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Title	The Cabala of Being: John Dee's Semiotic Ontology in the <i>Monas Hieroglyphica</i>
Words	~ 29,365 (~36,987 with notes)
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The Cabala of Being: John Dee's Semiotic Ontology in the *Monas Hieroglyphica*

James Justin Sledge  
MA Thesis - 2009

Qui non intelligit, aut taceat, aut discat.  
- John Dee, *Monas Hieroglyphica*, 1564

Quis Monadem Hieroglyphicam philosophi Londini declaret?  
- Andreas Libavius, *Rerum Chymicarum*, 1595

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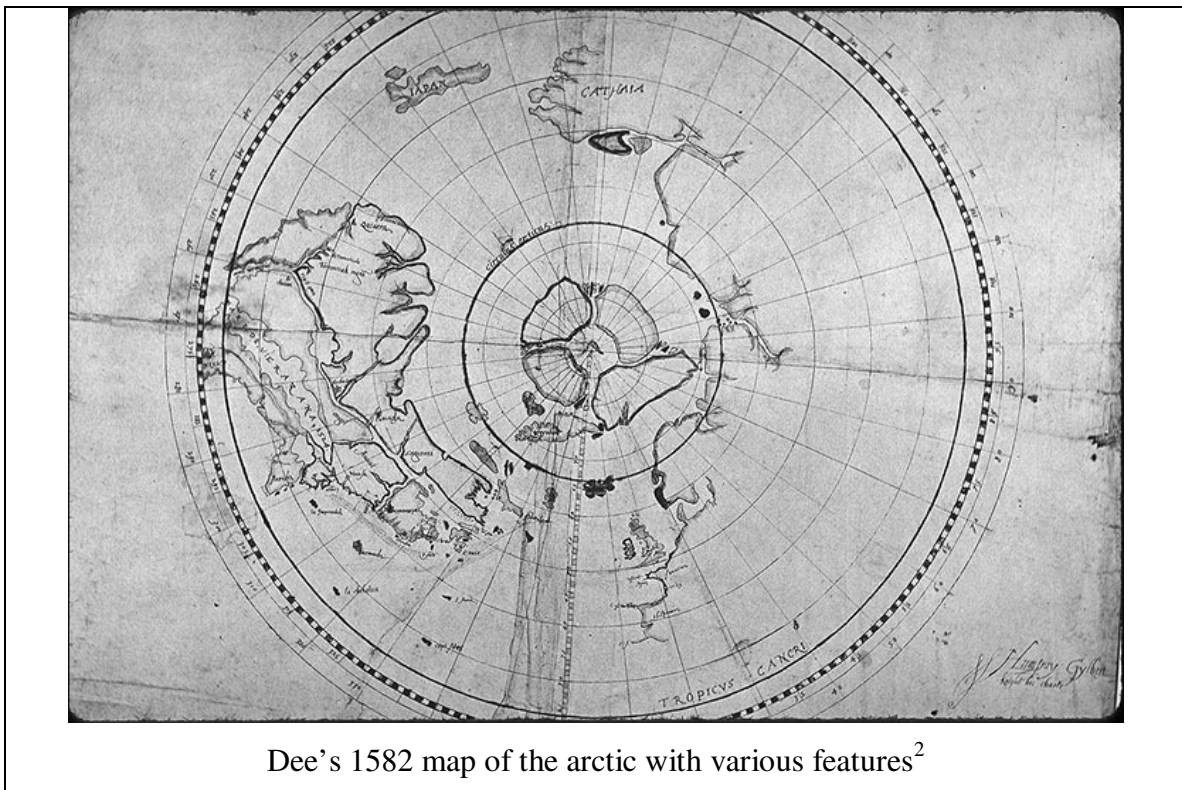
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I would like to express my thanks to the Bibliotheca Philosophica Hermetica and to Joyce Pijnenburg for her gracious assistance and thoughts during the preparation of this paper.

## 1.1 1582 or The Maps of Dr. John Dee

By 1582, Dr. John Dee was concerned with at least three different kinds of maps. One was his attempt at calendar reform, the map of the year, which would have brought England into conformity with the Continent. Such a “popish” notion was rejected and Dee himself oscillated in his diaries when he locates himself on the map of the year between “new style,” “old style,” and “true style.” The British map of the year would not change until March of 1752 when Wednesday September 2<sup>nd</sup> leaped to Thursday September 14<sup>th</sup>. In Dee’s time even one’s location in time was wrapped around the contours of geo-politics. The movement toward to such synchronic cartography of Europe was part and parcel of the apocalyptic and utopian hopes which we now know greatly propelled Dee’s “scientific” endeavors.<sup>1</sup>

A second map is one we more easily recognize:



Dee’s 1582 map of the arctic with various features<sup>2</sup>

<sup>1</sup> For a detailed account of Dee’s relation to calendar reform see Poole: 2005.

<sup>2</sup> This image was taken from <http://www.henry-davis.com/MAPS/Ren/Ren1/418.html> of which the parent site <http://www.henry-davis.com/MAPS/> is an excellent resource for early modern and medieval maps.

Here we see a map in Dee's autograph depicting the Arctic Circle - Thule, the roof of the world. Dee prepared this map in order to help find the famed Northwest Passage which would allow easy shipping for British vessels traveling the long route to China and India thus securing global dominion – after all, it was Dee who coined the phrase “British Empire.” This map represents a disjunction between reality and representation. We know that the North-West passage was locked by ice in the 16<sup>th</sup> century – Dee's map was a combination of reality, theory, and speculation. The passage was a virtuality, the striated nature of the ice-sheets only needing conditions, a line of flight, to transition to the actual, smooth space of sea. After some centuries and due to the process of global climate change the first ships actually passed through the Passage in the late 20<sup>th</sup> century with the first British ship, a father and son team, making the journey in July of 2003. Dee's map was not “unreal,” its virtuality was simply actualized 421 years later. We could say, tongue planted in cheek “The territory simply had to catch up to the map.”<sup>3</sup>

It seems that Dee grappled at this relationship for years, this process of creating the perfect map, of linking the represented to its representation in one *unit* – indeed it was Dee who in 1570 would give the English language just that word, “unit” as a translation for another, more powerful word – “Monas.”<sup>4</sup> But, by 1608/9, after continuing this project for much of his life by directly invoking heavenly beings, Dee went quietly into the night likely searching to the very end for the link between map and territory, a process he had begun at the age of 37 with the 1564 publication of a book as brief as it is enigmatic – *The Monas Hieroglyphica*.

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<sup>3</sup> The map-territory relationship developed by Korzybski has been a favorite topic of many post-structuralists. Some treatments include Borges' famous "On the Exactitude in Science," Baudrillard's discussion of the problem of representation and hypereality in *Simulacra and Simulation* takes the same track, J.Z. Smith has used the relation in the Religious Studies in his eponymous 1978 monograph. We follow Deleuze and Guattari's articulation and playful exploration in *A Thousand Plateaus* not because it is very novel but because of the ontological link it makes with representation as we explore later and think through in relation to the Monas project in the conclusion.

<sup>4</sup> The OED makes this clear in its history of the usage of the word “unit,” with the first mention, and thus the official invention of the word, as “*DEE Math. Pref.* \*iij, Number, we define, to be, a certayne Mathematicall Summe, of Vnits. And, an Vnit, is that thing Mathematicall, Indiuisable, by participation of some likenes of whose property, any thing, which is in deede, or is counted One, may reasonably be called One,” with Dee noting in the margin of the above, “Note the worde, Vnit, to expresse the Greke Monas, & not Vnitie: as we haue all, commonly, till now, vsed.”

2009 may<sup>5</sup> mark the 400<sup>th</sup> anniversary of Dee's death and, despite the passing of so many years, his life and intellectual labors remain the course of mystery and speculation. We may even say that 400 years of speculation and research have done to make more myths than clarify the intellectual and religious practice of this Elizabethan figure. Recent scholarship by Clucas, Clulee, Harkness, Szőnyi, Håkansson and others however, has begun to develop a more complex, and therefore richer and nuanced, vision of the intellectual/religious production of a man at the cusp of what we now call modernity – indeed, we find Dee at a fissure where representation and represented break apart, Geberian alchemy begins gives way to atomization, and Paracelsus' war against Galenic medicine.<sup>6</sup> The difficult interplay of mathematical, astronomical/alchemic, and apocalyptic themes has presented contemporary scholars with a uniquely difficult task of developing a theoretical model into which Dee can be read and understood – in which he can be intelligible to a contemporary gaze. Simply put, certain post-Enlightenment trends towards a reductionist positivism and its polemical division of previous intellectual disciplines have left the contemporary scholar with very little theoretical framework to appreciate, much less, model the philosophical mélange of many 15th through early 18th century thinkers. It is therefore not an easy matter to see the connection between the “scientific” nature of Dee's early work on optics or mathematics and the “occult” collection of the angelic conferences which continued until his death because we both lack the worldview which allowed them cohere in Dee's time and we have developed a habitus of speaking which also renders “science” as a-historical<sup>7</sup>. We cannot assume that map-making has always had the same techniques, goals, or logic thus rendering undecideable and relative exactly what a “good” map is.

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<sup>5</sup> Biographers of Dee cannot decide for certain between 1608/9. We go with 1609 here for literary convenience.

<sup>6</sup> Hence, we must proceed carefully – the difference of misplacing fifty or even twenty years in this study can prove tectonic.

<sup>7</sup> In the sense that “science” itself does not have a history in a great deal of our current thinking. The history of science is then the codification of various activities in the past which are fitted into models of scientific discourse developed largely in the 18<sup>th</sup> and 19<sup>th</sup> centuries. Archimedes, Galen, Versalius, Newton, and Crick are all then thrown into one continuum with any elements which cause cognitive or narrative dissonance marginalized or simply ignored. Such was the fate in the case of Newton's alchemy and occult interests.

Dee's *Monas Hieroglyphica* (MH) is a text which, because sits as the uneasy edge of a line-of-flight between so many discourses and philosophic movements, simultaneously resist easy comprehension due to its apparent polyvalence yet collapses readily into one domain of discourse when set under the proper gaze. If we wish to see the text as alchemic, or cabalistic, or magical, it becomes, because of its plasticity just what the reader wants to find. Yet, the text destabilizes those readings and further inspection does not allow the easy priority of one reading. Thus for over 400 years, the MH has produced a copious explanatory literature and yet remains a substantially obscure and difficult book.

So, again, are we going to walk into the trap of Dee's Monas<sup>8</sup> – into its esoteric and infinite semiosis? Not quite. While writing this paper I came across a moment of speculation in Christopher Lehrich's 2003 monograph on Agrippa where he writes: "... Dee's *Monas Hieroglyphica* will require rethinking, as Dee claimed for this single hieroglyphic sigil the possibility of a restitution of all knowledge and language." Which is linked to a footnote which continues, "...Clulee's analysis...is excitingly frustrating in this respect: Clulee takes the analysis to the very edges of a theoretical, semiotic understanding of the monas, then stops. A "theory-headed" re-examination will certainly be necessary."<sup>9</sup> Curiously, despite throwing down the gauntlet in 2003, Lehrich's recent chapter on the Monas in his 2007 monograph on magic does not attempt such an analysis. Our exploration will go in just such a direction but will not, in large part, pretend a "reading" of what the MH "means." That task is for what Dee would call the "adeptus" for in the meaning of the Monas, as we will see, is the doing of the Monas.

Rather, this investigation will ask a set of philosophic and historical questions: How does Dee employ various intellectual disciplines in order to compose the MH? What is the process by which this appropriation occurs? How does the logic of the Monas allow Dee to proclaim its power? What model best describes Dee's sense of the relationship of representation to the represented? Why did Dee abandon the Monas? Thus this investigation will operate through a differential analysis to investigate the

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<sup>8</sup> For the sake a clarity, when we use the term "Monas" we mean the sign of the Monas itself, as an adjective we use the term "Monadic." If we use the term "Monad" in another sense, we try to be clear in context as to be distinct. When we use "MH" we refer to the text of the 1564 *Monas Hieroglyphica* following the Latin original or Josten's standard translation.

<sup>9</sup> Lehrich: 2003, 219-220, footnote 7.



historico-philosophic currents which allowed for the development of the Monas (alchemic theory, Renaissance philosophy of language, etc) and then build model for rendering its operation intelligible to contemporary readers. In other words, we will cast the project of the Monas into the light of historical research and semiotic analysis in the hopes of alleviating some of the interpretative difficulties produce by the text. “What the Monas Hieroglyphica means” is not a question we seek to answer lest again we find ourselves caught in its logic of recursion and infinite semiosis. We ask a more modest question – What are the conditions in which such a project as the MH can be intelligible?

To answer such a question this study will move largely through a process of differential analysis in three main arcs before arriving at our model:

1. First, we will locate and discuss the MH itself, its influences, and place in Dee’s oeuvre. This will allow us to reveal Dee’s technique of “miraculous appropriation” by which the intellectual practices of his day were “cartographized” into the Monas. While alchemy and cabala<sup>10</sup> have been the central hermeneutical tools for understanding the MH in the past four centuries, we will show how such a heuristic error deprioritizes the Monas itself and thus greatly affects the comprehensibility of the text in current scholarship.
2. Second, we will explore issues in 15<sup>th</sup> century theories of language to reveal a tension in the ontological status of the represented and representation. By exploring some of Dee’s influences and an analysis of Renaissance appreciation of Hieroglyphics through an iconographic analysis, we hope to show the underlying ontological tendency in theories of representation and how Dee navigates between naïve realism and Nominalistic conventionalism with the development of the Monas.
3. Third, we will show the need to transition away from issues of philosophy of language to a more robust semiotic-ontological analysis. We hope to show that Dee’s project in the Monas cannot be modeled solely in terms of philosophy of

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<sup>10</sup> For the sake of analysis, we will use the spelling “kabbalah” to refer to pre-15<sup>th</sup> and/or exclusively Jewish speculations while the spelling “cabala” will refer to the Christian use of such forms of thought. Of course, much of what makes up “kabbalah/cabala” is the production of pluralistic and polemical exchanges between various religious and intellectual communities, but we hope this division will help to provide clarity if the division is not a little contrived.

language and how the transition to semiotic analysis is better suited for treating the MH.

Finally, we will synthesize our findings by presenting (1) a technical term for the Monas which captures its semiotic, historical, and performative character, (2) a theory of the recursive logic by which the Monas “works” then (3) we will explore why a Saussurean semiotic analysis cannot model the Monas, and finally we will (4) deploy a synthetic-analytical tool in which we use the triadic semiotic system of Charles Sanders Peirce isomorphically with the three ontological modalities of Gilles Deleuze to model the Monas in contemporary theory but in such a way as to capture Dee’s philosophic underpinnings.

