapes in the movement patterns of animals, Browne writes: "Studious Observators may discover more analogies in the orderly book of nature, and cannot escape the Elegancy of her hand in other correspondencies."<sup>49</sup> He then goes on to point out non-quincuncial symbolic forms, such as botanical structures that evoke the nails from the Crucifixion. Close observation, here, enables the perceiver to find "correspondencies" between natural things and theological concepts. To find and appreciate these divine signatures, the observator must be "studious," a message that echoes Browne's later claim in *Christian Morals*: "To thoughtful observators, the whole world is a phylactery, and every thing we see an item of the wisdom, power, or goodness of God."<sup>50</sup> Browne suggests that the surrounding world continually reminds observators of their faith; every object is a reliquary containing divine secrets that could be unlocked by thoughtful observation.<sup>51</sup> Even while observators learn more about detailed physical structures, these structures hieroglyphically evoke spiritual truths.

Quincuncial reading, though, is not only a meditative process and does not only involve imposing the quincunx upon the world. Again in *Christian Morals*, Browne

---

<sup>49</sup> Ibid., 1:206.

<sup>50</sup> Ibid., 1:277.

<sup>51</sup> Relevant definitions of "phylactery" are both "a reminder; a religious observance or profession of faith" and "a container for a holy relic." See "phylactery, n." OED Online. December 2012. Oxford University Press. <http://www.oed.com/view/Entry/143041?redirectedFrom=phylactery> (accessed December 19, 2012).

admonishes the reader to “Let thy Studies be free as thy Thoughts and Contemplations, but fly not only upon the wings of Imagination; Joyn Sense unto Reason, and Experiment unto Speculation, and so give life unto Embryon Truths, and Verities yet in their Chaos.”<sup>52</sup>

Empirical observation — the intelligent application of “sense” and “experiment” — is key to Browne’s model of observation. In *Cyrus*, Browne repeatedly demonstrates such observation that is spiritually-attuned and yet grounded in sensory detail. For instance, describing the germination of seeds, Browne notes: “He that from hence can discover in what position the first two leaves did arise, is no ordinary observer.”<sup>53</sup> Like Dee’s focus on heroic or extraordinary readers, Browne here encourages his readers to think of *themselves* as more-than-ordinary in their observational capacity, a rhetorical move that both creates an intangible community of “studious observers” and challenges individuals to be ever more detail-oriented in their natural investigations.

The author himself, of course, is the implicit model for this quincuncial reader.. He moves seamlessly among historical and civic examples like the organization of ancient cities, to plainly-seen quincunxes like those in constellations, to quincunxes exposed only by close empirical study. Integration of the latter is Browne’s primary new intellectual contribution, and the mode of observation that he demonstrates with the most enthusiasm. Take, for example, his observation of “order in the Egges of some butterflies and moths, as they stick upon leaves; which being dropped from behinde, not directed by the eye, do neatly declare how nature Geometrized, and observeth order in all things.”<sup>54</sup> These rhomboidal formations

---

<sup>52</sup> Browne, *Works*, 1:261-2.

<sup>53</sup> *Ibid.*, 1:196.

<sup>54</sup> *Ibid.*, 1:203.

of butterfly eggs could only be seen with careful attention to leaves, and the reader imagines Browne walking through fields and forest, taking note of every detail from anthill to acorn. Browne takes pains to note that these patterns are unintentional on the part of the butterflies, “not directed by the eye,” and thus demonstrate even more clearly the working of divine order in the natural world.

This union of empirical observation and wonder often results in poetic descriptions of quotidian things, like his description of a common thistle with a maggot living in it:

The *Arbustetum* or Thicket on the head of the Teazell, may be observed in this order. And he that considereth that fabrick so regularly palisadoed, and stemm'd with flowers of the royall colour; in the house of the solitary maggot, may finde the Seraglio of *Solomon*.<sup>55</sup>

Browne finds sensual beauty and exoticism, evoked by the image of the “Seraglio of *Solomon*” as well as majesty (the “royall” purple of the thistle’s flower) in a humble local plant. Moreover, this glorification of the thistle invites the “studious observator” of Browne’s text to consider the layered symbolic meanings that, as we saw earlier, are so crucial to his understanding of natural and human hieroglyphs. This encomium to the thistle, long understood as a symbol of Scotland, also obliquely implies nostalgia for Stuart reign. The particular language here emphasizes the ordered and hierarchical beauty of this emblematic plant. In the “regularly palisadoed” structure as well as the royal hue, the quincuncial hieroglyph of the thistle suggests that nature, even on the tiny scale of a wildflower, symbolically mirrors and providentially reinforces human power structures. This kind of quincuncial reading models a synthesis between empirical observation and spiritual insight, the fruits of which are not only detailed knowledge of the natural world but also an understanding of divinely-instantiated order at all levels.

---

<sup>55</sup> Ibid., 1:194.

This generative balance between a “scientific” worldview based on empirical observation and one that finds symbolically-significant correspondences is not completely stable, though. This instability manifests in two problematic locales: places where finding the quincunx depends upon its flexibility, and those where it simply cannot be found at all. Browne’s examples suggest that when reading the quincunx, one can choose which aspect of the figure to focus on. Although the five dots, the lines connecting them, and the spaces between them are all part of the quincunx, observers may choose to focus on any one of those, enabling them to find more quincunxes in the natural, artificial, and mystical worlds than would otherwise be apparent.<sup>56</sup> If the dots are present but the lines invisible, for example, then “the Quincunciall Specks on the top of the Miscle-berry” are as valid an example as the “Spongy leaves of some Sea-wrack” that are “over-wrought with Net-work elegantly containing this order.”<sup>57</sup> In the berry, the dots comprise the quincunx, but in the seaweed, the reticulate pattern on the leaves is the key figure. Any one or more of these component elements can mark an object or creature as quincuncial.

Bacon would doubtless see the quincunx’s seeming plasticity as an indication that such instances are actually false reflections in the observator’s mental mirror, but for Browne, this flexibility reinforces the shape’s truth. In one of the places where Browne mentions Egyptian hieroglyphs in *Cyrus*, he actually notes a quincunx *in* a hieroglyph: “Nor is it to be overlooked how *Orus*, the Hieroglyphick of the world, is described in a Network

---

<sup>56</sup> The quincunx can even appear in shapes that seem to bear little relation to rhombuses or nets, like the “æquicrural triangles” that gemcutters use for faceted jewels (1:188) or arrangements of hexagonal honeycombs (1:202).

<sup>57</sup> *Ibid.*, 1:193.

covering, from the shoulder to the foot” (see Figure 9).<sup>58</sup> Significantly, the “Hieroglyphick of the world” is swathed in a quincuncial robe. Despite its orderly geometric appearance in illustration in *Cyrus*, the quincunx is not a rigid hieroglyph. Rather, it is capable of being interpreted different ways and seen in varying forms, some of which are themselves flexible like Horus’ net-patterned garment. Quincunxes pervade and encompass all of creation, including humanity, but in contrast to the malevolent net that I began this chapter with, this adaptable hieroglyphic pattern continually renews humanity’s sense of both comfort and wonder at the divinely-structured cosmos.

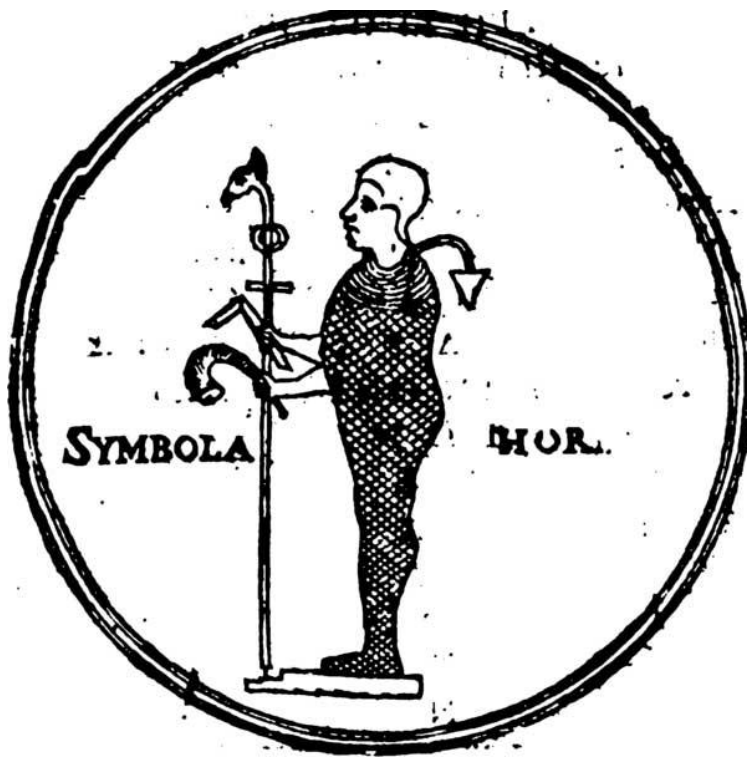


Figure 9: Illustration from Athanasius Kircher, *Oedipus Aegyptiacus* (1652), [http://books.google.com/books?id=jHCt\\_wrnMqcC&pg=PP9#v=onepage&q&f=false](http://books.google.com/books?id=jHCt_wrnMqcC&pg=PP9#v=onepage&q&f=false).

Sometimes, though, quincunxes just cannot be found where the observator expects them. One of the main overall impressions with which *Cyrus* leaves any reader is an almost

---

<sup>58</sup> Ibid., 1:204.

bewildering sense of the capacious and messy plenitude of the natural world. Browne's vision moves from the stars to the stomachs of birds, zooming out and in, pausing to focus on curiosity-inspiring details. He chooses not to neaten up this hoarder's living room of natural philosophy, but rather to catalogue the unsuccessful observations with the successful ones. For instance, he describes surprise at not finding quincunxes in the internal organs of fish and frogs:

As for those Rhomboidal Figures made by the Cartilagineous parts of the Wezon, in the Lungs of great Fishes, and other animals, as *Rondeletius* discovered, we have not found them so to answer our figure as to be drawn into illustration; Something we expected in the more discernible texture of the lungs of frogs, which notwithstanding being but two curious bladders not weighing above a grain, we found interwoven with veins not observing any just order.<sup>59</sup>

Browne has taken the advice he later gives to his audience in *Christian Morals*, to deploy “sense” and “experiment” in his search for natural hieroglyphs. Here he looks inside fish lungs and finds them not as “rhomboidal” as sixteenth-century French naturalist *Rondeletius* has led him to expect. In a similar disappointment, he examines the lungs of frogs and finds them irregularly-veined rather than quincuncially. This willingness to acknowledge the non-quincuncial epitomizes Browne's careful balance between empiricism and what might be characterized as an “older” model of a world infused with spiritual significance. I suggest that these anomalous examples bolster rather than undercut Browne's credibility and the wide-ranging significance of the quincunx. The hieroglyphic net must have things to enfold, and examples like the lungs of aquatic creatures or the “semi-decussation” of reflected images become simply part of the world's variety and richness that is undergirded with deep quincuncial structures.

Thomas C. Singer argues that because “man both thinks and sees quincuncially ...

---

<sup>59</sup> *Ibid.*, 1:205-6.

empirical observation” is ultimately unnecessary for Browne since one can always expect to find the quincunx. Because meaning is predetermined, “everywhere the same fundamental figure,” Singer suggests that the endlessly recursive catalogue of quincunxes masquerades as a scientific text, yet is best understood mystically, “as a conversation between Browne and God with nature serving as their common language.”<sup>60</sup> While it is true that *Cyrus* teaches the reader to find signatures of providential order, I argue that the text values both empirical observation and spiritual sight. Browne illuminates nature’s mysteries with incisive observation and analysis, yet those mysteries are not diminished by the scrutiny; Browne praises “sense and ocular observation, which seems to me the surest path, to trace the Labyrinth of Truth.”<sup>61</sup> The quincuncial structures of sight and understanding, rather than predisposing humans to falsely identify quincunxes, serve to remind readers of the structures that will inevitably be there for “studious observers” who deploy the right balance of reasoned observation and pious wonder. Moreover, the nuanced understanding that such observers acquire leads them to an appreciation for providential order in both natural and civic spheres.

### III. HOW TO READ AND USE THE QUINCUNX

In adumbrating the qualities of the “studious observer,” Browne trains readers to perceive and interpret as he does, following the model he offers in *Cyrus*. This didactic purpose occasionally becomes explicit in Browne’s demonstrations of quincuncial reading in places where he self-consciously draws readers’ attention to the fact that they are learning to interpret. In one example, Browne points out five special leaves on a rose, describing them in

---

<sup>60</sup> Singer, “Emphaticall Decussation,” 100-1.

<sup>61</sup> Browne, *Works*, 1:226.



language that exposes the double purpose of cataloguing quincunxes and teaching readers to do so:

But nothing is more admired than the five Brethren of the Rose, and the strange disposeure of the Appendices or Beards, in the calicular leaves thereof, which in despair of resolution is tolerably salved from this contrivance, best ordered and suited for the free closure of them before explication. For those two which are smooth, and of no beard, are contrived to lye undermost, as without prominent parts, and fit to be smoothly covered; the other two which are beset with Beards in either side, stand outward and uncovered, but the fifth or half-bearded leaf is covered on the bare side but on the open side stands free, and bearded like the other.<sup>62</sup>

This passage refers to the arrangement of the sepals of a rose, or the five leaves that enclose the flower when it is a bud. Alluding to an ancient botanical riddle of the “Brethren of the Rose,” Browne describes the way the sepals overlap each other and are distributed around the flower.<sup>63</sup> He represents his own explanation of this botanical riddle as a process of discovery: faced with a conundrum, he attacks it with close observation and logic to offer a solution. At first, he simply wonders at the rose’s beautiful formal arrangement (“nothing is more admired”), but then that wonder turns to frustration as he, “in despair of resolution,” cannot adequately explain the purpose of the five leaves.

It is not enough simply to note the presence of quincuncial structures, Browne implies; observers also must understand how such structures function and relate to the larger world. The rhetorical “turn” from problem to solution occurs when Browne proposes that the puzzle “is tolerably salved from this contrivance,” or in other words, adequately

---

<sup>62</sup> *Ibid.*, 1:200-1.