The first objection to such a project is clear. “You are making a map of a map, one Dee himself would find incomprehensible.” Indeed, we have received, after some centuries, a map and told a destination in which the lines of latitude, the contours of the land, the smooth space of the sea, even direction itself are traced and notated before us but are in scripts, languages, and notations dim to us. Our gaze is subject to a cartographic vertigo upon its inspection. Much in the same way that Newton’s *Principia Mathematica*, couched in archaic Euclidean notation still contains its analytic truths but must, nevertheless, be translated into the Cartesian analytic notation to be intelligible to contemporary mathematicians (something which would have rendered it as an enigma to Newton), we too must make a map of a map to understand just how Dee’s map was, after all, in continuum with the territory itself.

## 1.2 Preparatory Remarks on the *Monas Hieroglyphica*

The MH was composed in Latin over the course of twelve days in January of 1564, likely while Dee lived with Willem Silvius, who would subsequently print the work in Antwerp in March of 1564.<sup>11</sup> It is comprised of an introduction in the form of a letter addressed directly to the subject of the works’ dedication, Maximilian of Habsburg (whose coronation Dee had personally witnessed only the year before), a brief but formal

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<sup>11</sup> Josten: 1964, 87.

letter to the printer reminding him of the importance of printing the text very carefully (which seems to have been well followed, the 1564 text, Josten notes, is printed virtually error free<sup>12</sup>) followed by twenty-four theorems of varying length in quasi-geometric method with accompanying diagrams and emblematic devices. The first edition, a copy of which I have had the privilege to review courtesy of the Bibliotheca Philosophica Hermetica in Amsterdam<sup>13</sup>, is printed handsomely on high quality paper with a deep print impression per page.

Dee's Latin, while technical and crisp, is frequently punctuated by alchemical and Neo-Pythagorean jargon and neologisms some of which appear to occur only in the MH itself.<sup>14</sup> In addition, there are extensive quotations in Greek from classical authors and two instances of unintelligible Hebrew. As fitting such an obscure text, Dee's language ranges from the technical, geometric description for the construction of the Monas itself in theorem XXIII to expressing fear that he may too easily be revealing divine and secret knowledge. The short text provides a compelling specimen for interrogating Dee's intellectual process in its interdisciplinary complexity. Chronologically situated at the hinge of his interests in both mathematics and cabala, the MH emerges after Dee's work on optics but before his more extravagant attempts at communication with other-worldly entities.

It is, at a superficial glance, a densely compressed explanation for the construction, manipulation, and exegetical power of a symbol composed of geometric/astrological elements which oscillate between mathematical clarity and hermetic obscurantism.

The structure of the text, the *more geometrico*, is not accidental and deserves a few words. Dee had employed a similar method in the *Propaedeumata Aphoristica* (1558 and 1568) and was intimately familiar with it from Euclid (in 1570 he would write the preface for the first English edition of the *Elements*) but also in its application to

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<sup>12</sup> Ibid., 88.

<sup>13</sup> Shelf mark H. This copy is also bound with a text entitled *Morien Romani, Quondam Eremitae Hierosolymitani, De Re Metallica, Metallorum Transmutatione, et Occulta Summaq; antiquorum medicina libellus praeter priore editionem accurate reconstitutus* with a corresponding commentary printed in Paris (1564) which describes conventional alchemic theory and practice. The BPH also owns a copy of the defectively printed (the illustrations are especially flawed) Frankfurt edition of 1591. Dee did not edit the text for the production of the 1591 edition and it was likely made without his permission.

<sup>14</sup> e.g. "litrovinium" on 22v, "geogamia" on 14r, and "acioaedes" on 13v, among others.

theological matters from Proclus's commentary which he owned and read.<sup>15</sup> Dee is likely employing the *more geometrico* in order to remain as concise, clear, and as un-“occult” as possible. However, Dee's style moves in rapid, often non-linear succession through various fields of 15<sup>th</sup> century inquiry – alchemy, astrology, geometry, Pythagorean numerology, etc... A single theorem may contain alchemic, astrological, and/or geometric elements and from theorem to theorem these currents interpenetrate each other in various tangents. Despite the use of the *more geometrico*, the MH does not move in a straightforward, deductive process. Dee rarely arrives at certain conclusions, rather he unfolds them from axioms he never quite makes clear. His theorems are ultimately focal orbits around central themes which, while never total, should prepare the “adept” to employ them to miraculous effect. While the MH is often obscure we are rightly tantalized by Dee's use of the geometric method and should proceed carefully in dismissing what is dark to us on those grounds alone.

Dee claimed to have developed the character of the Monas in 1557<sup>16</sup> being “pregnant with it during the course of seven years<sup>17</sup>” noting that it first appears in print on the title page of Dee's work on astrological physics and optical theory, the *Propaedeumata Aphoristica* (1558) and later in his marginal annotations of Pantheus' *Voarchadumia* which he received in 1559.<sup>18</sup> Through the 1560's it seems the symbol of the Monas became increasingly central in Dee's hermeneutic for approaching the varied domains of intellectual speculation which he navigated. Indeed, Clulee argues that Dee may have developed the Monas as a method of rendering stable the polyvalent field of alchemic discourse such that the work could proceed more efficiently.<sup>19</sup> Dee is effusive about the importance of the text and even invokes divine inspiration. He claims that the work itself has a revelatory character in theorem XXIII such that “the pen merely of Whose Spirit, quickly writes these things through me, I wish and hope to be.”<sup>20</sup> In his opening letter and dedication to Maximilian of Habsburg, he writes that the work should be subject to “intense studies and work, examining its depths” and that it was a

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<sup>15</sup> Clulee: 1988, 152.

<sup>16</sup> Aphorism LII, Shumaker and Heilbron (PA): 1978, 148-9.

<sup>17</sup> MH, 10r.

<sup>18</sup> For a comprehensive analysis of the influence of the *Voarchadumia* on Dee see Norrgrén: 2005, 217-245.

<sup>19</sup> Clulee: 1988, 95-6.

<sup>20</sup> “...cuius Spiritus celeriter haec per me Scribentis, Calamum tantum, esse me, & opto, & Spero”

“philosophical treasure.”<sup>21</sup> Clearly, Dee felt for the years before the beginning of his attempts at communications with angels that the *Monas* was the central key to his thinking and a powerful tool for unlocking the secrets of nature.

Despite a structure that seeks to ensure clarity, Dee’s long intellectual gestation of the concept itself, and his surety of its importance, the work was contemporaneously obscure and has certainly improved little since. Meric Causabon, the first editor of Dee’s “spirit diaries,” would later capture the nature of this odd dialectic between clarity and obscurantism in his comment that, “I can extract no sense nor reason (sound or solid) out of it; neither yet doth it seem to me very dark or mystical.”<sup>22</sup> Another scholar has referred to the MH as, “possibly the most obscure work ever written by an Englishman.”<sup>23</sup> Clulee has conjectured that the work was meant to serve as a textbook in conjunction to which Dee himself would explain and tutor individual readers.<sup>24</sup> The text itself contains no indication of such a plan although Dee notes that he did actually tutor Queen Elizabeth on the contents of the text. It is precisely this obscurity that stands as the first hurdle to render the MH intelligible.

### 1.3 The Obscurity of the *Monas Hieroglyphica*

The obscurity of the text likely has three reasons: (1) the semi-esoteric<sup>25</sup> yet technical character of the subject matter, (2) the obscurity of the internal logic by which concepts operate, (3) an analytic tool for modeling the object of the MH, (4) and the completeness of the text itself<sup>26</sup>.

Firstly, the subject matter is a highly technical intellectual domain with its own semi-esoteric jargon. Dee is drawing from many intellectual systems, none of which are characterized by their transparency or consistency. The language of alchemy, for

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<sup>21</sup> MH, 7v.

<sup>22</sup> Casaubon: 1659, 38.

<sup>23</sup> Vickers quoted Forshaw: 2005, 247.

<sup>24</sup> Clulee: 1988, 96.

<sup>25</sup> I mean this in the most common sense of the word – the language is meant to broadcast meaning at one level and conceal it at the next. Alchemic and Kabbalistic discourses are especially dexterous in this regard.

<sup>26</sup> Simply put, if Dee did not finish the text, cut it short, or rushed it at some points, he may have left dark something which, had a fuller edition existed, would have been more detailed or fleshed out. If the text is incomplete economy of language can be the difference between encoding and enciphering.

instance, itself is notoriously mobile in its interpretive possibilities and Dee himself uses this polyvalence to great effect in the MH. Dee is not operating from an experimental understanding of the inter-relationships of the systems of knowledge he employs. Indeed, it is likely that Dee had yet to actually begin laboratory alchemy at this point in his career while his astrological knowledge was extensive. Rather, his intellectual movements are preformed in the space of active intellect in which the theoretical sympathies and metaphysical relationships of the elements he manipulates interact due to their essential natures. If such relationships were obscure even in Dee's time (there were certainly dozens of competing theories for such relationships) they are certainly dark to us now. Virtually all previous attempts at making sense of the MH have proceeded by situating these disciplines within their diachronic and synchronic matrices and then fitting the Monas somewhere in their midst. Such attempts have greatly increased our awareness of the source data, intellectual and cultural currents which inform the composition of the MH. However, they have not great gotten at the underlying philosophical project which propelled the creation of the Monas itself in addition to Dee's understanding of its practical application. As we will see, Dee felt that the Monas included and surpassed the intellectual disciplines and praxis of his day (especially cabala, alchemy, and astrology) and thus we must resist the urge to see the Monas as simply an intellectual summation, even of those as evocative as cabala, alchemy, magic, and so on.

Secondly, the geometric method entails a high degree of compression which can make "unpacking" its informational content difficult in that it obscures the internal logic of the work itself. Despite what appears to us as non-linearity in his thinking, we have the impression that Dee is being quite precise in his use of concepts and language. His use of the geometric method, tightly worded theorems, the invention of new words, and the more or less systematic attempt to relate the concepts internally all indicate a precision which, although the logic and concepts are obscure, should be subject to intelligibility. While unclear to us, the concepts seem to inhere within a philosophic framework which was sufficiently rigorous to at least Dee himself. However, for such a precision to be effective, it requires that Dee's audience have a specific theoretical grasp of his operational logic. We are unclear if such an audience ever existed and we should

likely assume that it certainly does not now<sup>27</sup>. Despite this lacuna in our understanding, Dee was not fool or a rambling madman and simple dismissals should be slow if at all. Dee is not only using alchemic, astrological, and Neo-Pythagorean theoretical terms with their accompanying philosophic baggage, but he is also setting them into motion with each other with an operational logic which he never makes clear to the reader. The internal logic of the MH itself seems to have a rigor which allows Dee to set the wide range of philosophic concepts into play with each other. The geometric compression produces a surface terseness which greatly obscures this underlying logic and therefore seriously impedes an understanding of how the concepts internally relate. Much less work has been done on this front and thus this paper will deal with this problem in detail. Despite the linear printed flow of theorems, we will show that a “logic of recursion” operates within the MH as a text but also within the semiotic structure of the Monas itself.

Thirdly, a central heuristic error that has accompanied virtually all readings of the MH is to focus on the known content of the knowledge systems which act as it proof-texts (specially the pole between alchemy and cabala) rather than on the device of the Monas itself. Dee’s central importance in writing and publishing the MH is to forward a “Hieroglyph” whose power and use is proven by appeals to various disciplines – the central object of investigation should, therefore, be the “Hieroglyph” of the Monas. Only in the past decades have analytical tools for the discussion of imagery been developed and thus it has only recently become possible to employ such fields as iconology and semiotics to such a mixed-format “text.” Indeed our use of the word “text” here, baring the expansive use the term has taken on in recent years, prioritizes what Dee wrote as opposed to the non-discursive character actually at the center of his project. Semiotician Umberto Eco has claimed, and rightly it seems, that all major thinkers have implicitly employed some semiotic system.<sup>28</sup> This, while less apparent in some writers, should be clear as Dee participates in the rise of early modern visual culture with the publication of a book whose central focus is a powerful *sign*. Previous analyses have passed over or ignored

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<sup>27</sup> Dee references several “adepts” in the MH, especially those in Paris, who he seemed to have felt would have understood him. Dee’s Paris lectures were primarily concerned with mathematics and we may conclude that some Neo-Pythagorean elements were discussed as well.

<sup>28</sup> Eco 1986: 4-13. He specifically argues that semiotics has always already been at work, as a super-structure over philosophy of language.

this most central aspect of the MH to certain deleterious effects on rendering the MH intelligible.

Finally, the text may be unfinished or incomplete.<sup>29</sup> In theorem XXIII, itself a long explanation of how to construct the Monas geometrically formulated with an appendix-like quality, Dee seems to enumerate a four-point program in which he would expand on many of the previous theorems either later in the MH itself or perhaps in another, future book. Oddly, this section of the theorem ends, “We now abruptly conclude,”<sup>30</sup> and moves onto an explanation of the Pythagorean quaternary. It seems possible, if not likely, that Dee envisioned a much larger work and, for reasons unknown, ended it prematurely. These largely structural issues with the MH show, even at the outset, the contents of the book itself are heavily resistant to either linear or complete exegesis.

#### 1.4 The *Monas Hieroglyphica* in a Continuum of Dee’s Oeuvre

To get at Dee’s philosophical thinking we should first look at the period in his life directly before and after the MH first appeared in print, i.e. the years between c.1559 and 1564. The period of the early 1560’s has often been made out in the literature as the “occult turn” in Dee’s thinking away from the more empirically-leaning discussion of the theory of rays found in the *Propaedeumata Aphoristica* and towards Hermetic philosophy, magic, cabala, alchemy. In many accounts this is described as the result of an increasing frustration on the part of Dee with the inability of “science” to provide him access to Truth itself.<sup>31</sup> While it is during this period that Dee begins to shift his attention directly to alchemy and cabala and in turn the learning of Hebrew and the acquisition of books in Hebrew, we must be careful in how we describe such a modulation (not a shift or a breakage) in Dee’s intellectual life. Indeed, Dee was already “pregnant,”<sup>32</sup> to use his

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<sup>29</sup> Curiously, I have not found a single commenter who has put forward such a theory although it seems quite possible from a critical reading of the text itself.

<sup>30</sup> MH, 25v. “haecque brevissime absolvemus.” Throughout the section mentioned Dee’s Latin is in the future tense. It is to be noted that the custom of placing the tables of contents for a text at the end of the book did exist in Dee’s time. I have owned a copy of Agrippa’s *De Incertitudine et Vanitate* printed in 1632 and just such a convention was used. In this instance such a convention does not seem to be the case.

<sup>31</sup> Clulee: 1988, 87.

<sup>32</sup> MH, 10r.



language, with the notion of the MH as early as the writing of the PA. While his theory of rays shows some leaning toward empirical demonstration, there seems to be little evidence that he attempted such tests.<sup>33</sup> Indeed, Dee's interest remained largely in the realm of speculative theorizing rather than empirical testing and it should come as little surprise that physical observation, much less empirical testing as we understand it currently, were explicitly jettisoned in the MH.