<sup>63</sup> Here is one version of the riddle:  
On a summer's day, in sultry weather,  
Five brethren were born together.  
Two had beards and two had none,  
And the other had but half a one.

Botanist W.T. Stearn describes it as an oral tradition among gardeners dating back to the Middle Ages. See W.T. Stearns, “The Five Brethren of the Rose: An Old Botanical Riddle,” *Huntia* 2 (1965): 180-4.

explained by this natural arrangement. The collection of leaves, he suggests, is “best ordered and suited for the free closure of them before explication,” that is, organized so that the flower can open and close freely. The word “explication,” though, also suggests interpretation and explaining, unfolding the meaning of the gardening riddle. The “answer” he models combines thoughtful analysis with close observation of the shape and positioning of the five sepals. Moreover, in relating the rose quincunx to an oral tradition among communities of botanists or gardening enthusiasts, Browne both addresses those in his audience who might be familiar with the riddle and implies that knowing observers constitute their own community of quincuncial puzzle-solvers. The hermeneutic framework that is laid bare in the rose example both models how observers might work through the discovery process on their own *and* implicitly binds those observers into a community with shared interpretive values.

Browne foreground this concern with community-formation in the introductory letter to Nicholas Bacon, which distinguishes between worthy and unworthy readers. He notes that he will only include a diagram of the quincunx itself, because some readers might be intimidated by a profusion of botanical illustration: “We have not affrighted the common Reader with any other Diagramms that of it self; and have industriously declined illustrations from rare and unknown plants.”<sup>64</sup> On the one hand, he seems to want this book to be accessible to the “common Reader” — a category that might include not only people who are daunted by scientific illustration but also people who might not be able to afford a more lavishly illustrated, and thus more expensive, book.

On the other hand, the dedicatory letter disparages such common readers and claims

---

<sup>64</sup> Browne, *Works*, 1:176.

that they lack sufficient insight to appreciate his book:

To wish all Readers of your abilities, were unreasonably to multiply the number of scholars beyond the temper of these times. But unto this ill-judging age, we charitably desire a portion of your equity, judgement, candour, and ingenuity; wherein you are so rich, as not to lose by diffusion.<sup>65</sup>

Exemplary readers, and thus exemplary observers, are distinguished by their “equity, judgement, candour, and ingenuity”; this unusual list suggests that the most insightful readers will bring their own learned analysis to a text, judging it fairly but honestly, but it also suggests that interpretive practice requires creativity. Like the observer who should go out into nature and apply both sense and intuition to understand natural phenomena, the reader must deploy both reasoned and imaginative analysis to benefit most from *Cyrus*. Browne’s work, again, becomes like the ancient hieroglyphic texts that he discusses in *Pseudodoxia*, requiring a reader attuned to multiple layers of meaning.

Unlike Dee, who believes (or at least claims) that his book is actually *dangerous* for unworthy readers to consume, Browne suggests not that *Cyrus* might be harmful for such readers but that they simply will not understand it. Of course, the natural tendency of people in reading the dedicatory letter is to number themselves among those, like Bacon, possessed of these virtues, so the ultimate effect of Browne’s rhetoric is to create the illusion of a community of elite readers while disclaiming that such a group might in fact exist. Browne’s praise ostensibly elevates Bacon above the average readership with characteristic dedicatory flattery, but its larger effect beyond its “audience of one” is to imply that readers-at-large could see themselves as containing Bacon’s admirable qualities. From the beginning, then, readers are primed to see themselves as having the potential to become “studious observers.”

---

<sup>65</sup> Ibid., 1:177.

In the first printing of the combined text of *Urn Buriall* and *The Garden of Cyrus*, Browne reiterates this concern with defining and addressing his readership by concluding with a letter from “The Stationer to the Reader” claiming that *Natures Cabinet Unlocked*, another book recently published under Browne’s name was actually *not* written by Browne.<sup>66</sup> In requesting that his publisher include this note about the authorship of *Natures Cabinet Unlocked*, Browne indicates clear interest in preserving his scholarly reputation among his readership. Moreover, the letter justifies setting the authorial record straight by claiming that “to distinguish of true and spurious Peeeces was the Originall Criticisme,” suggesting again that exercising judgment — as Browne writes to Bacon in the introduction — is an essential part of thoughtful reading. From beginning to end, Browne’s rhetorical choices encourage readers to think of themselves as specially gifted, a move that also emphasizes quincuncial reading as an important and uniquely insightful activity.

But, someone might object, where does quincuncial reading lead? Earlier I suggested that this hieroglyphic reading practice could be conceived of as having a use-value not unlike the medical self-help treatises Jennifer Richards discusses. I have already argued that quincuncial reading changes its practitioners internally by encouraging them to adopt Browne’s own interpretive framework and thus to see the world as Browne does — seeing, for example, emblems of a lost monarchical order in a humble thistle. But does quincuncial reading have external as well as personal applications?

Browne does describe the quincunx as not merely *present* in the natural and human-created worlds, but actually *efficacious*. Chapter II catalogues instances of “artificial”

---

<sup>66</sup> Anthony á Wood’s 1691 biography of Browne calls the falsely-attributed book “a dull worthles thing” and notes that it is both too “arrogant” for Browne’s “true humilitie” and too ignorant for Browne’s “great learning.” See Anthony á Wood, *Athenae Oxoniensis* (London: Thomas Bennet, 1691), 536.

quincunxes such as ancient military formations and orchard arrangements, among others, moving seamlessly among classical and contemporary, foreign and domestic examples.

Perhaps the most striking in its potential use-value is a snippet of popular magical lore that

Browne shares:

The Rural charm against *Dodder*, *Tetter*, and strangling weeds, was contrived after this order, while they placed a chalked Tile at the four corners, and one in the middle of their fields, which though ridiculous in the intention, was rationally in the contrivance, and a good way to diffuse the magick through all parts of the *Area*.<sup>67</sup>

Although Browne calls this quincuncial magic “ridiculous in the intention,” this condemnation is not because he is skeptical of this practice’s efficacy or views it as a baseless superstition; on the contrary, he claims that this use of quincuncially-arranged tiles is “a good way to diffuse the magick through all parts of the *Area*.” His criticism, rather, seems instead to hinge upon the designation of this “rural charm,” which perhaps is “ridiculous” *because* it is “rural” and thus representative of a kind of non-learned, folkloric tradition from which Browne wishes to distinguish himself. The idea of using the quincunx to manipulate natural forces, though is “rationally”; the quincunx can not only be found in nature but also imposed upon nature.

Browne’s universe can be plumbed by empirical observation and experiment, but it is also a space of invisible influences, in which the quincunx can participate. Describing the occult forces that trees can exert upon one another, he paints a vivid picture of a created world that is permeable and fluid; Browne claims that in a certain arrangement, trees “had the advantage of a fair perflation from windes, brushing and cleansing their surfaces, relaxing and closing their pores unto due perspiration.” These porous plants are continually both releasing and taking in “effluviiums,” or invisible yet material substances that can affect their

---

<sup>67</sup> Browne, *Works*, 1:188.

growth and health.<sup>68</sup> The quincuncial network both permeates and manipulates this animate ecosystem.