Firstly, we must be careful not to divide between and reify camps such as "science" and "the occult" or even "astronomia"<sup>34</sup> and "alchemy" both in the intellectual character of the 16<sup>th</sup> century socius and in the philosophic life of Dee himself. Simply put, it could not be that Dee "turned" to the "occult" in that the intellectual world of his day did not have such a taxonomy in which these pairs were set into a dichotomy.<sup>35</sup> Thus to parse the registration of Dee's intellectual expression onto 19<sup>th</sup> century lines of positivist discussion of progress, into which science is seen to have "evolved out of magic" or "chemistry out of alchemy," greatly limits our ability to manage as much historical information as possible. There is very little reason to think that Dee himself or his contemporaries would have perceived any intellectual discontinuity in his transition between the PA and the MH.

Secondly, Dee's intellectual life is not so easily parsed into distinct periods. The symbol of the Monas itself appears first in print in the earlier more "scientific" or proto-empirical period of Dee's speculative career.<sup>36</sup> As we pointed out above, the PA is not simply a "scientizing" text on early astronomy<sup>37</sup> and optics and the MH an "occultizing" text on alchemy. Rather the two texts are likely complementary parts of a more or less unified underlying philosophy. Indeed, when Dee edited the PA for its 1568 edition, he only added minor emendations to provide harmonizing linkages between the theories of the 1558 edition of the PA and the MH. Dee is unambiguous, he sees alchemy and

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<sup>33</sup> Clulee: 1988, 67-8.

<sup>34</sup> See Appendix II for an analysis of the role of Dee's astrology in the MH.

<sup>35</sup> Such as the much later pairs easily known to us, "science vs. religion," "alchemy vs. chemistry," "astrology vs. astronomy," and "physics vs. metaphysics."

<sup>36</sup> Note the frontispiece of the *Propaedeumata Aphoristica* and also Aphorism LII Shumaker and Heilbron (PA): 1978, 148-9.

<sup>37</sup> A note on the use of the words "astronomia," "astronomy," and "astrology" – in that Dee used these terms interchangeably we follow him and there is no nuance in the use of one word over another in our analysis.

*astronomia* as two parts of a single practice concerning the sympathetic, causative, and transformative relationships of various ontologically viable entities. The cabalistic or “magical” elements in the MH are part of a continuum of thought not a shift in emphasis or break in his orientation programmatically. As a corollary to Dee’s larger intellectual habit we may also point to Dee’s introduction to *Euclid’s Elements* in which Dee the mathematician weaves smoothly between what we would label number theory and Neo-Pythagorean numerology (which also features prominently in the MH). Dee’s interest remains firmly grounded in mathematical rigor and clarity, indeed even in his communication with what he perceived to be angelic beings we see him correcting the Angels themselves when they mistake a square for a root.<sup>38</sup>

All of this points to a continuum in Dee’s intellectual habit that seems not marked by breaks, such as Clulee’s “metaphysical revolution” which must conform to certain anachronistic taxonomies. Nor is Dee simply a “Hermetic Magus,” a hybrid category that existed primarily in the mind of the Warburg school of the mid-twentieth century, rather he appears to enjoy a sophisticated and dynamic modulation in the various fields of inquiry open to a scholar of his age in his quest for Humanist ideal of “radicall truthes.” Dee’s greatest intellectual strength was not novelty of concepts; rather, it was his attempt to synthesize so many disciplines into a single domain of knowledge. Dee’s thinking in the MH will not be unlocked solely by the reconstruction of his sources and the genealogies of his ideas, rather we must develop some apparatus to understand how he weaves these domains around the sign-act of the Monas itself. Such a task is not comprehensible without a discussion of the significant gains made by scholars and exploring the conceptual dimensions of the systems to which Dee appeals to devise the Monas.

### 1.5 Previous Scholarship of the *Monas Hieroglyphica*

Interest in the MH has been on the steady increase through the late 20<sup>th</sup> and early 21st centuries and a brief survey of the major monographs and articles concerning the

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<sup>38</sup> Casaubon: 1659, 80, when Dee corrects the “angel” Nalvage’s confusion between a “square” and a “roote.”

MH is warranted before we proceed to analyze the contents of the MH itself. While a comprehensive account of all the literature would be impossible, we will focus on the salient features of these inquiries here while exploring relevant sections of each in depth as we proceed through this investigation.

These studies have gone to substantial links to establish in fine detail Dee's sources and the genealogy of the ideas he employs. In effect, we may parse the studies into four uneven currents<sup>39</sup>: the Renaissance Neo-Platonic, the historical-alchemical, the discursive-cabalistic, and the analytical-semiotic. The first current was largely developed, pursued, and declined with scholars of the Warburg school and colors the only scholarly English translation of the MH itself. The second two currents of study far out number the others and were synthesized by Clulee's landmark monograph. The analytical-semiotic, which, to date, only has three published representatives and only one treatment of length, is the newest and poorest represented.<sup>40</sup> We list and describe the major arcs of study in chronological order with their position in the above taxonomy being more or less apparent:

The contemporary study<sup>41</sup> of the MH in English has, in many ways, been inaugurated by the first scholarly translation (with facing facsimile) of the text by Josten in 1964. Other translations such as those by Hamilton-Jones (1947) were largely produced for use in occult practice and did not include the invaluable prefatory letters printed with the 1564 edition. Indeed, only with the Josten translation was it possible for Dee scholars to appeal to a common, trustworthy and critical text in order to build stable

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<sup>39</sup> What we leave out is also telling. There are, of course, numerous non-academic, occult, readings of the MH which are often perplexing and imaginative – many are more enigmatic than the MH itself. A rather recent and length occult reading can be found at: <http://www.jwmt.org/v2n13/sign.html> A systematic study of the reception of the MH since the publishing of the Rosicrucian pamphlets (which seems to have greatly increased the use of the Monas as a universal Hermetic symbol) and including the 20<sup>th</sup> centuries has yet to be done. It seems unlikely that such a study would greatly help in our analysis – the MH has never been clear and a diachronic analysis in this respect would not likely lift the veil.

<sup>40</sup> Indeed, it is even sparser than it appears. Szőnyi's relies on pre-semiotic iconographic analysis, Szulakowska comes the closest, while Håkansson's longer treatment focuses on situating the MH into early modern visual culture generally with little semiotic analysis. This study will be the first lengthy semiotic analysis which attempts to synthesize as many of the intellectual and historical dimensions as possible to produce a gestalt of Dee's philosophy at work in the MH as a text and the Monas as an ontological-semiotic device.

<sup>41</sup> I was torn as whether to include an analysis of Calder's unpublished PhD thesis as a representative of the Warburg school. While interesting in a certain sense, it has not played a great role in the recent analysis of Dee's intellectual habit. Perhaps in the future I can address this, but it would not change the drift of our work and perhaps, for reasons of economy of space, is better left out.

systems for its comprehension.<sup>42</sup> We will focus on the readings of Josten, Walton, and Clulee closely because virtually all subsequent commentaries fall generally within the parameters they define.

Josten reads “the Platonist” Dee’s “magic parable” as a text primarily concerned with the alchemic transformation (read, transmutation) of the individual magus into a spiritually superior form.<sup>43</sup> This process is expounded in three thematic centers in Josten’s reading: a psychological transmutation of the magus, a bi-elemental alchemic theory, and a symbolic expression of the unity of the cosmos. For Josten, the magus is the subject of the MH in such that the book is a study in the process of inner, or psychological alchemy whose aim is illumination in a vaguely Neo-Platonic sense. By a combination of alchemic and astrological magic in which the interior Monas substitutes for the exterior world (alchemy, astrology, optics, etc...) the illuminatory benefits of such practices directly affects to transform the magus.<sup>44</sup> In this reading alchemic elements are analogized into psychological types (mercury becomes the magus, “fiery and sulphurous fumes” become “spiritual, or psychological, dangers rather than poisonous vapours,” and so on). This “process of spiritual transmutation” is that “which his [Dee’s] treatise is chiefly concerned.”<sup>45</sup> Secondly, Josten reads Dee’s alchemic theory as slightly unorthodox focusing on two central elements, Fire (Aries, the process of transmutation) and Mercury (the material to be transmuted) rather than the more common tri-elemental scheme of salt, mercury, and sulfur.<sup>46</sup> While positing such an alchemic reading, Josten admits stultification to some extent as to how Dee imagined such a theory’s instrumentalization. “One would try in vain to go any further in the alchemical interpretation of Dee’s symbol and to derive from the text and information on the practical, or psychological, application of Dee’s hermetic doctrine.”<sup>47</sup> Finally Josten reads the MH as developing a symbol for the “oneness” of the “elementary world.”<sup>48</sup> Such an oneness was shown by Dee in the form of his alchemic theory (the priority of

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<sup>42</sup> Although, as we will see later, Josten’s philosophic pre-suppositions concerning what the MH means deform aspects of the translation attempt.

<sup>43</sup> Josten: 1964, 100.

<sup>44</sup> Ibid., 101-102.

<sup>45</sup> Ibid., 102.

<sup>46</sup> Ibid., 103-104.

<sup>47</sup> Ibid., 104.

<sup>48</sup> Ibid., 105-108.

mercury) and in his Pythagorean theory of numbers which Josten traces to Trithemius.<sup>49</sup> This reading, admittedly, while not comprehensive, represents one of the first sustained scholarly accounts of the text.

Michael Walton's 1976 *Ambix* article seems to be the first reading of the MH as a text whose central concern is, in a broad sense, cabalistic-linguistic in nature. In this reading, the MH is situated in the dual Kabbalistic sense of the cosmographic character of creation and the manipulation of meaning through "alphabetic manipulation."<sup>50</sup> Watson reads the MH as a cabalistic tool for teaching a purer form of astrology through the manipulation of a parent symbol. As Watson puts it, "The grand scheme of the Monas, then, was to reveal the real Cabala as show how its proper object, the Monad, could teach astronomy by divine force 'without words.'"<sup>51</sup> He goes on to describe that Dee's use of techniques first developed for the manipulation of Hebrew letters (notaricon, tsiruf, and gematria) become a "key to understanding the universal harmony" of "signs, symbols and numbers which the astrological, alchemical, and scriptural traditions had developed up to his [Dee's] day."<sup>52</sup>

Clulee's groundbreaking 1988 monograph on Dee's natural philosophy was the first lengthy and sustained attempt to present a comprehensive reading of the MH.<sup>53</sup> Clulee, following Walton, presents the MH as an "alphabet of nature" in which all the symbol sets of alchemy, astrology, and numerology are captured in one symbol which can be manipulated Kabbalistically in order to restore and improve nature.<sup>54</sup> Clulee focuses heavily on Dee's prefatory letter in which Dee declares his intention for the reform, through the MH, of all intellectual disciplines. While Walton did not attempt a sustained reading of the alchemic elements in the MH, Clulee reads Dee's alchemy as a "cabala of metals," following Pantheus, in which all elements are manipulated into their primal states.<sup>55</sup> Clulee understands the Monas as a sort of commentary on nature in which it was "meant to mirror nature because it reflects the geometrical and

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<sup>49</sup> Ibid., 108-111.

<sup>50</sup> Walton: 1976, 116.

<sup>51</sup> Ibid., 119.

<sup>52</sup> Ibid., 181-183.

<sup>53</sup> Clulee: 1988, 75-115.

<sup>54</sup> Ibid., 82-95.

<sup>55</sup> Ibid., 101-105.

numerological principles inherent in creation.”<sup>56</sup> From this reading Clulee develops three principle thematic arcs in the MH: (1) Inferior-Superior Astronomy<sup>57</sup> (the relationship of celestial influences on the elements and their changes (alchemy) which the Monas restores to a more perfect harmony through, (2) Alchemical Magic<sup>58</sup>, how through the Pythagorean balancing of the elemental conditions within a given body perfect proportion can be achieved, finally resulting in (3) Adeptship,<sup>59</sup> which Clulee sees as a “new discipline superior to the traditional sciences” which is the result (or results in) a perfect blend of faith and reason which allows for an illuminated understanding of the cosmos, mathematics, and mystical speculation.

Nuanced and learned studies of the MH, and Dee generally, began to appear more frequently through the 1990’s and even more important monographs and articles have already appeared in the first half of the 21st century. Subsequent approaches to the MH have better situated the work in its intellectual setting and have fallen somewhere between the poles of alchemic or cabalistic reading of the text. Håkansson’s monograph provides a learned and systematic exploration of the Monas within the field of Renaissance hermeneutics and symbolic exegesis to show Dee’s preoccupation with a “universal grammar” which would ultimately restore all knowledge.<sup>60</sup>

Szőnyi has shown the influence of Ficino’s talismanic magic<sup>61</sup> on the MH in addition to situating the Monas within a Renaissance notion of the *exaltio* or illumination of the intellect<sup>62</sup>. Szőnyi has also attempted to situate the symbol of the Monas into the larger field of iconography which Grombrich first developed.<sup>63</sup> Szulakowska has carried such a reading even further, employing Peircean semiotic analysis to understand the Monas as an “index” in which a continuum between sign and signified is carried through a commonly linked sign.<sup>64</sup>

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<sup>56</sup> Ibid., 105.

<sup>57</sup> Ibid., 106-110.

<sup>58</sup> Ibid., 110-111.

<sup>59</sup> Ibid., 111-115.

<sup>60</sup> Håkansson: 2001. While his argument is diffused throughout the text key passages include 73-84, 180-200, 332-337.

<sup>61</sup> Szőnyi: 2001, 1-11.

<sup>62</sup> Szőnyi: 2005, 161-174.

<sup>63</sup> Szőnyi: 1996, 250-63.

<sup>64</sup> Szulakowska: 2000, 2-3, 56-69

The November 2005 edition of *Ambix* was dedicated solely to exploratory issues in Dee's MH.<sup>65</sup> Norrgrén's article has shown the deep influence of Pantheus's *Voarchadumia* (Venice, 1530).<sup>66</sup> Clulee in the same year nuanced his previous account with a more sustained alchemic reading of the MH.<sup>67</sup> Forshaw's article traced the reception of the MH in later alchemic circles and how the symbol was itself transformed to fit various hermetic prerogatives.<sup>68</sup>

Two further articles appeared in the 2006 volume edited by Stephen Clucas *John Dee: Interdisciplinary Studies in English Renaissance Thought*. Karen De Leon-Jones examined in detail the Kabbalistic (and notably, the un-Kabbalistic) aspects of Dee's appropriation of ideas from Reuchlin (especially how both men seem to link Pythagorean and Kabbalistic speculation).<sup>69</sup> Cavallaro has shown the wide range of potential alchemic sources Dee may have employed in the composition of the MH and provides a sustained alchemic reading of the text.<sup>70</sup>

Lehrich developed an analysis in which the creation and use of the Monas is a form of self-conscious, condensed ritual experimentation in which the Monas is externalized and thus is both displaced and ontologically guaranteed through its writing and through it as a process of writing in which Dee, and others, can encounter it in its transformative sense.<sup>71</sup> Lehrich's analysis represents the first reading of the Monas under the light of Post-Structuralism, especially Derridean tropes.<sup>72</sup>

It is clear that while the MH has not garnered numerous studies, those that have appeared have been serious, nuanced, and deeply specialized. What they have produced is an impressive body of the intellectual and culture influences to which Dee appeals to prove the power and application for the Monas itself. While the strengths of such approaches is clear, the gaps they produce also reveal the deep agnosticism with which

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<sup>65</sup> The dedication of an entire issue of *Ambix*, a journal of the history of chemistry, also shows how deeply the alchemic priority in reading the MH has become.

<sup>66</sup> Norrgrén: 2005, 217-245.

<sup>67</sup> Clulee: 2005, 197-215.

<sup>68</sup> Forshaw: 2005, 247-269.

<sup>69</sup> De Leon-Jones: 2006, 143-158.

<sup>70</sup> Cavallaro: 2006, 159-176.

<sup>71</sup> Lehrich: 2007, 48-61 primarily but 48-81 in toto, including an interesting differential reading comparing the Monas to the Japanese Nō theater.

<sup>72</sup> This is clearest in a telling comparison of Dee creation/discovery of the Monas to Artaud's notion that his poetry had been stolen from him before it was written on 53-54. The Monas becomes, in this sense, a Derridean *trace*.

many historical scholars have treated the philosophical underpinnings which led Dee to produce the MH at all. By tracing the contours of the intellectual genealogy of Dee's sources, it is possible to detect lacunae in comprehensibility and inconsistencies in their explanatory power. The MH, a deeply philosophic text, reveals the limits of a purely historical approach to its comprehension in two senses. Firstly, it brings the intellectual practices, such as alchemy and cabala, which cohere in it, to auto-critique through its logic of recursion. Secondly, it does this through a persistent, but implicitly semiotic theory which is inherently mobile but ontologically viable. These two structural mechanisms at work in the MH reveal a heuristic error in a great deal of previous literature: They prioritize singular philosophic features in the MH which the Monas itself recursively deconstructs in order to actualize.



## 2.1 “Through Miraculous Appropriation”<sup>73</sup> – Dee’s Process of Philosophic Assimilation

The vast majority of the readings of the MH, past and present, have been done through alchemic and/or cabalistic lenses. Dee himself was clearly interested in the relation of his alchemic theory to the Monas and the use alchemy had in proving the power and viability of it. Likewise the power of cabalistic speculation was a central aspect in establishing the interwoven power of the Monas into reality itself. These two practices form the dual core of the vast majority of subsequent exposition and Dee’s chief thematic centers in establishing the power of the Monas. Thus it is necessary to investigate the topography of the alchemic and cabalistic (in the forms it takes in the MH) theory as it is deployed in the service of the Monas. Our study will reveal that Dee’s prioritizing of the Monas follows a set assimilative logic in relation to these practices in which they undergo:

- (1) Erasure – in which the dominant philosophic practice (alchemy, cabala, etc...) Dee employs is shown to be lacking or deformed and is thus erased and set into a palimpsestic ontological status which is present-at-hand but in a virtual status. Dee is thus able to erase the power of the previous system but employ its components as he sees fit.
- (2) Intensification – in which the practices is exported (sometimes re-named) from the previous virtual state to be used as proof and thus reinvested in power for the validity of the Monas. Dee thus expropriates these elements to make-up and support his development of the Monas.
- (3) Actualization – in which the intensive practice is set into the recursive logic of the Monas’ semiotic-ontological power and integrated into the other assimilated disciplines as part of a refined, ready-to-hand, extension of the Monas. The expropriated element is then “refined” or “reformed” and re-expressed through the Monas itself.

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<sup>73</sup> I borrow this phrase from Pico, Thesis 11>6 where he describes how the Tetragrammaton actually reveals the trinity “per mirabilem appropriationem.” The term seems to fit Dee’s process of philosophic assimilation into the Monas perfectly. All references to Pico are to the Farmer: 1999 edition.

We argue that while Dee employs the language and theory of alchemy, cabala, Pythagorean speculation, he does so in order to appropriate its contents through the process described above. Thus, as we trace the structure and influences of these systems of thought/practice in Dee's use of them in the MH, we should watch for this process of appropriation to occur. This three-fold process stresses the hermeneutical reprioritizing of the Monas in our reading and the situating of other systems of thought (alchemy, cabala, etc) as subsumed, transformed and re-expressed in the context of the larger project the MH lays out generally.<sup>74</sup> We provide this process first in order to see it occur in our exploration of these systems of thought which both inform the Monas project but are thought by Dee to be supplanted, repaired, and perfectly expressed in the *practice* of the Monas itself. This process occurs doubly, we argue, in Dee's thinking – both as a transfer in terms of signs but also in being of the referent itself. In that alchemy and cabala, in the various senses Dee employs it in the MH, are the primary tools used to construct the Monas device, we explore this dynamic process of “miraculous appropriation” in them at length.

## 2.2 The Alchemy of the *Monas Hieroglyphica*

The MH has been received and interpreted as a text primarily concerned with alchemic theory and there can be no doubt that Dee was deeply interested in alchemy by the times of its composition.<sup>75</sup> One of the earliest commentaries on the text, and indeed the preface to an either lost or aborted c.1600 English translation by Thomas Tymme, states:

His [Dee's] whole purpose & drift is, to give unto ☿ the mastery in Alchimy, and the  $\alpha$  and  $\omega$  in the worke, & for this cause his Monas Hieroglyphicall hath the first

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<sup>74</sup> In other words, Dee *detrterritorializes*, to use the language of Deleuze and Guattari, the previous regime of signs in order to cartographize them, and then *reterritorializes* them by mapping them onto the Monas in a reformed way, within a new, mobile plane of sign-being assemblages.

<sup>75</sup> By 1564 it is clear that Dee owned many alchemical books but his only dated laboratory experiments date from a later period.

in the top & the last in the foote, the Cross going Betweene, which signifies the dejecting and humiliacion of ☿ before his exaltacion.<sup>76</sup>

For subsequent generations of readers the MH was seen as a compendium of alchemic knowledge, an example of the combined power of alchemy and cabala and a symbol for the great work itself.<sup>77</sup> Like many sufficiently obscure but learned texts, the readers would often find in the text just what they were looking for regardless of what it was there or not.<sup>78</sup> The literature concerning the possible sources of Dee's alchemic knowledge are varied and vast and there is significant division about how much practical knowledge Dee held by the 1564 publication date of the MH.<sup>79</sup> Clulee has traced Dee's central sphere of influence to a mix of primarily Geberian alchemy and notes the clear relationship of Trithemius's commentary on the famed *Tabula Smaragdina*<sup>80</sup> on the Monas.<sup>81</sup> Another key source for Dee is the *Turba Philosophorum*, which he owned several copies, the works of Roger Bacon (especially the *Radix Mundi* and to a lesser

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<sup>76</sup> Tymme quoted in Norrgrén: 2005, 221.

<sup>77</sup> The MH seemed to attract negative attention for being obscure in Dee's own lifetime. Andreas Libavius referred to certain aspects of the text as "ineptiae" which prompted Dee to retort in his 1595 *Discourse Apologeticall* that he would answer Libavius' criticisms in a future book. As far as known, Dee never composed the text. Libavius, as quoted in Clucas: 2007, 44, would go on to condemn the "Londinas philosiphus" for referring to "Haec cruces varisque et ductus contulit...Ensoph literam Pythagorae et nescio quae alia ex multis scientiis corrupta maleque adnibita." Despite such a contemporary dismissal, Dee would send the book far and wide as well to various monarchs and scholars. Within a generation after his death it would be printed and reprinted. It seemed that while most disclaimed it obscurantism they simultaneously felt it held profound mysteries. For a comprehensive account of this early reception, especially in alchemic circles, consult Forshaw: 2005.

<sup>78</sup> One may compare such an intellectual apophenia to the reception of perhaps the most obscure book of all time, the *Sefer Yetzirah* and its countless and sundry commentaries.

<sup>79</sup> Clulee: 1988, 96 points to a strange inconsistency in Dee's alchemic education. "The list of fifty-six alchemical works Dee read in July 1556 that marks the beginning of his serious interest in the subject is an imposing body of material from which it is difficult to identity individual works of singular importance for understanding his Monas. The lists of things he owned, however, are not rich in alchemical literature, and there survive few alchemical books and manuscripts with inscriptions dated before 1564." Clulee seems to accept at face value Dee voracious 1556 reading but admits that a later date has Dee not owning many MSS or books prior to 1564. Perhaps future studies of Dee's marginalia, especially like the careful one of Norrgrén: 2005 will help to clarify just what Dee was reading before 1564. Szulakowska, 1996, 10-11, dates Dee's earliest purchase of an alchemical text to 1551 including over 100 Paracelsian texts by 1562 including many doubles (perhaps for the use of teaching). The only surviving records of Dee's own practical, laboratory practice date from the 1580's although it is certain he was working prior to this.

<sup>80</sup> Ruska: 1926 remains a standard study of the *Tabula* in its long and obscure history from Greek, to Arabic, to Latin.

<sup>81</sup> Clulee 2001: 183-184 for Geberian tendencies, 191-197 on Trithemius' influence on Dee.

extent the *Secretum Secretorum*<sup>82</sup>) and nascent Paracelsian elements can also be detected.<sup>83</sup> This study will not attempt to add source data to the discussion in that our focus is on Dee's theory of representation as opposed to his alchemic theory of 1564. Rather, by proceeding via disjunction we want to show that while the MH employs alchemic theory, it is secondary and always in service to the development and deployment of the Monas itself.

Despite the generations of insistence that the text is centrally concerned with alchemy, the MH is not a systematic presentation of an alchemic theory nor is it a laboratory guide for the practical application of a theory.<sup>84</sup> Alchemic references in the MH are unevenly distributed in the text and the alchemic theory developed or displayed therein is anything but transparent. Despite such a muddle, certain salient features emerge from the MH to point to his sources:

1. Dee's theory employs a classic four elemental theory with some Paracelsian interpolations. As Dee states in theorem VII "It will, therefore, not be absurd [to assume] that the mystery of the four elements (into which their several compounds can be ultimately resolved) is intimated by the four straight lines going forth from one indivisible point and into opposite direction." These four elements stem from a common source, the classic *materia prima* of Aristotle's physics (and Geberian alchemy generally<sup>85</sup>), and combine to form all other elements and so can be equivocally dissolved. Although we would like to simply assume the classic quaternary, earth, air, fire, and water, we wonder about the

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<sup>82</sup> Bacon's alchemical theories are quite similar to Pseudo-Geber and it seems likely to me, based on Dee's language that he is consulting Bacon over Pseudo-Geber although he owned both texts. For *Radix Mundi* see translation in Linden: 2003, 111-122 (esp 113-115).

<sup>83</sup> Dee employs the Egg model from the fourth dictum of the first book (discussed more below). Paracelsian elements are explored in Szulakowska 2000: *passim*.

<sup>84</sup> Cavallaro: 2005 attempts to systematize most of the oblique alchemic references in the MH although I think he does so at the cost of reaching too far. For instance, a great deal of the significant portions of his analysis rely on the 1617 *Atalanta Fugiens* which post-dates the MH by some years along with much unreferenced alchemic theory. While it is possible that both sources draw from a common well, it is difficult to prove influence from later to older. Similarly Cavallaro does not work closely with Dee's known sources and his notes do not mention the relationship between the texts he relates to the contents of the MH to and possible books Dee could have read.

<sup>85</sup> A significant difference is Dee's silence on the corpuscular theory which importantly undergirds Geberian theory (and is essential to understanding the development of quantification which gives rise to chemistry). Dee speaks of simply the four elements and their chemical referent without the particulate intermediaries. See Newman 1991: 153-162, and more thoroughly 2001: 291-330 for a discussion of this corpuscular aspect of Geberian alchemic theory.

place of the “Aries Fire” discussed below. These elements, according to theorem XVI, exist in equal and unequal portions which will be perfected balanced through correct application of the Monas itself. Dee is never very clear on how this should happen practically but it seems that, for him, due to a geometric propensity of the relationship between lines and points, the elements too strive toward some perfect “flowing together.”

2. The Sun and the Moon form the primal polarity in which the sun is the active agent (it emits the influence of the “rays<sup>86</sup>”) and the moon is the passive or reactive agent, with the same relation of this dyad to the elemental quaternary.<sup>87</sup> The correspondence between the sun and gold and the moon and silver is doubled as the primal elements and the physical metals unite through the alchemical process of purification.<sup>88</sup> Dee echoes Pseudo-Geber on the nature of the “lunar silver” although in some cases he seems to have in mind a type of hermetic quick silver (the “luna, existens viva” of theorem XXI).<sup>89</sup> Indeed, the sun and moon for Dee seem to have a primal existence followed by a subsequent period in which they can be affected by other planetary objects (the increased power through the “exaltation” of the Sun in the sign of Aries or the moon in the sign of Taurus).<sup>90</sup> This primal sun and moon “infuse their corporeal virtues into all inferior bodies that consist of elements in a far stronger manner than do all the other planets...”<sup>91</sup>
3. The sign of Aries represents the dynamic change of the elements through the application of fire as Dee states it in theorem X “We have added [in the symbol of our Monad) the astronomical sign of Aries, therefore, to signify that (in the practice of this Monad) the aid of fire is required.”<sup>92</sup> For Dee this fiery dynamism fuels and transforms the Monas itself into an internal combustion and

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<sup>86</sup> Cf, PA, 188-9.

<sup>87</sup> MH, 12v, 14r - 15v

<sup>88</sup> Cf the role of Sun and Moon in the *Tabula Smaragdina* with the father as the sun, mother as moon and womb (matrix) in which the elements are then separated. Linden (ed): 2003, 28.

<sup>89</sup> Dee seems to want to fit these elements within the matrix Geberian Mercury theory by using the moon to be the hypothetical Sophic Mercury in addition to the primary passive tendency of the Emerald Tablet. Cf Newman: 1991, 669-674 in Pseudo-Geber on the relationship of Sun, Moon, and Mercury.

<sup>90</sup> This double process best represents Dee’s commitment to the notion that Alchemy and Astrology are two parts of one discipline.

<sup>91</sup> MH, 18v.

<sup>92</sup> Ibid., 13v.