Like other hieroglyphic works this project has considered, *Cyrus* does aim to transform its reader. Just as Dee's *Monas* fashions an "adept" and the Jacobean court masque fashions an ideal political subject, so too does Browne's text fashion an insightful "observer" attuned to the ubiquitous presence of quincunxes. *The Garden of Cyrus* deploys its hieroglyphs in a slightly different way from these other examples, though. In Dee's *Monas*, the monad occurs only within the printed book, and transformation occurs through the process of active reading; in the Winthrop letters, the *Mysterium* diagram embodies the friends' shared hope for transformation; and in *Mercury Vindicated*, the unique occasion of hieroglyphic enactment was thought to catalyze transformation in the masquers and their audience. In all three, the hieroglyph occurs in a single instance, and, to return to Dee's key term, individuals actuate it through experience — contemplative reading, writing, or physical enactment.

In Browne's *Cyrus*, the hieroglyph is not confined to the text, but diffused throughout the world; the quincuncial structure suffuses the book, the natural world, human culture, and the human body and mind. *Cyrus* is about quincunxes, is itself a quincunx with its five-chapter organization, and teaches us to read quincunxes. As a whole text, it functions much like the example of the "Brethren of the Rose": identifying and interpreting quincunxes while addressing and creating a community of knowing readers. In doing so, I have suggested, Browne's worldview integrates natural and civic structures within his divinely-instantiated hieroglyphic network, expressing both nostalgia for lost monarchical order and conviction

---

<sup>68</sup> Ibid., 1:210.

that such political structures, like the quincunx itself, are deeply embedded in creation itself. This cosmological model is neither specific nor prescriptive politically — contemporary political topics are never explicitly mentioned in *Cyrus* — but it nonetheless encourages a mode of political thought that looks forward to the Restoration.<sup>69</sup>

Having been trained by Browne to see quincunxes, readers might then tend to look at more overtly political hieroglyphs with a quincuncial eye. Consider, for example, the richly emblematic arena of flags, those hieroglyphs of patriotic and political identity. In an account from 1660, the lieutenant-governor of Jamaica recalls the arrival of news that the monarchy had been restored: “His Majesty’s ship ... arrived from England, with the union jack flying, which gave all people great hopes his majesty was restored to his throne, and was confirmed when the ship came into the harbour.”<sup>70</sup> What could be more quincuncial than the iconic union jack, a flag that was first developed in 1606 under the aegis of James I? To a Brownian observator, the quincunx would be plainly apparent in the distinctive decussation of this national emblem.

Let us back up several years from 1660 to look at one particular Royalist standard from 1642-3 that depicts a die with the “five” side facing outward, positioned in the middle of the field so that the quincuncial dots actually comprise the center point of another quincunx formed by the corners of the square banner. Alan R. Young describes the flag’s

---

<sup>69</sup> Here I follow Kevin Killeen in conceiving of Browne’s political thought as a general position rather than specific emphasis on topical policies: “‘Politics’ here is used in a loose sense, to describe particular cultural investment and habits of thought allied to political positions, rather than an explicit engagement with the polity.” See Killeen, *Biblical Scholarship*, 3.

<sup>70</sup> Cited in Nick Groom, *The Union Jack: The Story of the British Flag* (London: Atlantic Books, 2006), 149. The history of flags during the Civil War era is very complicated: the union jack itself was used exclusively at sea, and the Parliamentarians often identified with a flag bearing the red cross of St. George, if not the complete British flag as we know it today. Nonetheless, this eyewitness account of the arrival of the quincuncial flag in Jamaica suggests that some of Browne’s contemporaries perceived it as a hieroglyph of Charles II’s rightful monarchy.

motto and significance: “Another Royalist officer showed a die displaying only the odd numbers. His motto was ‘Ut cunque quadratus’ [Square in every way], expressing his dislike of all things round but affirming too his stability and ‘evenness,’ the die being always square and erect and resting on an even number” (see Figure 10).<sup>71</sup> In this overtly military emblem, the “square” quincunx literally opposes the Roundheads. Armed with the tools of quincuncial reading, the trained observator would find this divine signature in battle standards as well as flowers. The quincunx represents natural order as well as a stability that is also fluid, like earthquake-proof buildings that are designed to flex rather than crumble, and the act of seeking it out — in other words, the act of hieroglyphic reading — reinscribes that structure on the world.

---

<sup>71</sup> Alan R. Young, “The English Civil War Flags: Emblematic Devices and Propaganda,” *Emblematica* 5.2 (1991): 354.





Figure 10: A royalist standard, reproduced in Alan R. Young, ed., *Emblematic Flag Devices of the English Civil Wars, 1642-1660*, vol. 3 of *The English Emblem Tradition* (Toronto: University of Toronto Press, 1995), 245.

## BIBLIOGRAPHY

### PRIMARY SOURCES

- Agnello, Giovan Battista. *A Revelation of the Secret Spirit Declaring the most concealed secret of alchymie*. Trans. Samuel Daniel. London: John Haviland for Henrie Skelton, 1623.
- Bacon, Francis. *Francis Bacon: The Major Works*. Ed. Brian Vickers. Oxford: Oxford University Press, 2002.
- Bacon, Francis. *The Instauration Magna Part II: Novum Organum and Associated Texts*. Edited by Graham Rees and Maria Wakely. Oxford: Clarendon Press, 2004.
- Boas, George, ed. *The Hieroglyphics of Horapollo*. Princeton: Princeton University Press, 1993.
- Browne, Sir Thomas. *Pseudodoxia Epidemica*. Edited by Robin Robbins. Vol. 1. Oxford: Clarendon Press, 1981.
- Browne, Sir Thomas. *The Works of Sir Thomas Browne*. Ed. Sir Geoffrey Keynes. Vols. 1 and 3. Chicago: University of Chicago Press, 1964.
- Carew, Thomas. "In Answer of an Elegiacal Letter, upon the Death of the King of Sweden, from Aurelian Townshend, Inviting Me to Write on that Subject." In *Ben Jonson and the Cavalier Poets*. Ed. Hugh Maclean. New York: WW Norton & Company, 1974.
- Du Chesne, Joseph. *The Practise of Chymicall, and Hermeticall Physicke, for the Preseruation of Health*. Trans. Thomas Tymme. London, 1605.
- Daniel, Samuel. *The Complete Works in Verse and Prose of Samuel Daniel*. Vol. 3. Ed. Alexander B. Grosart. New York: Russell & Russell, 1963.
- Dee, John. *A letter, containing a most briefe discourse apologeticall with a plaine demonstration, and feruent protestation, for the lawfull, sincere, very faithfull and Christian course, of the philosophicall studies and exercises, of a certaine studious gentleman: an ancient seruant to her most excellent Maiesty royall*. London: Peter Short, 1599.
- Dee, John. "The Compendious Rehearsal of John Dee." In *Johannis, confratris & monachi Glastoniensis, chronica sive historia de rebus Glastoniensibus*. [...] *Descripfit ediditque Tho. Hearnius*. [...] *Duobus voluminibus*. Oxonii: e Theatro Sheldoniano, 1726.
- Dee, John. Preface to *The Elements of Geometrie of the most auncient philosopher Euclide of Megara*. Imprinted at London by John Daye, 1570.