- transmutation.<sup>93</sup> Aries is connected alternatively to the sun (XV, in its “exaltation”), the moon (XI, in its shape), and fire (X, as above).
4. These components, the four primal elements in addition to the sun and moon, along with the fiery<sup>94</sup> dynamism of Aries come together to form, both graphically and alchemically, all others signs and physical compounds (XII) through a series of “revolutions” in which Mercury is made “sophic” and united with the Sun<sup>95</sup>
  5. Mercury, in the form of “his uterine brother,” is given specific priority. This Mercury, the “sophic” mercury, is the result of the perfect combination between solar and lunar forces (and presumably those in between) with the indivisible center of the four-fold elemental quaternary.<sup>96</sup> This higher mercury is linked with the “sun of the philosophers” the exalted and perfect alchemic “gold.”<sup>97</sup> To show how this process is mirrored in the astronomical realm Dee borrows the image of the celestial Egg from the *Turba Philosophorum* as combined with his specific theory of the chemical revolutions. It is to be noted that in the *Turba* mercury is dually represented as the egg itself and the planet/influence within the egg – a possible source for Dee’s mercurial doubling.<sup>98</sup> Like Pantheus in his *Voarchadumia* (discussed more below) notes “the metals of the philosophers are six (for quicksilver [‘Arg. Vivi’] is not a metal, but the matter of metals.”<sup>99</sup>

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<sup>93</sup> Cf Newman: 1991, 727-730 on the need of the influence of Aries to accelerate the process of the purification of Mercury in order to remove “humidity.” Dee extends this, using Astrological correspondences, to it to mean dynamism generally. The relationship of Aries to Mercury would produce the Sophic Mercury, devoid of humidity and thus able to be totally united with the Solar influences.

<sup>94</sup> The role of fire, and the heating via solar and lunar influences, dung, and warm are all qualitatively different in this period of alchemic theory. Thus the Aries fire is different from the burning of wood or the heating in the “Lamina earth” Dee mentions later in the MH. For more on the various fires see Debus 1967.

<sup>95</sup> Clulee 2001: 185 uses Thomas Norton’s *Ordinall of Alchemy* to show that the process of “...recomposition occurs involving seven circulations of the elements presided over by the astrological influences of the planets. The seven circulations are divided into two sequences. The first begins with (1) fire acting on (2) earth producing (3) pure water, leading to (4) air. The second sequence begins with (5) air and leads through (6) clean earth to return to (7) fire.” While Dee’s system does not mirror this process exactly, the from fire to fire is the certainly mirroring the process by which Mercury is purified. Dee illustrates this process on MH 14v.

<sup>96</sup> Note that Dee is not appealing for the use of Sulfur at all. Pseudo-Geber allows for a “Mercury Alone” theory as well with sulfur only being an impurity. It seems likely that Dee is adopting just such thinking. See Newman 1991: 204-208 for an exploration.

<sup>97</sup> This process is described at length in theorem XVIII.

<sup>98</sup> Sheppard: 1959, 143.

<sup>99</sup> Norrgrén: 2005, 243 notes that Dee seems to have accepted Pantheus’ analysis of quicksilver but disagreed about the number of metals. Dee actually inserts a spare notesheet and copies a section from an

6. Although not without parallel in previous literature, Dee's elemental Sun, Moon, Aries, and Mercury all undergo a transformative process of doubling in which they variously unite with each other<sup>100</sup> or become transmuted into a purer form.<sup>101</sup> This transformative doubling, while a process of purification in classical Geberian thinking, is recursive in Dee's thinking and is one example of the recursive logic of the Monas we will discuss in detail during our analysis.
7. Two specifically Paracelsian references are clear in the text. The first is when the Monas itself is referred to as a "gamaaea".<sup>102</sup> It is unclear just what Dee meant but he probably had the idea of the Monas as a type of talisman. Secondly, Dee mentions that the Monas itself can "effect a healing of the soul and a deliverance from all distress...." This medical application of the Monas itself has Paracelsian echoes.<sup>103</sup>

These features represent the larger theoretical arcs employed by Dee throughout the MH. Dee's use of these concepts ranges from axiomatic declarations to minute points of application within a given discipline. While Dee's alchemic theory of c. 1564 is largely a version of the "Mercury Alone"<sup>104</sup>, version of the Pseudo-Geberian (with some Paracelsian interpolations), Dee's propensity to swerve obliquely through the various sources and disciplines he appeals to produces more parabolic digressions more than linear exposition which has no doubt contributed to its odd, dual status of condemnation for unintelligibility and persistent fascination. Like many aspects of Dee's intellectual character, the alchemic theory which emerges in the MH is marked by hybridity,

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earlier work of Pantheus, his *Ars Metallica*, in seven metals are required. In both cases Dee heavily underlines six in the *Voarchadumia* and seven in the earlier *Ars*. In the MH, Dee employs the traditional number of seven but does understand mercury in Pantheus' dual sense.

<sup>100</sup> This process is described with an illustration in Theorem XIII

<sup>101</sup> This process is described in the difficult Theorem XXI in which Dee inverts the Monas.

<sup>102</sup> The word is of Paracelsian origin but mysterious otherwise (perhaps from the Hebrew word for amulet *kami'a*?). Paracelsus felt that a "gamaaea" could "trap astral influences as in a box." See Szőnyi: 1995, 257 for a further discussion.

<sup>103</sup> As Szulakowska: 1996, 11-12 points out, Dee was well acquainted with Paracelsian doctors and corresponded with them although after the MH period.

<sup>104</sup> How long Dee held this version of the Geber theory is unsure. He seems to be actively using sulfur during his later period. Szulakowska 1996: 14, points to Dee's practical use of large quantities of sulfur by 1581 and during his continental work with Edward Kelly and if Kelly's writings are any indication of Dee's later theory, sulfur is certain though to be a central part of the elemental makeup with the sulfur-mercury version in Kelly's *Theatre of Terrestrial Astronomy*. The title of the work is clearly a nod to Dee's language of *alchemia* as *astronomia inferior*.

innovation, with a strong carry-over from previous sources.<sup>105</sup> Dee glides easily from quoting late classical alchemical authors in the original Greek to creating his own neologism to synthesize what, for him, was the very latest in high alchemic theory. What can be compiled from the references in the MH reveal Dee's alchemic theory to be a nuanced structural alteration of previously alchemic theories made to fit the contours of the theoretic primacy of the Monas itself.

Regardless of the exact character of Dee's 1564 theory was, assuming he had just one, a pernicious reading has seriously clouded appreciating alchemic writings, in situ, generally – the unnecessary psychologization (or de-materializing) of alchemic theory notably inaugurated by Jung. Indeed, we should resist readings, such as Josten's, which psychologize the alchemic process as primarily an elaborate allegory for the transformation of the individual subject (the "self," "spirit," or "soul") as a sort of "spiritual alchemy." Such a philosophic priority in Josten's thinking results in an unfortunate anomaly in the English translation of the MH. Likely because they do not fit into this psychologizing tendency, the table of correspondences on 23r and the enormously interesting cosmic map featuring the Pico inspired "Horizon Aeternitatis" on 27r are simply left untranslated with only the explanation that they are "deliberately veiled" while the other is even "less intelligible."<sup>106</sup> This study will explore both diagrams in our analysis.

Calder forwards this as a reading of the MH as part of the Warburg school of reading Dee as a "Neo-Platonic," or more programmatically "Hermetic Magus." Josten's introduction of the MH follows suits and such a reading<sup>107</sup>, although significantly more nuanced and constricted, occurs in Clulee as well<sup>108</sup>. Such a reading is heavily dependant on an unfounded prioritizing of one sentence in the introduction letter Dee attaches to the MH and a very allegorical reading of the text itself.<sup>109</sup> Opposed to such a reading, we

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<sup>105</sup> Mostly directly, as we have shown, the *Tabula Smaragdina* in Trithemius' commentary, the *Summa-Perfectionis* of Pesudo-Geber, and the *Turba Philosophorum*.

<sup>106</sup> Josten: 1964, 111.

<sup>107</sup> Ibid., 100-102.

<sup>108</sup> Clulee: 1988, 111-113.

<sup>109</sup> The key sentence is on MH 7-7v "...he who fed [the monad] will first himself go away into a metamorphosis and will truly afterwards very rarely be held by mortal eyes. This, O very good King, is the true invisibility of the magi which has so often (and without sin) been spoken of, and which (as all future magi will own) has been granted to the theories of our monad." Surely a striking claim but one that Dee does not develop further in the introduction nor does he mention it in the actual theorems. While we are



would offer that Dee is not only primarily interested in the material composition and transformation of substances (as he understood them<sup>110</sup>) but that such an opposition between “spiritual” and “physical” alchemy is simply anachronistic in the mid-16<sup>th</sup> century. Based on Norrgrén’s careful analysis of Dee’s marginalia in his copy of the Pantheus’ *Voarchadumia* (Venice, 1530), we can no doubt conclude that Dee takes up Pantheus’ “anti-alchemical” stand against those that simply color metals as opposed to being able to actually transform and alter them physically.<sup>111</sup> Pantheus’ “cabala of metals,” presented Dee as early as 1559 a theoretical foundation for a quantifiable method by which to measure and manipulate metallic substances. Indeed, Dee’s annotations of the *Voarchadumia* employ the Monas symbol both on the cover and throughout the text.<sup>112</sup> The spiritual or psychological reading of Dee’s alchemic theory seems more a modern attempt at normalizing the theory anachronistically than situating it historically.

The unevenly distributed and unsystematic character of the alchemic references in the MH leads points to the need to situate the alchemic tendency in the text within the parameters of a larger explanatory matrix. It seems that Dee is employing a rather nebulous alchemic theory in order to substantiate the philosophical relationship between the sign of the Monas and physical, as opposed to a “spiritual” or “psychological,” reality. Indeed, we would not be far remiss to understand Dee’s alchemic theory as a physics in which composition and change can be described both in the sub-lunar terrestrial world along with their celestial influences in relation to the or, better, through the Monas itself. Despite being primarily read as an alchemic text, the priority is not the centrality of alchemic theory but the central place the Monas plays in Dee’s vision of the

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slow to simply dismiss it as simply marketing bombast we are certainly not going to hinge a reading of the text itself upon such a statement.

<sup>110</sup> We do not want to be seen as claiming that Dee is a physicalist in the modern sense. As we will show below, Dee’s physics and metaphysics are deeply connected but precisely opposite to the bifurcated, post-Cartesian configuration we currently inherit.

<sup>111</sup> We conclude this based on Norrgrén’s: 2005, careful reading of Dee meticulous experimentation with Pantheus’ “alchemy of metals.”

<sup>112</sup> It is especially written over sections in which mercury is seen to have been “actualized” by solar forces. Indeed, on the cover of his copy of the book, Dee’s places the Monas at the top of a triangle between the dual bases of Mercury and the Sun. On the scroll surrounding the Monas on the cover of MH 1564 there reads “Mercury becomes the parent and the King of all planets when made perfect by a stable pointed hook.” The “stable pointed hook” alludes to the sign and fiery power of Aries.

cosmos and its representation. Alchemy is meant to be proof for the power of the Monas not vice versa.

In Dee's prioritizing of the Monas a disjunction is created which Dee uses to draw a wedge between his "anti-alchemy" alchemy (Monas-centered) and the alchemy perceived as in practice around him. In employing the Monas, Dee indicates that he is separating himself from alchemy as he perceived it practiced stating unequivocally "May the wretched alchemists hence take admonishment and learn to recognize their various errors."<sup>113</sup> This theoretical disjunction formed by Dee's prioritizing of the Monas results in his deployment of several neologisms to distinguish his reformed material theory of elements such as the Pantheus' inspired term "Voarchadumicus"<sup>114</sup> and referring to the process as the "Arioton Art"<sup>115</sup>. While tantalizingly spare in his description of these processes, Dee adopts this strangely anti-alchemical "alchemy" which is crystallized around the reforming and transforming power of the Monas itself. While unrecognizably different in appearance to most eyes, Dee suspends what he perceives as erroneous in "alchemy" to expropriate enough of its content to simultaneously prove the validity of the Monas and undermine the previous practice, alchemy, generally. This anti-alchemical alchemy is then modeled on the contours of the Monas as an image-act of expression in which the practice is made isomorphic to the image-architecture of the Monas and then actualized in Dee's semiotic-ontology.<sup>116</sup> This process of erasure, intensification, and actualization is the central mode of argumentation Dee takes with all philosophical systems he uses to stabilize the priority of the Monas.<sup>117</sup> As we will show in our later analysis, this process bears an isomorphic relationship to the semiotic-ontology at the heart of the Monas' logic.

### 2.3 The Cabala(s) of the *Monas Hieroglyphica*

Dee himself said that he wished to describe his Monas "mathematically, magically, cabalistically, and anagogically..." with the most persistent of these methods

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<sup>113</sup> MH 17v.

<sup>114</sup> Ibid., 7v.

<sup>115</sup> Ibid.

<sup>116</sup> This process is described in detail in our analysis below.

<sup>117</sup> The same process is clearly applied to *Astronomia* on 3v-4r. and to *Language* on 4r-4v.

in the interpretive history of the MH being its “cabalistic” dimension. Within a generation of Dee’s death we find Meric Casaubon writing in the preface to *True and Faithful Relation*, the first printed record of Dee’s “Angelicall Conferences,” that “Dr. Dee, of himself, long before any apparition, was a cabalistical man, up to the ears, as I may say; as may appear to any man by his *Monas Hieroglyphica*....”<sup>118</sup> Indeed, Dee invokes the word “cabala” and “cabalistic” multiple times in the MH and often in several distinct senses in the theorems. We will explore these in this order: The first is the ability for linguistic units to be decomposed into constituent parts in order to reveal mystical or hidden meaning. As we will see below this “cabala” takes the form of alpha-numeric manipulation of words and symbols. In the second sense, Dee seems to link, as Reuchlin did before him, “cabala” in a general sense to (neo)-Pythagorean numerical philosophy. This second sense, while less clearly developed in the *Monas*, would feature more prominently (although less provocatively worded) in his 1570 Euclid Preface. The third sense, Dee’s “cabala of what is said” is his understanding of the relationship of discursive language and linguistic power explored in the next chapter. Dee’s ultimate sense of the “cabala of the real” is developed in the preface and our discussion of what he may have meant will be developed in depth later in the paper.

## 2.4 The “Cabala of the Hebrews”

Whatever Dee knew of the cabala by 1564 was likely drawn directly from Christian sources, especially Pico, Reuchlin, Postel and Agrippa and perhaps superficial use of primary Hebrew texts.<sup>119</sup> It does not appear that Dee took much if any interest in the cabala until around the year of the publication of the MH and to what extent Dee’s knowledge of Hebrew was ever proficient is unclear. Regardless, he seems convinced that there is a relationship between cabala and the use and understanding of the *Monas* itself. Although Dee’s equation of the primitivity of geometric form and language is clear in the preface, there is no theorem which, in simple terms, states that the creation

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<sup>118</sup> Casaubon: 1659, 38.

<sup>119</sup> Harkness 1999: 84-5 points to Dee’s book buying to indicate a surge in the purchase of cabalistic texts around 1560-62. Dee seems to increase his purchase of Hebrew books but in the period directly before the composition of the MH but it is unclear how well of if at all he could read them. Prior to this period, 1556-7, Dee seems to own only the authors mentioned above.

and manipulation of the Monas is a linguistic enterprise.<sup>120</sup> However, the configuration may be manipulated using classic methods of Kabbalistic alphanumeric permuting: Gematria, Notarikon, Temurah, and Tsuruf.<sup>121</sup> It becomes clear that Dee employs cabalistic methods to manipulate the symbol in a way previously only reserved for language, especially Hebrew. Through this process of cabalistic permutation of the symbol(s) of the Monas Dee wishes to both provide proof for the universal application of the Monas symbol but also, according to the preface, in doing so to reform all previous disciplines by a sort of proof-reading the *liber naturae*.<sup>122</sup>

As convincingly pointed out by Walton and developed by Clulee, Dee employs the cabalistic techniques of Gematria, Notarikon, Temurah, and Tsuruf to deconstruct the symbol of the Monas itself in order to display its cosmographic character exegetically.<sup>123</sup> In this sense, Dee likely understood the Monas as a quasi-linguistic token which was subject to the same manipulation previously preserved for biblical exegesis. For Dee, the Monas itself is a type of fractal in which each part contains every other part and can be extracted and rearticulated back into the feedback cycle.<sup>124</sup> Each section can be decomposed into parts and refer to a larger program of central elements. This is very similar to the cabalistic process of *notarikon* in which the first letter of several words are reassembled into a new word or acronym meant to carry the linguistic content of both simultaneously. The Monas itself contains within it a matrix of reference in which the symbol stands as a loaded cipher for its various symbolic capacities. For Dee this fractal like quality of the Monas means that it contains all possible combinations of symbolic knowledge and therefore can correspond to any discrete point of data, be it a

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<sup>120</sup> Dee draws such a conclusion about language and geometry when he forms an identity between the point, line, and circle and the “Iod & Chireck” on MH, 5r. Dee seems to be see an affinity, or co-extension, between the linear quality of the ך although he seems to have compounded two other vowels signs into one word both of which are small points either below (hirik) or at a medial point in a letter (shuruk). Perhaps Dee would have been better served by a Vav ך for the former. Here his knowledge of Hebrew seems confused.

<sup>121</sup> These techniques are attested in a wide range of sources, including Christian cabalists such as Reuclin and Agrippa and involve, as we discuss below, making use of anagramming, the double-duty that Hebrew (and Greek) letters can also be numbers and can thus be subject to arithmetic manipulations, and so on. For more on these techniques see Scholem 1974: 337-343.

<sup>122</sup> This is Clulee’s thesis, described in depth below.

<sup>123</sup> Walton: 1976, 179-180 and Clulee 1988: 92-5. Note that Dee mentions these by name in the preface on 6v in which he refers to the techniques as “Artis suae tres quasi praecipuas claves.”

<sup>124</sup> This is a curious bit of logic we will explore in detail when detailing the Monas’ “logic of recursion” below. It is also a function of the Monas’ peculiar semiotic articulation discussed below.

mathematical number, an alchemic process, or an astrological influence. The manipulation of the Monas in its most mobile can be seen in theorems XII (in which all the astrological signs are derived from and combined with to form the Monas itself), XVIII (in which the Monas is shown to perfectly mediate the celestial and sub-lunar worlds), XX (in which mathematic linear ratios are brought to bear on elemental balances in nature), and XXI (in which the Monas itself is decomposed and inverted to reveal more “philosophical treasures”). These complex matrices of elements in various states of composition potentially form the purest means of expression for the disciplines Dee is intent on reforming.

Dee similarly employs gematric techniques<sup>125</sup> in which decomposed elements of the Monas are shown to be simultaneously numbers and letters. For instance, in theorem XVI Dee decomposes the center cross of the Monas to form two “L”-shaped sections which simultaneously represent the Roman numeral for fifty but also when turned 90 degrees are pronounced, in English, as “El” which Dee gleefully notes is the one of the Hebrew names for God. Dee will go on to derive the number 252<sup>126</sup> from a complicated manipulation of the “+” and subsequently derive the formulation “LVX” from the right angles in theorem XVII. Here Dee seems to want to prove that from the Monas alone he can derive not only astrological and alchemic symbols but potentially all numbers and letters which compose mathematical and discursive language.

Lastly Dee also employs *tsiruf*, indeed he mentions, “the tziruph or themura of the Hebrews”<sup>127</sup> in Theorem XXIII. This process is central for Dee in that the vast majority of the MH is concerned with decomposing and recomposing elements of the symbol to show how they relate to astrological entities and alchemical processes. For instance, in theorem X and XI Dee explains how the symbol for Aries is constructed by a “firery triplicity in the sky”<sup>128</sup> and how the semi-circles which compose the symbols for the sun

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<sup>125</sup> The substitution of numbers and letters in various permutations and arithmetic processes to “reveal” hidden of mystical meaning.

<sup>126</sup> Why Dee felt this number was so important is unclear. In taxonomical breakdown of theorem XXIII Dee seems to associate it with the philosopher’s stone. Josten: 1964, 175 points out that Dee may have found it significant that  $2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 = 252$ . Outside of this, the number does not seem to feature as important in other Kabbalistic literature.

<sup>127</sup> MH, 25v. “Hac ego in Hebraeorum Tziruph (sive Thmura)

<sup>128</sup> Itself commonly linked to the various “heats” of Aries, Leo, and Sagittarius. This “nesting” is a common feature of the logic of the MH.

and moon can be deconstructed to create the astrological symbol itself as well as the alchemic engine of fire which makes the Monad itself dynamic.

This “miraculous appropriation,” to borrow a phrase from Pico, of processes normally reserved for use in Kabbalistic exegesis of Hebrew clearly shows Dee’s propensity to place under erasure the previous practice in order to expropriate it as proof for and for use in the power of the Monas. Dee is clearly unapologetic in this process:

And now I come to the Hebrew cabalist who, when he will see that (the three principal keys to his art, called) Gematria, Notariacon, and Tzyrurph, are used outside the confines of the language called holy, and that, moreover, the signs and characters of that mystical tradition (which was received from God) are brought together from whencesoever....he will call this art holy, too; and he will own that, without regard to person, the same most benevolent God is not only [the God] of the Jews, but of all people, nations, and languages; also that no mortal may excuse himself for being ignorant of our holy language....<sup>129</sup>

Here Dee resituates the Kabbalistic techniques within the Monas such that they act as a syntactical logic in its permutation without which Dee cannot accomplish the needed semiotic mobility of the sign. Again, Dee employs the same threefold process as he did with the practice of alchemy to conform these techniques to the Monas.

## 2.5 The Pythagorean Cabala

Dee’s second sense of the word “cabalistic” seems to imply a conflation with a Neo-Pythagorean speculation not fully clear by 1564 (Dee would speak a bit more in these terms in his 1570 Euclid Preface) but only briefly expounded in the MH itself. This is clearly visible in theorem VIII when Dee speculates “Besides, a cabbalistic expansion of the quaternary [i.e. the elements], in accordance with the customary style (when we say, one, two, three four, produces, in sum, the denary, as Pythagoras used to say; for 1, 2, 3, and 4, add up to ten.” In this case “cabalistic” almost could be replaced with “Pythagorean” with no change in meaning. The conflation of cabala and Pythagorean

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<sup>129</sup> MH, 6v.

philosophy is also found, and likely has its roots<sup>130</sup>, in Reuchlin's *De Arte Cabalistica* (1517). In the dialogue Philolaus, himself a "Pythagorean by persuasion,"<sup>131</sup> describes the Kabbalah as "This kind of knowledge [Kabbalah] most nearly approaches Pythagorean teaching, or so I am given to understand by scholars when they have the time for discussion and are in an expansive mood. They say that Pythagoras derived most of his ideas from this source."<sup>132</sup> The second book itself is a long discussion of a form of Neo-Pythagorean philosophy as dictated by Philolaus to Marranus as Simon (the Jewish Kabbalist) has broken from the group to keep the Sabbath. Of significance to our discussion is Philolaus' presumed distillation of "Kabbalah" which may very well have lined up with Dee 1564 understanding "...Kabbalah is simply (to use the Pythagorean vocabulary) symbolic theology, where words and letters are code things, and such things are themselves codes for other things."<sup>133</sup> While this does not fill in the content of Dee's thinking it does provide some insight into his use of the word and the genealogical conflation of the terms as he would have encountered them.

While this cabalistic sense of the MH was not as persistently employed by later interpreters it was not forgotten. In Petrus Bungus' 1618 *Numerorum Mysteria* a very similar graphical construction of the word "OVUM" is derived from various alchemical procedures in addition from the symbol for Aries. Various other similar relationships are developed which are clearly influenced by the MH.<sup>134</sup> This Cabalistic priority of the text has actually been taken up by most modern Dee scholars in their reading the MH as a type of symbolic language meant for various ends, ranging from developing a Hermetic ecumenical religion, stabilizing the polyvalent discourse of alchemy itself, to reform in the liberal arts generally. Again, and much like in Dee's use of alchemic appropriations, Dee seems to employ the language of the cabala and its techniques in the service of

<sup>130</sup> Pico also links Pythagorean speculation to Cabala, e.g. Thesis 11>55, et al. but not as systematically as Reuchlin.

<sup>131</sup> Reuchlin: 1517, 40/41. "...disciplina Pythagoreum"

<sup>132</sup> Ibid., 42/3. "...quae una facultas (ut sepe audiui doctissimos homines suavi ocio & consiliis oberrimis affluentissime praefente arbitrari) prae caeteris ess qucat philosophiae Pythagoricae cognatior tanquam nihil similis. Nam esse Pythagoram omnia ferme dogmata istinc expifactum aiunt."

<sup>133</sup> Ibid., 238/240. "Cabalam aliud nihil esse nisi (ut Pythagorice loquar) sybolicam theologiam, in qua non [the following five words are so heavily abbreviated and ligatured I cannot accurately transcribe them fully hence I reproduce them as they were printed] << nō mō lřæ ac nōīa >> sunt rerum signa, verum res etiam rerum."

<sup>134</sup> Forshaw: 2005, 253.

proving the priority of the Monas itself. We can point to the scattered and various manners in which Dee uses cabalistic tropes to show his main interest in the MH is certainly not developing a new “cabala” as a continuation or response to previous Jewish speculations (of even much of Christian cabalist speculation) but to *intensify* the cabalistic techniques he has appropriated for service within the Monas itself. What is left out here is the most telling. As De Leon-Jones points out, Dee does not employ any of the “classic” kabbalistic themes such as the priority of Hebrew as a divine language, the sefirot and their place in the chain of being, mystical biblical exegesis and so on all easily accessible to Dee through other Christian Cabalists he undoubtedly read.<sup>135</sup> Whatever Dee meant by “cabala” is drastically curtailed to wrap such ideas around the contours of the Monas and not vice-versa. Rather, he wishes to employ such techniques, at the time thought to be highly powerful tools for unlocking mysteries, to show the priority of the Monas itself.

There can be no question that the primary systems of thought Dee appeals to in order to prove the validity, describe the structure, and display the function of the Monas itself are alchemy (/astronomia) and cabala. Virtually all theorems can be read through one of these lenses but, as we have seen, neither one seems to totally or coherently describe the Monas nor do both theories seem to produce a conjoined theoretical amalgamation. Dee appeals to them unsystematically, unevenly, and always at the service of the priority of the Monas itself. In other words, the Monas cannot simply be the ideographic summation of Dee’s alchemic and cabalistic theories.

In order to render the MH intelligible most commentators have over-expanded either the alchemic or cabalistic readings as their central hermeneutic device. Calder, Josten, and many modern occultists have nullified, or generously liberalized, the materialist alchemical theory by internalizing (or psychologizing) the transformative processes described by Dee into a system for developing inner magical or psychic power. For them, the Monas is a key for inner transformation and exaltation. On the other hand,

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<sup>135</sup> De Leon-Jones: 2006, 146-7. Curiously, however, she states later in her paper “Like the cosmic egg, the Adam Kadmon represents the dimensions of the universe. In essence, the glyph of the Monas is the Adam Kadmon, and the sefirot that compose the figure are contained in the dimensions of the text.” This parallel seems liberal given her position stated earlier in the paper that Dee is not a Kabbalist and “In the MH Dee is concerned with a different sort of revelation, that of a new form of numerical revelation that is closer to Cartesian than traditional Jewish Kabbalistic thought....” Both parallels seem unwarranted and a bit forced.



other commentators such as Walton, Clulee and others have expanded the cabalistic reading to understand the MH as describing a “language of nature.” This language, in their readings, will reform the liberal arts (including alchemy), nature, or both.

As we have shown above, Dee did not write the MH to be understood from a single hermeneutical apparatus or even a summation of various systems. Alchemy and Cabala, as we have described above, while important thematic arcs for Dee in proving the importance of the Monas, are not totalizing or coherent bounding systems into which the MH can or should be read. On the other hand, Alchemy, Cabala, Pythagoreanism, etc are but facets which Dee appeals to in order to prove the power and significance of the Monas and its deep relation to reality itself. Thus, we argue, the prior privileging of one discipline for framing and reading the MH is not only invalid but deeply opposed to the central thrust of Dee’s work resulting in a serious heuristic error. In other words, in order to get a handle on the text commentators have increasingly mistaken the handle for the text. What is needed, therefore, is an analysis of the Monas device itself and the philosophic conditions by which Dee understood its ontological status and its ability to interact with reality at large. The MH cannot simply be the result of a hybridizing of alchemy and cabala and it seems we require a more over-arching theory to get at what Dee means for the Monas to be the *only* component within his “cabala of being. For Dee the “cabala of what is said,” while a facet of the Monas itself, faces a similar auto-deconstruction as it is subsumed, appropriated, and replaced in the prioritizing of the larger project set forward in the MH. Before we move on to a semiotic analysis, we must turn to this notion of the Monas as “symbolic language” in relation to Renaissance philosophy of language and Dee’s evaluation of it within the logic of the Monas.