- Dee, John. *John Dee's Five Books of Mystery*. Ed. Joseph H. Peterson. San Francisco: Weiser, 2003.
- Dee, John. *John Dee on Astronomy: Propaedeumata Aphoristica (1558 and 1568), Latin and English*. Trans. Wayne Shumaker. Berkeley: University of California Press, 1978.
- Descartes, René. *Oeuvres Complètes*. Vol. 3. Edited by Jean-Marie Beyssade and Denis Kambouchner. Gallimard, 2009.
- Digges, Dudley. *Of the Circumference of the Earth: A Treatise of the North-West Passage*. London: W. W. for John Barnes, 1632.
- Fludd, Robert. *Robert Fludd*. Ed. William Huffman. Berkeley: North Atlantic Books, 2001.
- Fraunce, Abraham. *Symbolicæ Philosophiæ Liber Quartus et Ultimus*. Ed. John Manning. Trans. Estelle Haan. New York: AMS Press, 1991.
- Giovio, Paolo. *The Worthy Tract of Paulus Iovius (1585)*. Trans. Samuel Daniel. Delmar, New York: Scholar's Facsimiles and Reprints, 1976.
- Hazard, Mary E. *Elizabethan Silent Language*. Lincoln and London: University of Nebraska Press, 2000.
- Howes, Edward. *Short arithmetick or, The old and tedious way of numbering, reduced to a new and briefe method. Whereby a mean capacity may easily attain competent skill and facility*. London: Printed by R. Leybourne, for H. Blunden, at the Castle in Corn-hill, 1650.
- Jackman, A. *Syons Calamitye or Englands Miserye Hieroglyphically Delineated*. London: 1643.
- James, Thomas. *The Strange and Dangerous Voyage of Captain Thomas James, in his intended discovery of the North West passage into the South Sea*. London: John Legatt, 1633.
- Jonson, Ben. *Ben Jonson*. Ed. C.H. Herford and Percy and Evelyn Simpson. Vols. 7 and 10. Oxford: Clarendon Press, 1941.
- Jonson, Ben. *Ben Jonson: Selected Masques*. Ed. Stephen Orgel. New Haven: Yale University Press, 1970.
- Jonson, Ben. *Ben Jonson's Timber or Discoveries*. Ed. Ralph S. Walker, ed. Syracuse: Syracuse University Press, 1953.

- Josten, C.H. "A Translation of John Dee's 'Monas Hieroglyphica' (Antwerp, 1564), with an Introduction and Annotations." *Ambix* 12 (1964): 84-221.
- Maier, Michael. *Atalanta fugiens : hoc est, Emblemata nova de secretis naturae chymica*. Kassel: Bärenreiter, 1964.  
<http://books.google.com/books?id=VuoQAQAIAAJ&pg=PP1#v=onepage&q&f=false>.
- Plutarch. *Plutarch's Lives*. Translated by Bernadotte Perrin. Vol. 1. Loeb Classical Library. New York: Macmillan, 1914.
- Pliny the Elder. *Natural History*. Edited and translated by H. Rackham. Vol. 9. Cambridge, Mass.: Harvard University Press, 1952.
- Ruland, Martin. *A Lexicon of Alchemy*. London: John M. Watkins, 1964.
- Sbordone, Francesco. *Hori Apollonis Hieroglyphica*. New York: Georg Olms Verlag, 2002.
- Tymme, Thomas. *A light in darkness, which illumineth for all the Monas hieroglyphica of John Dee, discovering natures closet and revealing the true Christian secrets of alchemy*. Ed. S.K. Heninger. Oxford: New Bodleian Library, 1963.
- The Winthrop Papers. *Collections of the Massachusetts Historical Society*. Vol. 6, Ser. 4. Boston: Printed for the Society, 1865.
- á Wood, Anthony. *Athenae Oxoniensis an Exact History of All the Writers and Bishops Who Have Had Their Education in the Most Ancient and Famous University of Oxford*. London: Thomas Bennet, 1691.

## SECONDARY SOURCES

- Abraham, Lyndy. *A Dictionary of Alchemical Imagery*. Cambridge: Cambridge University Press, 1998.
- Adams, Alison and Stanton J. Linden, eds. Introduction. *Emblems and Alchemy*. Glasgow: Glasgow Emblem Studies, 1998. v-vi.
- Anderson, R.E. "Howes, Edward (fl. 1632–1659)." Rev. Anita McConnell. In *Oxford Dictionary of National Biography*. Ed. H. C. G. Matthew and Brian Harrison. Oxford: Oxford University Press, 2004.
- Assmann, Jan. *Moses the Egyptian: The Memory of Egypt in Western Monotheism*. Cambridge: Harvard University Press, 1998.
- Barbour, Reid. *Literature and Religious Culture in Seventeenth-Century England*. Cambridge: Cambridge University Press, 2001.

- Barbour, Reid and Claire Preston, eds. *Sir Thomas Browne: The World Proposed*. Oxford: Oxford University Press, 2008.
- Bath, Michael. *Speaking Pictures: English Emblem Books and Renaissance Culture*. London and New York: Longman, 1994.
- Berensmeyer, Ingo. "Rhetoric, Religion, and Politics in Sir Thomas Browne's *Religio Medici*." *SEL, 1500-1900* 46.1 (2006): 113-32.
- Black, J.B. *The Reign of Elizabeth 1558-1603*. Oxford: Clarendon Press, 1959.
- Black, Robert C. *The Younger John Winthrop*. New York: Columbia University Press, 1966.
- Bray, Alan. "Homosexuality and the Signs of Male Friendship in Elizabethan England." *History Workshop Journal* 29 (1990): 1-19.
- Brooks-Davies, Douglas. *The Mercurian Monarch: Magical Politics from Spenser to Pope*. Manchester: Manchester University Press, 1983.
- Browne, C.A. "An Old Colonial Manuscript Volume Related to Alchemy." *Journal of Chemical Education*. Reprinted in *Microfilm Edition of the Winthrop Papers*, ed. Majorie F. Gutheim (Dec 1928): 1583-1590.
- Butler, Martin and David Lindley. "Restoring Astraea: Jonson's Masque for the Fall of Somerset." *ELH* 61 (1994): 807-27.
- Cavallaro, Federico. "The Alchemical Significance of John Dee's *Monas Hieroglyphica*." In *John Dee: Interdisciplinary Studies in English Renaissance Thought*. Ed. Stephen Clucas. Dordrecht: Springer, 2006.
- Cave, Terence. "*Enargeia*: Erasmus and the Rhetoric of Presence in the Sixteenth Century." *L'Esprit Créateur* 16 (1976): 5-19.
- Chaplin, Joyce E. *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676*. Cambridge, Mass.: Harvard University Press, 2001.
- Clucas, Stephen. "'Non est legendum sed inspicendum solum': Inspectival knowledge and the visual logic of John Dee's *Liber Mysteriorum*." In *Emblems and Alchemy*, ed. Alison Adams and Stanton J. Linden. Glasgow: Glasgow Emblem Studies, 1998.
- Clulee, Nicholas H. *John Dee's Natural Philosophy: Between Science and Religion*. London: Routledge, 1988.