## 2.6 “The Cabala of that which is said” – Mid-16<sup>th</sup> Century Language Issues in the *Monas Hieroglyphica*

Most directly influenced by the influx of earlier cabalistic ideas, the ontological priority of language seems present but inconspicuous in Dee’s thinking in the early

1560's.<sup>136</sup> Dee does however take part in the booming intellectual fascination with the Hebrew language. As Harkness has pointed out, Dee likely begins to learn Hebrew and purchase Hebrew books as early as 1560.<sup>137</sup> While it is unclear what degree of proficiency Dee achieved with the language by publishing of the MH, he is certainly able to explore the Hebrew Biblical text in the original for exegetical purposes and during the later angelic conferences he is able to work directly with Hebrew names of God and other key words.<sup>138</sup> Likely, his fascination with Hebrew is also related to the greater Humanist interest in re-discovering the perfect, pre-lapsarian language of Adam of which Hebrew was likely to be either a good candidate or that language itself in a degenerated form.<sup>139</sup> As we will see, for Dee, it appears, unlike Reuchlin and Postel and others before him, that Hebrew did not hold such a central position. Such an original language must be something different than discursive communication, even such an ancient one as Hebrew, and must connect all realms into a coherent whole.<sup>140</sup> We are reminded of Plotinus when he says, "It must not be thought that in the Intelligible World the gods and the blessed see propositions; everything expressed there is a beautiful image."<sup>141</sup>

It is during this period between the PA and the MH that Dee also composed his *Cabbalae Hebraicae Compendiosa Tabella*<sup>142</sup> which has since either vanished or in fact

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<sup>136</sup> This tendency seems to gain considerable momentum and by the period of the spirit diaries, in the early 1580s. Dee is very taken with the angelic "languages" in their various forms.

<sup>137</sup> See Harkness: 1999, 85-87 for a discussion of Dee's Hebrew. We are faced with a curious fact. Dee's Hebrew is almost universally thought to be inferior to that of Reuchlin but his private library at Mortlake would go on to contain more Hebrew books than any library in England during his lifetime and for some time after. Dee's bibliophilia likely crossed the line to become bibliomania.

<sup>138</sup> Dee employs Hebrew only once in the theorems of the MH, most significantly on 22v, and it is a highly cribbed text. According to Dr. James Bowley's (Professor of Hebrew and Biblical Studies, Millsaps College) it reads, "Line 1: the salt constantly 6 (days?) soaked/dissolved cloth/skin // Line 2: or after from above/on top to be mixed," matching vaguely with the previous alchemical section. Where this text, a quotation, comes from remains a mystery to me and is being investigated. The other two examples are in the introductory letter with Dee seeming to phonetically spell "aurum" in Hebrew letters ("אָרֻם") and a garbled transliterated phrase "Voar Beth Adumoth" which Josten renders tentatively as "the light (?) of two red ones." Dee's 1564 Hebrew is so idiosyncratic or poor it approaches total incomprehensibility.

<sup>139</sup> Harkness 1999: 79-84 discusses Dee in this context. Our discussion of Hieroglyphics below also explores the non-discursive dimension of this context.

<sup>140</sup> Likewise numbers, and not "those of merchants" but numbers in a much more primitive and powerful sense, held a central place in Dee's conception of the relationship between language and reality.

<sup>141</sup> Quoted in Szönyi: 1996, 258.

<sup>142</sup> Very little is known about this book. It appears to have been addressed to "Paris Adepts" and purports to reveal Dee's work in the "Hermetic sciences" over the previous 20 years of his life. While commonly assumed to be alchemy, Dee was actually lecturing on mathematics in Paris. I would lean more toward a type of Neo-Pythagorean mysticism than an alchemic one in this case considering Dee linkage of the cabala with such thought and the title.

became the later MH. Here Dee claims in the preface of the MH that he developed his distinction between the “cabala of that which is said”<sup>143</sup> which deals with the language-centered mystical-exegetical practice, and the more powerful “realem nominavi Cabalam, sive του οντος” or rendered often as “the Cabala of that which is” although I prefer the “Cabala...of Being.”<sup>144</sup> Unlike the cabalists<sup>145</sup> before him, Dee moves away from discursive language (be it Hebrew or not) to a symbolic unit which forms a continuum between sign and signifier, object of expression and object expressed. This “cabala of being” is the central idea of our later exploration and analysis of the MH itself. First we must explore in quick fashion, some of the linguistic theories at work in the MH itself and Dee’s eventual rejection of the priority of “language” in its relation to the Monas.

## 2.7 The Monas and the Limits of “The Cabala of that which is Said”

While we have discussed how Dee employs some “cabalistic” methods in order to manipulate the Monas we must also nuance this discussion by following Dee’s line of thinking a bit further. Specifically in his separation between the “cabala of that which is said” and the “cabala of the real” both of which seem to inform Dee and be the reactionary source of the MH itself. While in the Monas we see the precursor to the explosion in interest in the slightly later, 17<sup>th</sup> century, interest in developing either a universal language (an idea which persists to this day) and/or the first, Adamic, language, it is not without precedent before him, specifically in the writings of Pico, Reuchlin and Postel.<sup>146</sup> Such theories represent a theoretical framework from which the “cabala of that

<sup>143</sup> “...cabalisticam nomino GRAMMATICAM sive τω λεγομενω”

<sup>144</sup> MH, 7r.

<sup>145</sup> As Wolfson: 2005, esp. 197-220 et passim, has masterfully shown, Jewish Kabbalists (and Sufi mystics) have long held (stretching from the enigmatic *Sefer Yetzirah* through *Zohairic* literature but also nascent in several key *Talmudic* narratives) a philosophic commitment to the notion that language (Hebrew or Arabic) is ontological tied to Being itself as a link, in Hebrew for instance, between “shem (name)” and “guf (body or essence).” The question in our study is to what degree, if any, Dee, by 1564, knew of or was influenced by such a tradition. I am of the mind that he was not directly or his contact was minimal and he thus arrived at a similar but critically distinct position. Dee’s rejection of the priority of Hebrew (with discursive representation generally), the absence of so many other central aspect of Kabbalistic discourse (the sefirot, speculative cosmological layers, theosophical language, etc) and the narrow scope of his cabalistic erudition at this point seem to support this conservative stance.

<sup>146</sup> Our analysis will be brief and focused narrowly on the relation of these thinkers to the Monas. For a more lengthy view see the articles below, for a relevant overview of the ontological status of language and these thinkers see Von Stuckrad: 2008, 430-436.

which is said” arises. This tension between the “cabala of that which is” and “that which is said” itself is likely the result of the semiotic-ontological tension in this extremely volatile period in the philosophy of language in which the logical ends of Nominalism<sup>147</sup> are ever more drawing a line between the represented and representation which may be most overtly seen in the *900 Thesis* of Giovanni Pico della Mirandola.

Pico’s *900 Theses* are not systematic or often terribly coherent, but they are very telling. While dense and provocative many of his pronouncements, especially in the sections on cabala and magic, remain either wildly speculative or the product of some reasoning lost on the modern reader. Regardless, his work in bringing Cabala, through the copious translations of the converted Jew Flavius Mithridates, into the high intellectual fashion of the following centuries cannot be ignored. In his work, we want to briefly bring attention to his oscillations between a Nominalist position and one more commonly linked with Neo-Platonism generally – that is, the ontological relation of *nomina* to their objects.

As Von Stuckrad has pointed out, Pico seems to unknowingly, or uncritically, lay Nominalist and “Realist” positions directly beside each other, such as at 3>5, 6 where Pico writes: “Quiddities possesses their formal existence from eternity from themselves, not from something outside themselves<sup>148</sup>,” then “No definition is adequate to the thing defined.<sup>149,150</sup> While Pico has certainly inherited the ontologized features of languages from the Cabala, especially in regards Hebrew, he incorporates them in a framework of largely Nominalist positions. Indeed, this is due to the final nature of his work – magic, as he understands it, and cabala, as he wants to employ it. As he writes in thesis 9>24 at, “Out of the principles of the more secret philosophy it is necessary to acknowledge that characters and figures are more powerful in magic work than any material quality.” Such “figures and characters” are linguistic or symbolic and thus have some ontological status<sup>151</sup> however they would simply perish if too long in Pico’s, otherwise, Nominalist

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<sup>147</sup> We mean it here in the dual sense as to the question of the existence of universals and of the relationship of words to objects. Both ideas can be said to flow philosophically into each other.

<sup>148</sup> “Quiditates habent ab aeterno suum esse formale a se, no ab extrenseco.”

<sup>149</sup> “Nulla diffinitio adaequat diffinitium.”

<sup>150</sup> Von Stuckrad 2008: 431.

<sup>151</sup> This is clear at 9>25 when Pico writes “Just as characters are proper to a magical work, so numbers are proper to a work of Cabala [note the Pythagorean-Cabala connection here and in 9>23 when he mentions

air. Pico's aim is largely one of an appeal to secret, although world-reforming, knowledge and magic is a central part of that program. While he attempts, often in a very *ad hoc* and uncritical manner, to navigate a problem of which it is unclear he had a conscious awareness. Here we break slightly with Farmer's desire for a more nuanced reading of Pico to situate such tensions as part of a larger, semi-conscious anxiety about the ontological nature of representation generally. For Pico, and so too for Dee, the relationship between certain representations obviously had an affect on what they represented or corresponded to, yet, Nominalism was central to their process of interrogation at several levels leading to a semiotic-ontological anxiety. In other words, their analysis required a Nominalist architecture and procedure but their ends were often "magical" and incompatible with their methodology.

As we have seen in Pico<sup>152</sup>, with Christian interest in Kabbalistic ideas came an intense interest in the Hebrew language and long held Jewish attitudes to its ontological status.<sup>153</sup> Christian cabalists, especially in the northern Italian environment of religious-cultural exchange, despite its serious power asymmetry, were able to gain substantial insights into previously inaccessible realm of Kabbalistic ideas. In addition to this exchange they also made use of recently converted Jews and, to varying levels of proficiency, began to learn Hebrew themselves in order to read central Kabbalistic texts such as the *Zohar*, *Sefer Yetzirah*, *Sefer Bahir*, and Joseph Gikatilla's popular compendium on the sefirot, *Sha'are Orah*.<sup>154</sup> Two figures, one a generation before Dee

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"magical arithmetic"], with a medium existing between the two, appropriable by a declination between the extremes through the use of the letters."

<sup>152</sup> We should not limit ourselves to thinking that Pico alone is representative of this intellectual current. Among others, we should add to this list the Augustinian cardinal Aegidius of Viterbo, philosopher Pietro Colonna Galatino, bishop Domenico Grimani, Franciscan friar Francesco Giorgi, German scholar Johann Albrecht Widmannstetter.

<sup>153</sup> The literature on this subject is vast. We are most directly informed by Idel: 2002 and Wolfson: 2005.

<sup>154</sup> The complex exchange of cultural information between Jews, Christians, and Muslims in the early modern period is incredibly rich, complex and only recently probed in depth. Mainly northern Italian figures have provided key insight into, at times polemical, others fluid, exchange across religious lines in the 15<sup>th</sup> and 16<sup>th</sup> centuries which would prove essential to the Humanist movement generally. Figures such as the Jewish Averroist Elias del Medigo (another translator of Pico who would eventually become disenchanted with his syncretism), Kabbalistic philosopher Yohanan Alemanno, linguist Elia Levita, translator of the *Zohar* Baruch of Benevento, philosopher and rabbi Judah ben Jehiel Roфе, and others are among key figures on the Jewish side (depending on conversion status, although even a converted Jew was still often "other" – such as the famed Flavius Mithridates) of this exchange. Important studies are Coudert and Shoulson's 2004 edited volume *Hebraica Veritas?*, Idel's ongoing studies of Yohanan Alemanno, Gareth Loyd Jones' *The Discovery of Hebrew in Tudor England* is the primary study of Hebrew in English speaking areas, Wirszubski's 1989 *Pico della Mirandola's Encounter with Jewish Mysticism*

and one his contemporary (in fact, Dee met him in Paris), feature most prominently in the linguistic reading of the MH: Johannes Reuchlin and Guillaume Postel. It would be impossible to describe the rich variety of their appropriation of Kabbalistic sources and thus we will remain close to those issues for our reading of the MH.

Schmidt-Biggeman has explicated how Reuchlin links the Tetragrammaton, the ineffable four-letter name of the biblical God, with a host of quaternaries, the most telling of which are the four elements, the four dimensions of a body (point, line, area, volume), and the Pythagorean quaternary. Reuchlin describes how artists and scientists had employed the four-fold system to:

...chisel the universality of all things in a true imagery and form it in one image so that there would be no need to pronounce the highest name again, since they were afraid that too frequent usage would lead to its contempt. Of course they called this image holy, and the sculptors were named as “Hieroglyphers.”<sup>155</sup>

For Reuchlin the tetragrammaton was the “wonder working word” in which all knowledge, especially mathematics, was a condensation thereof. The Adamic language, for Reuchlin was indeed Hebrew, but only in how the letters emanated out of the primal “hieroglyphic” characters of the tetragrammaton. First from the primal Hebrew letter Yod<sup>156</sup> in which “A Monad, begetting a Monad, reflects itself in ardor<sup>157</sup>,” through the unfolding of essence and existence (Heh), the Trinitarian “copulative conjunction” of the Vav, and finally the final Heh which broadcasts all creation in the form of the rest of the Hebrew letters. Reuchlin borrows a classic Kabbalistic theme of the creation of the universe through the Hebrew alphabet but also nods to the logical conclusion of such thinking. If the Tetragrammaton is the method by which creation came into being, it must also be a conduit for its manipulation. Such an idea would be picked up by Agrippa

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show the in depth role the convert Flavius Mithridates played being both the first and one of the most laborious translators starting around 1486, David Ruderman’s 1988 *Kabbalah, Magic, and Science: The Cultural Universe of a Sixteenth-Century Jewish Physician* which studies of Italian Jewish physician and occultist (and possible convert) Abraham Yagel.

<sup>155</sup> Reuchlin: 1494, rpt. 1964, 68 quoted in Schmidt-Biggemann: 1999, 103.

<sup>156</sup> Postel below, along with Dee MH 5r, both place significant importance on the priority of the Yod.

<sup>157</sup> “Monas, monadem gignens in se unum reflectens ardorem”

and many contemporary magicians and there can be little doubt of Dee's familiarity with such a method.<sup>158</sup>

The French polymath Guillaume Postel was an amazing linguistic by any standard. He traveled widely and his knowledge of Semitic languages was unsurpassed in his day. Kuntz<sup>159</sup> shows that Postel consistently held that Hebrew was the language from which all other languages emerged, the best taxonomy for accounts of created things, and also the most pure language for mathematics and science.<sup>160</sup> He also accepts the relationship between the Tetragrammaton and the Pythagorean Quaternary. For Postel, Adamic Hebrew and creation shared a direct, non-arbitrary relationship. Like Reuchlin, Postel would prioritize the Hebrew letter Yod as the basis for geometry, the rest of the Hebrew alphabet, the Zodiac, and so on. All of this pointed, for Postel, to a grand reunification of language in which Christianity and sectarian political strife would be reconciled in a divine *restauratio* with Venice as the new Jerusalem.