- Clulee, Nicholas H. "Astronomia inferior: Legacies of Johannes Trithemius and John Dee." In *Secrets of Nature: Astrology and Alchemy in Early Modern Europe*. Ed. W.R. Newman and A. Grafton. Cambridge: The MIT Press, 2001.
- Colie, Rosalie L. *The Resources of Kind: Genre-Theory in the Renaissance*. Berkeley: University of California Press, 1973.
- Como, David R. *Blown by the Spirit: Puritanism and the Emergence of an Antinomian Underground in Pre-Civil-War England*. Stanford: Stanford University Press, 2004.
- Cook, Elizabeth. "'Death Proves Them All but Toyes': Nashe's Unidealising Show." In *The Court Masque*. Ed. David Lindley. Manchester: Manchester University Press, 1984.
- Cormack, Bradin and Carla Mazzio. *Book Use, Book Theory 1500-1700*. Chicago: University of Chicago Library, 2005.
- Cotterill, Anne. *Digressive Voices in Early Modern English Literature*. Oxford: Oxford University Press, 2004.
- Craik, Katharine A. *Reading Sensations in Early Modern England*. New York: Palgrave Macmillan, 2007.
- Crombie, A.C. *Science, Optics, and Music in Medieval and Early Modern Thought*. London: The Hambleton Press, 1990.
- Davis, Natalie Zemon. "Beyond the Market: Books as Gifts in Sixteenth-Century France." *Transactions of the Royal Historical Society*, Ser. 5. 33 (1983): 69-88.
- Daybell, James. *The Material Letter in Early Modern England: Manuscript Letters and the Culture and Practices of Letter-Writing, 1512-1635*. New York: Palgrave MacMillan, 2012.
- Debus, Allen G. *Science and Education in the Seventeenth Century: The Webster-Ward Debate*. New York: American Elsevier Publishing Company, 1970.
- Dieckmann, Liselotte. *Hieroglyphics: The History of a Literary Symbol*. St. Louis, Washington University Press, 1970.
- Dobbs, B.J.T. *Alchemical Death and Resurrection: The Significance of Alchemy in the Age of Newton*. Washington, D.C., Smithsonian Institution Libraries: 1990.
- Dobranski, Stephen B. *Readers and Authorship in Early Modern England*. Cambridge: Cambridge University Press, 2005.

- Doran, Susan. *England and Europe 1485-1603*. New York: Longman, 1996.
- Doran, Susan. *England and Europe in the Sixteenth Century*. New York: St. Martin's Press, 1999.
- Doran, Susan. *Monarchy and Matrimony: The Courtships of Elizabeth I*. London: Routledge, 1996.
- Drake, George A. "Percy, Algernon, tenth earl of Northumberland (1602–1668)." In *Oxford Dictionary of National Biography*. Ed. H. C. G. Matthew and Brian Harrison. Oxford: OUP, 2004. Online ed., ed. Lawrence Goldman. Last modified January 2008. <http://www.oxforddnb.com/view/article/21923>
- Duncan, Edgar Hill. "The Alchemy in Jonson's 'Mercury Vindicated.'" *Studies in Philology* 39 (1942): 625-637.
- Duncan-Jones, Katherine. "Two Elizabethan Versions of Giovio's Treatise on *Imprese*." *English Studies* 52 (1971): 118-123.
- Eamon, William. *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture*. Princeton: Princeton University Press, 1994.
- Eco, Umberto. *The Search for the Perfect Language*. Trans. James Fentress. Cambridge, Mass.: Blackwell, 1995.
- Fichtner, Paula Sutter. *Emperor Maximilian II*. New Haven: Yale UP, 2001.
- Fichtner, Paula Sutter. *The Habsburg Monarchy, 1490-1848: Attributes of Empire*. New York: Palgrave Macmillan, 2003.
- Finch, Jeremiah S. *Sir Thomas Browne: A Doctor's Life of Science & Faith*. New York: Henry Schuman, 1950.
- Flachmann, Michael. "Ben Jonson and the Alchemy of Satire." *SEL 1500-1900* 17.2 (1977): 259-280.
- Forshaw, Peter J. "The Early Alchemical Reception of John Dee's *Monas Hieroglyphica*." *Ambix* 52.3 (2005): 247-269.
- Fowden, Garth. *The Egyptian Hermes: A Historical Approach to the Late Pagan Mind*. Princeton: Princeton University Press, 1993.
- Freeman, Rosemary. *English Emblem Books*. New York: Octagon Books, 1966.
- French, Peter J. *John Dee: The World of an Elizabethan Magus*. London: Routledge and Kegan Paul, 1972.

- Galis, Diana. "Concealed Wisdom: Renaissance Hieroglyphic and Lorenzo Lotto's Bergamo Intarsie." *The Art Bulletin* 62.3 (1980): 363-375.
- Geometric Optics: Reflection*. Films Media Group, 2006. *Films On Demand*. H.264, <http://digital.films.com/PortalPlaylists.aspx?aid=4059&xtid=36390>. (accessed December, 18 2012).
- Greene, Thomas M. *The Light in Troy: Imitation and Discovery in Renaissance Poetry*. New Haven: Yale University Press, 1982.
- Groom, Nick. *The Union Jack: The Story of the British Flag*. London: Atlantic Books, 2006.
- Guibbory, Aschah. "A Rationall of Old Rites': Sir Thomas Browne's *Urn Buriall* and the Conflict over Ceremony." *Yearbook of English Studies* 21 (1991): 229-41.
- Guibbory, Achsah. *Ceremony and Community from Herbert to Milton: Literature, Religion, and Cultural Conflict in Seventeenth-century England*. Cambridge: Cambridge University Press, 1998.
- Håkansson, Håkan. *Seeing the Word: John Dee and Renaissance Occultism*. Lund: Lunds Universitet, 2001.
- Hall, David D., ed., *The Antinomian Controversy, 1636-1638: A Documentary History*. Durham: Duke University Press, 1990.
- Halley, Janet E. "Sir Thomas Browne's *The Garden of Cyrus* and the Real Character." *English Literary Renaissance* 15.1 (1985): 100-121.
- Harkness, Deborah E. *The Jewel House: Elizabethan London and the Scientific Revolution*. New Haven, Yale University Press, 2007.
- Harkness, Deborah E. *John Dee's Conversations with Angels: Cabala, Alchemy, and the End of Nature*. New York: Cambridge University Press, 1999.
- Harris, J.R. *The Legacy of Egypt*. Oxford: Clarendon Press, 1971.
- Hazard, Mary E. *Elizabethan Silent Language*. Lincoln and London: University of Nebraska Press, 2000.
- Huehns, Gertrude. *Antinomianism in English History, with Special Reference to the Period 1640-1660*. London: Cresset Press, 1951.
- Hornung, Erik. *The Secret Lore of Egypt: Its Impact on the West*. Ithaca: Cornell University Press, 2001.



- Howard, Skiles. *The Politics of Courtly Dancing in Early Modern England*. Amherst: University of Massachusetts Press, 1998.
- Hoxby, Blair. "The Wisdom of their Feet: Meaningful Dance in Milton and the Stuart Masque." *ELR* 37.1 (2007): 74-99.
- Huntley, Frank L. "The Garden of Cyrus as Prophecy," in *Approaches to Sir Thomas Browne*. In *Approaches to Sir Thomas Browne*. Edited by C.A. Patrides. Columbia, MO: University of Missouri Press, 1982.
- Iversen, Erik. "Horapollo and the Egyptian Conception of Eternity," *Rivista degli Studi Orientali* 38 (1963): 177-86.
- Iversen, Erik. *The Myth of Egypt and its Hieroglyphs in European Tradition*. Princeton: Princeton University Press, 1993.
- Jagodzinski, Cecile M. *Privacy and Print: Reading and Writing in Seventeenth-century England*. Charlottesville: University Press of Virginia, 1999.
- Janacek, Bruce. *Alchemical Belief: Occultism in the Religious Culture of Early Modern England*. University Park, PA: Pennsylvania State University Press, 2011.
- Jardine, Lisa and Anthony Grafton. "'Studied for Action': How Gabriel Harvey Read His Livy." *Past and Present* 129 (1990): 30-78.
- Johns, Adrian. *The Nature of the Book*. Chicago: Chicago University Press, 1998.
- Kamil, Neil. *Fortress of the Soul*. Baltimore: Johns Hopkins University Press, 2005.
- Kassell, Lauren. *Medicine and Magic in Elizabethan London*. Oxford: Clarendon Press, 2005.
- Kavey, Allison. *Books of Secrets: Natural Philosophy in England, 1550-1600*. Chicago: University of Illinois Press, 2007.
- Kelly, Ann Cline. "The Challenge of the Impossible: Ben Jonson's *The Masque of Blackness*." *CLA Journal* (1977): 344-46.
- Kent, Dale. *Friendship, Love, and Trust in Renaissance Florence*. Cambridge, Mass.: Harvard University Press, 2009.
- Killeen, Kevin. *Biblical Scholarship, Science and Politics in Early Modern England: Thomas Browne and the Thorny Place of Knowledge*. Burlington, VT: Ashgate, 2009.

- Killeen, Kevin. "The Politics of Painting: *Pseudodoxia Epidemica* and Iconoclasm." In *Sir Thomas Browne: The World Proposed*. Edited by Reid Barbour and Claire Preston. Oxford: Oxford University Press, 2008.
- Kogan, Stephen. *The Hieroglyphic King: Wisdom and Idolatry in the Seventeenth-Century Masque*. London: Associated University Presses, 1986.
- Knowlson, James. *Universal Language Schemes in England and France 1600-1800*. Toronto and Buffalo: University of Toronto Press, 1975.
- Lanier, Douglas. "Fertile Visions: Jacobean Revels and the Erotics of Occasion." *Studies in English Literature, 1500-1900* 39.2 (1999): 327-256.
- Laurence, Lionel. *General and Practical Optics*. Chapter 3. London: School of Optics, 1920.
- Levenda, Peter. *Stairway to Heaven: Chinese Alchemists, Jewish Kabbalists, and the Art of Spiritual Transformation*. New York: Continuum, 2008.
- Lindberg, David C. "The Science of Optics." In *Science in the Middle Ages*, 338-368. Chicago: University of Chicago Press, 1978.
- Linden, Stanton J., ed.. *The Alchemy Reader: From Hermes Trismegistus to Isaac Newton*. New York: Cambridge University Press, 2003.
- Linden, Stanton J. *Darke Hieroglyphicks: Alchemy in English Literature from Chaucer to the Restoration*. Lexington: University of Kentucky Press, 1996.
- Linden, Stanton J. "Jonson and Sendivogius: Some New Light on *Mercury Vindicated from the Alchemists at Court*." *Ambix* 24.1 (1977): 39-54.
- Linden, Stanton J. "Smatterings of the Philosopher's Stone: Sir Thomas Browne and Alchemy." In *Mystical Metal of Gold: Essays on Alchemy and Renaissance Culture*. Brooklyn: AMS Press, 2007.
- Long, Pamela. *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to the Renaissance*. Baltimore: Johns Hopkins University Press, 2001.
- Marlow, Christopher. "Friendship in Renaissance England." *Literature Compass* 1 (2003): 1-10.
- McManus, Clare. "'Defacing the Carcass': Anne of Denmark and Jonson's *Masque of Blackness*." In *Refashioning Ben Jonson: Gender, Politics, and the Jonsonian Canon*. Ed. Julie Sanders, Kate Chedgzoy, and Susan Wiseman. New York: St. Martin's Press, 1998.

- Meagher, John C. *Method and Meaning in Jonson's Masques*. Notre Dame: University of Notre Dame Press, 1966.
- Mendelsohn, J Andrew. "Alchemy and Politics in England 1649-1665." *Past and Present* 135 (1992): 30-78.
- Molekamp, Femke. "Early modern women and affective devotional reading," *European Review of History: Revue europeenne d'histoire* 17.1 (2010): 53-74.
- Moran, Bruce T. *Distilling Knowledge: Alchemy, Chemistry, and the Scientific Revolution*. Cambridge, Mass.: Harvard University Press, 2005.
- Mulryne, J.R. and Elizabeth Goldring, eds.. *Court Festivals of the European Renaissance: Art, Politics, and Performance*. Burlington, VT: Ashgate, 2002.
- Newman, William R. and Lawrence Principe. "Alchemy vs. Chemistry: The Etymological Origins of a Historiographic Mistake," *Early Science and Medicine* 3 (1998): 32-65.
- Newman, William R. *Promethean Ambitions: Alchemy and the Quest to Perfect Nature*. Chicago and London: University of Chicago Press, 2004.
- Newman, William R. and Lawrence Principe. "Some Problems in the Historiography of Alchemy." In *Secrets of Nature: Astrology and Alchemy in Early Modern Europe*. Cambridge, Mass.: MIT Press, 2001.
- Nordlund, Marcus. "The Earl of Somerset Vindicated from the Howards at Court." *The Ben Jonson Journal* 19.1 (2012): 88-104.
- Núñez, Rafael Vélez. "Beyond the Emblem: Alchemical Albedo in Ben Jonson's *The Masque of Blackness*." *Sederi* 8 (1997): 257-262.
- OED Online. Oxford University Press. Last modified December 2012.  
<http://www.oed.com>.
- Olmsted, Wendy. *The Imperfect Friend: Emotion and Rhetoric in Sidney, Milton, and their Contexts*. Toronto: University of Toronto Press, 2008.
- Orgel, Stephen and Roy Strong. *Inigo Jones: The Theatre of the Stuart Court*. Berkeley: University of California Press, 1973.
- Orgel, Stephen. *The Jonsonian Masque*. Cambridge: Harvard University Press, 1965.
- Orgel, Stephen. "The Poetics of Spectacle." *New Literary History* 2:3 (1973): 367-389.

- Panofsky, Erwin. *The Life and Art of Albrecht Dürer*. Princeton and Oxford: Princeton University Press, 2005.
- Parry, Glyn. "John Dee and the Elizabethan British Empire in its European Context." *The Historical Journal* 49.3 (2006): 643-675.
- Post, Jonathan F.S. *Sir Thomas Browne*. Boston: Twayne Publishers, 1987.
- Praz, Mario. *Studies in Seventeenth-Century Imagery*. Roma: Edizioni di storia e letteratura, 1964.
- Preston, Claire. *Thomas Browne and the Writing of Early Modern Science*. Cambridge: Cambridge University Press, 2005.
- Rattansi, P.M. "Paracelsus and the Puritan Revolution." *Ambix* 11 (1963): 24-32.
- Richards, Jennifer. "Useful Books: Reading Vernacular Regimens in Sixteenth-Century England." *Journal of the History of Ideas* 73.2 (2012): 247-271.
- Scott, Alison V. "Jonson's Masque Markets and Problems of Literary Ownership." *Studies in English Literature, 1500-1900* 47.2 (Spring 2007): 451-471.
- Schuler, Robert M. "Some Spiritual Alchemies of Seventeenth-Century England." *Journal of the History of Ideas* 41.2 (1980): 293-318.
- Shanahan, John. "Ben Jonson's *Alchemist* and Early Modern Laboratory Space." *Journal for Early Modern Cultural Studies* 8.1 (2008): 35-66.
- Shannon, Laurie. *Sovereign Amity: Figures of Friendship in Shakespearean Contexts*. Chicago, University of Chicago Press, 2002.
- Sharpe, Kevin. *Reading Revolutions: The Politics of Reading in Early Modern England*. Connecticut: Yale University Press, 2000.
- Sharpe, Kevin and Stephen Zwicker, eds. *Reading, Society, and Politics in Early Modern England*. Cambridge: Cambridge University Press, 2003.
- Sharpling, Gerard Paul. "Towards a Rhetoric of Experience: the Role of Enargeia in the Essays of Montaigne." *Rhetorica: A Journal of the History of Rhetoric*: 20.2 (Spring 2002): 173- 192.
- Sherman, William H. *John Dee: The Politics of Reading and Writing in the English Renaissance*. Amherst: University of Massachusetts Press, 1995.
- Sherman, William H. *Used Books: Marking Readers in Renaissance England*. Philadelphia: University of Pennsylvania Press, 2008.

- Sherwood, Terry G. *The Self in Early Modern Literature: For the Common Good*. Pittsburgh: Duquesne University Press, 2007.
- Singer, Thomas C. "Hieroglyphs, Real Characters, and the Idea of Natural Language in English Seventeenth-Century Thought." *Journal of the History of Ideas* 50.1 (1989): 49-70.
- Singer, Thomas C. "Sir Thomas Browne's 'Emphaticall Decussation or Fundamentall Figure': Geometrical Hieroglyphs in *The Garden of Cyrus*." *English Literary Renaissance* 17.1 (1987): 85-102.
- Smith, Nigel. *Perfection Proclaimed: Language and Literature in English Radical Religion 1640-1660*. Oxford: Clarendon Press, 1989.
- Smith, Pamela. *The Body of the Artisan*. Chicago: University of Chicago Press, 2004.
- Smith, Paul Julian. *Writing in the Margin: Spanish Literature of the Golden Age*. Oxford: Clarendon Press, 1988.
- Stanford, Michael. "The Terrible Thresholds: Sir Thomas Browne on Sex and Death." *English Literary Renaissance* 18 (1988): 413-23.
- Stearns, W.T. "The Five Brethren of the Rose: An Old Botanical Riddle." *Huntia* 2 (1965): 180-4.
- Strong, Roy. *Art and Power: Renaissance Festivals 1450-1650*. Berkeley: University of California Press, 1984.
- Summit, Jennifer. *Memory's Library: Medieval Books in Early Modern England*. Chicago: University of Chicago Press, 2008.
- Sutton, Julia, ed. and trans. Introduction to *Courtly Dance of the Renaissance: A New Translation and Edition of the Nobiltà di Dame (1600)*, by Fabritio Caroso. New York: Dover Publications, 1995.
- Szőnyi, György Endre. *John Dee's Occultism: Magical Exaltation through Powerful Signs*. Albany: State University of New York Press, 2004.
- Szőnyi, György E. "Occult Semiotics and Iconology: Michael Maier's Alchemical Emblems." In *Mundus Emblematicus: The Neo-Latin Emblem Books*. Ed. Karl Erenkel and Arnoud Visser. Turnhout: Brepols, 2003.
- Szulakowska, Urszula. *The Alchemy of Light: Geometry and Optics in Late Renaissance Alchemical Illustration*. Leiden: Brill, 2000.

- Tilton, Hereward. *The Quest for the Phoenix : Spiritual Alchemy and Rosicrucianism in the Work of Count Michael Maier (1569-1622)*. Berlin: Walter de Gruyter, 2003.
- Turner, James. *The Politics of Landscape: Rural Scenery and Society in English Poetry, 1630-1660*. Oxford: Blackwell, 1979.
- van Dorsten, J.A. *The Radical Arts: First Decade of an Elizabethan Renaissance*. Leiden: Leiden University Press, 1970.
- Vickers, Brian. "Frances Yates and the Writing of History." *Journal of Modern History* 51 (1979): 287-316.
- Vickers, Brian, ed. *Occult and Scientific Mentalities in the Renaissance*. Cambridge: Cambridge University Press, 1984.
- Webster, Charles. "Alchemical and Paracelsian Medicine." In *Health, Medicine, and Mortality in the Sixteenth Century*. New York: Cambridge University Press, 1979.
- Webster, Charles. "English Medical Reformers of the Puritan Revolution, a Background to the 'Society of Chymical Physitians.'" *Ambix* 14 (1967): 16-41.
- Wertenbaker, Lael. *The Eye: Window to the World*. Washington, D.C.: U.S. News Books, 1981.
- Wilding, Michael. *Dragons Teeth: Literature in the English Revolution*. Oxford: Clarendon Press, 1987.
- Wilding, Michael. "Religio Medici in the English Revolution." In *Approaches to Sir Thomas Browne*. Edited by C.A. Patrides. Columbia, MO: University of Missouri Press, 1982.
- Wilkinson, Ronald Stearne. "The Alchemical Library of John Winthrop, Jr. (1606-1676) and His Descendants in Colonial America, Part IV." *Ambix* 13 (1966): 139-86.
- Wind, Edgar. *Pagan Mysteries in the Renaissance*. London: Faber, 1968.
- Woodward, Walter W. *Prospero's America: John Winthrop, Jr., Alchemy, and the Creation of New England Culture, 1606-1676*. Chapel Hill: University of North Carolina Press, 2010.
- Woolley, Benjamin. *The Queen's Conjurer: The Science and Magic of Dr. John Dee, Adviser to Queen Elizabeth I*. New York: Henry Holt and Company, 2001.
- Wyatt, Michael. *The Italian Encounter with Tudor England: A Cultural Politics of Translation*. Cambridge: Cambridge University Press, 2005.

- Yates, Frances. *The Art of Memory*. Chicago: University of Chicago Press, 1974.
- Yates, Frances. *The Occult Philosophy in the Elizabethan Age*. New York: Routledge, 2005.
- Young, Alan R. "The English Civil War Flags: Emblematic Devices and Propaganda." *Emblematica* 5.2 (1991): 341-356.
- Young, Alan R., ed. *Emblematic Flag Devices of the English Civil Wars 1642-1660*. Vol 3 of *The English Emblem Tradition*. Index Emblematicus. Toronto: University of Toronto Press, 1988.
- Zetterberg, J. Peter. "Hermetic Geocentricity: John Dee's Celestial Egg." *Isis* 70.3 (1979): 385-393.
- Ziff, Larzer. *Puritanism in America: New Culture in a New World*. New York: Viking Press, 1973.
- Zitzewitz, Paul. *Physics: Principles and Problems*. Chapter 17. McGraw-Hill, 2004.