What Dee, Reuchlin, Pico and Postel share is the notion that there exists a non-arbitrary system of signification, likely defined by its antiquity and thus its nearness to the divine, which can be employed by mankind in order to reform the world. It is clear, however, that in the MH Dee breaks with previous thinking. Most significantly is Dee's break with (1) the priority of Hebrew as the best candidate for the Adamic language<sup>161</sup> and (2) the priority of the Tetragrammaton as the ontologically central device from which creation is said to flow.<sup>162</sup> In this sense, what remains is only the general idea that the three share in common – the search for a primal source from which nature emerged, which remains hidden in nature, and through which nature can be manipulated. While the

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<sup>158</sup> This discussion closely follows Schmidt-Biggemann: 1999, 102-108. Note also Reuchlin's link of Pythagorean philosophy and cabala.

<sup>159</sup> For a detailed description of linguistic issues see Kuntz: 1999, 123-149.

<sup>160</sup> Note in Postel the early shift from the ontology of language to philology. Postel, like Dee lived and though largely in this rupture period and their writings betray this ambivalence.

<sup>161</sup> Here we must draw a distinction. The Adamic was the first language and was considered "perfect" in its ontological relationship to its method of representation. Such an idea certainly had currency in the 16<sup>th</sup> century and before. The universal language was variously considered linked with the Adamic in the mid-17<sup>th</sup> century, such in Van Helmont's 1667 *Alphabet of Nature*, but also could be created ad hoc, an idea much more linked to late 17<sup>th</sup> century in writers like Leibniz. To avoid anachronism we should resist conflated the ideas out of hand. For more on this distinction see Coudert: 1999 & 2007.

<sup>162</sup> Dee does, however, strongly nod to such a theory in the introduction of the MH at 5r in which the tetragrammaton emerges out the Yod which Dee links to the straight line noting that such letters could not have come into existence with divine aid. However, he gives the same status to Greek and Latin just above this comment. For Dee here, they all emerge from a central point which he, of course, calls the "Monas." As Håkansson: 2001, 188-189 has pointed out, Dee is likely following Proclus here.

influence, especially in Dee's language, of Reuchlin and Postel is apparent, there is a theoretical break which cannot be glossed over. In this sense, Dee's Monas is a greatly de-theologized cabalistic device.<sup>163</sup>

While Dee places the "cabala of what is said" lower than "the cabala of being" he stressed its linguistic application and power. In the dedication letter presented as a preface to the MH, Dee declares that the Monas itself will, "...either establish this sacred art of writing as the first founders of a new discipline, or by his counsel renew one that was entirely extinct and had been wiped out from the memory of men."<sup>164</sup> For Dee the "cabala of what is said" is not simply a trifle to be discarded. Firstly, Dee claims, the Monas will "admonish them [grammarians] in a friendly way that the first and mystical letters of the Hebrew, Greeks, and the Latins, issue from God alone and were [by him] entrusted to mortals;" and, to mirror the Monas itself, "[also] that (whatever it may be the custom of human arrogance to vaunt) are derived from points, straight lines, and the circumferences of circle."<sup>165</sup> Secondly, the Monas will explain the reason "for the shapes of letters, for their position, for their place in the order of the alphabet, for [their] various [ways of] joining, for their numerical value, and for most other things (that must be considered with regard to the primary alphabets of the three languages<sup>166</sup>)."<sup>167</sup> Dee goes on to link this alphabetic power to "...He, who is the only author of mysteries, has compared himself to the first and last letter" and finally how the Monas will, much like in Postel's linguistic-utopian vision, unite those "... (compelled by truth, if he may understand) he too will call this art holy, too; and he will own that, without regard to person, the same most benevolent god is not only [the God] of the Jews but of all peoples, nations, and languages."<sup>168</sup> Dee, however, given his Neo-Pythagorean disposition, eventually "dismissed those philosophers of letters and of language" to move toward a higher form of proof, one grasped by the *dianoëa*<sup>169</sup> itself – mathematics, itself

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<sup>163</sup> This is, perhaps, more radical than it first appears. In fact, Dee states on MH 4r "Mercury may rightly be styled by us the rebuilder and restorer of all astronomy and an astronomical messenger by our IEOVA..." In other words, this process is Hermetically mediated, likely, by the Monas itself.

<sup>164</sup> Ibid., 4r.

<sup>165</sup> Ibid., 5r.

<sup>166</sup> Almost certainly Latin, Greek, and Hebrew.

<sup>167</sup> Ibid.

<sup>168</sup> Ibid., 6v.

<sup>169</sup> The technical Platonic mental faculty which directly "grasps" or intuitively mathematical or analytical truths.



too being eclipsed.<sup>170</sup> Again, Dee is moving in the same process of erasure, intensification, and actualization in his theory of language.

For Dee, the symbol of the Monas was grounded simultaneously in its geometric basicity in conjunction (or, indeed, correspondence) with the chief astrological entities. The point, the straight line, and the circle not only are the primitive elements of the Monas itself but also the inverse insofar as, “by virtue of the point and the Monad that all things commence to emerge in principle.”<sup>171</sup> While Dee makes it clear that the Monas is ostensibly composed of these primary geometric forms, his larger point is to refer us immediately to his theory that the Monas itself is, in fact, the origin for the forms. These basic shapes and their respective correspondences compose the elements for a new “mystic language”<sup>172</sup> in that the link between physical objects, especially astrological objects, is both expressed more purely through the Monas (the objects themselves “emerge in principle” from the Monas) and when studied through this lens the disciplines are thereby purified.

Dee is clearly interested in how the “cabala of that which is said” proves the Monas as relating to the deeper “cabala of being.” Dee goes on to list how his Monas will, as Clulee has pointed out clearly, either “improve and transcend” certain disciplines or “subsume and elucidate them.”<sup>173</sup> This process is accomplished through a twofold mechanism in which a reformation of language itself occurs (the shift to symbolic, non-discursive language more directly tied to the objects of inquiry) and a hermeneutical revolution (in which the new symbol is used to proof-read the *liber naturae*). The vagaries of the “vulgar grammarians” and “vulgar cabalists” must be superceded by a purified post-discursive semiotic system in which the objects described are intimately linked to the objects which describe them. For Dee the idea is not simply finding the language in which sign and signifier are minimally arbitrary but to invent/discover a new system of representation in which they are co-continuous. The “cabala of that which is said” points away from itself, beyond its power to simply reform the liberal arts, to the deeper relationship between the Monas and being itself. This primal semiotic ontology is

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<sup>170</sup> Ibid., 5v.

<sup>171</sup> MH 12v. “Puncti proinde, Monadisque ratione, Res est esse coeperut primo.” Dee is probably employing in a double entendre here between the Pythagorean Monad and his symbol.

<sup>172</sup> Ibid., 22r.

<sup>173</sup> Clulee: 1988, 82-5.

the operative philosophic notion behind Dee's notion of the "cabala of being" which grounds the explication of the power of the Monas. Dee can be said to side-step the larger Renaissance project for the search for the primal language – the *Ursprache* – by moving directly, we argue, into the realm of what is now called semiotics.<sup>174</sup>

## 2.8 The Iconology of the Monas

Thus far we have explored various intellectual practices which inform and instruct the structural and informational content of the MH including alchemic theory, various "cabalistic" techniques, and finally a version of the "symbolic language" theory put forward most recently by Clulee and others. As we have seen, the primary failure of these systems to be a totalizing hermeneutical foil is that they all de-prioritize the Monas itself as the central concern of the text: rendering it a summation of alchemy theory/symbolism, cabalistic speculation, or another expression of the Renaissance desire for a perfect or original language. For Dee, as we have stated above, the Monas itself is the priority of the text and any theory for reading the MH must share this concern. While the "linguistic" reading of the MH brings up closer to a comprehensive theory for clarifying the underlying philosophic strata of Dee's conception of the power of the Monas itself, the tool quickly deconstructs when we consider in detail the slippage between Renaissance and Modern concepts of the relationship between symbolic representation and language more generally. This will provide us the necessarily theoretical space to transition to our semiotic analysis.

Dee, as we have shown, discounts the "cabala of that which is said" as being the chief goal in the development (or, discovery) and application of the Monas itself. For Dee, the non-discursive<sup>175</sup>, poly-syntactical<sup>176</sup> quality of the Monas' method of

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<sup>174</sup> We can nuance this with a bit of micro-history. It seems that Dee's thinking exists somewhere directly in-between the event horizon of Nominalism's separation of represented and representation (what von Stuckrad: 2008, 428-9 has provocatively called the "tragedy of Nominalism") and the eruption of an "esoteric" rejection of this thinking. The MH seems to have been developed in the twenty or so years in which the semiotic-ontological anxiety was perceived (and thus viewable to us now) but not theoretically articulated. The MH, we argue, perfectly captures this undecideable, transitory period in philosophy of language.

<sup>175</sup> Perhaps, "trans-discursive" is the better word here in that Dee clearly held that the Monas could and does best communicate information.

representation is key to its importance. The MH is unavoidably about the philosophic primacy of a representational device and not a concern with discursion (as a syntax for representational mediation) or simple symbology (as a sensible expression of such mediation). In other words, while the MH is primarily concerned with the inter-relationship between material, form, and its representation, it does not distill the method of representation into language or by simply being a go-between for the real and its expression. In this sense, Clulee's notion of the Monas as "symbolic language" begins to unravel and we must transition our discussion into the more technical field of semiotic analysis.

Indeed the problem may be pinpointed to a lack of analysis in the "articulation" of the Monas itself. Articulation, in theoretical linguistics and semiotics, refers to the structural composition of a given sign.<sup>177</sup> A sign is said to have single articulation if it is non-reducible to other meaningful signs. A red traffic light indicating "STOP" is only composed of one sign, the redness of the light, and cannot be reduced to further signs. A sign is said to have double articulation when it is composed of minimal units which do not have meaning in themselves. English<sup>178</sup> words, for instance, are made up of letters which have no meaning in themselves, but serve to compose systems which do (/a/, /b/, /t/ mean nothing as letters but serve to compose words and, importantly, differentiate between them, e.g. /bat/) vs /tab/).<sup>179</sup> Signs can therefore be of single articulation, double articulation, or no articulation.<sup>180 181</sup>

This is quite tidy but in its application to the Monas, and perhaps Renaissance semiotics generally, a slippage appears. The Monas clearly has double articulation: as a sign it is composed of minimal elements (the point, line, and circle) and can be

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<sup>176</sup> As we will see in the Kabbalistic transformations, and later in its ability to deconstruct and invert, the Monas seems to express a number of syntactical paradigms – linguistic, astronomical, alchemic, Pythagorean, etc.

<sup>177</sup> Here we follow Nöth: 1990.

<sup>178</sup> Hebrew words can be more playful, a polyvalence taken advantage of by Kabbalistic exegesis.

<sup>179</sup> Note that this differential, differential relation is structurally vertical. Horizontally, a sign may be complex (like written signs for numbers, /sixty-four/) but each part remains composed of this vertical stratification.

<sup>180</sup> A sign with no articulation is a series of signs which have no direct relation to each other and are not made up of reoccurring elements. For instance, a sign system which links days of the week on which a child was born with the disposition of that child.

<sup>181</sup> We are simplifying a complex discussion here to make a point. While the conversation of articulation in signs systems is more nuanced than discussed here, our point in the following paragraph is not significantly disturbed.

configured such as to produce a huge array of representing elements (alchemic signs, letters, mystical truths and relations) and thus bear a similar economy to the way letters and words relate. However, these primitive elements in Dee's thinking also had meaning<sup>182</sup> and because of the recursive logic of the Monas could themselves feature dually into the expressive features of the Monas in its various permutations. This process of recursion produces a potentially infinite semiotic loop in which the point of expressive articulation is undecideable in the decoding of the Monas' representation. Thus, the Monas shares a certain *apparent* relation with language in its double articulation but because of its recursive logic the border between its articulation strata is permeable and impossible to determine, something which would undermine the ability of a language to operate.

This misapplication seems to have emerged from the unsystematic use of the idea of a "symbolic language" and the fast and loose application of both components, "symbol" and "language," in an uncritically, equivocal manner. As we will discuss below, "symbols," "icons," and "language" all have technical features which, while inter-related, cannot be easily conflated as they have very different functional and expressive characteristics.

## 2.9 The Monas and Iconology of Renaissance Hieroglyphs

The notions of "symbol" and "language" have themselves undergone significant mutation over the centuries and without situating these terms in the theories of 16<sup>th</sup> century representation we run the risk of fallacious anachronism. Thus to avoid this error of equivocation, we must look differentially at the status and function of such terms in both modern and early-modern theories of representation. To make this point clear we can turn briefly to how Renaissance thinkers conceived of the function of Egyptian Hieroglyphics. Marsilio Ficino most succinctly states the non-discursive theory of Hieroglyphics in the Renaissance mind, "When the Egyptian priests wished to signify divine mysteries, they did not use the small characters of script, but the whole images of

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<sup>182</sup> The point is referenced to the "earth," the line is connected with the "elements," and the circle variously operates as the "sun" and other signs. Theorems I-IV, VI, VII treat these relations.

plants, trees, or animals; for God has knowledge of things not by way of multiple thought but like the pure and firm shape of the thing itself (sed tanquam simplicem firmamque rei formam).”<sup>183</sup> As Lehrich points out, the two salient features of Egyptian Hieroglyphics, derived primarily from Horapollo’s *Hieroglyphica*, were (1) secret, priestly ‘writings’,<sup>184</sup> which contained unlimited sources of information about nature, God, and the cosmos, and, in addition, were (2) allegorically related to reality and therefore non-discursive in nature.<sup>185</sup> For example, a circle would represent the sun, which, in turn, would represent eternity.<sup>186</sup> These combinations were both apparent but also deeply nested and inter-related, producing an infinite variety of meaning and expressability. As Lehrich succinctly puts it, “The idea is that the hieroglyph is perfectly transparent and extremely dense.”<sup>187</sup> Thus, for Renaissance thinkers this allegorical method meant that rather than passing through the “fallen” world of post-Babel languages, one could, as Dee puts it, “speak hieroglyphically, without words.” Dee’s use of the word “hieroglyphic” is often used to precisely capture this dialectic. In many cases, Dee uses the term to connote something deductively obvious<sup>188</sup>, while in other places he uses it to mean something to the effect of “allegorical,” “dense,” or better, “encoded”<sup>189</sup>, but the term is always thematically consistent with its non-discursive quality. There was, for thinkers of Dee’s time, little connection between the spoken language of the Egyptians and the perceived allegorical symbol-set of their Hieroglyphics.<sup>190</sup> They were, on the other hand, an

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<sup>183</sup> Ficino: 1576 (*Opera Omnia*), 1768 quoted in Gromrich: 1978, 158-9.

<sup>184</sup> We use the ‘ ’ to capture the difference between our notion of writing as “graphic speech” and this Renaissance notion discussed below.

<sup>185</sup> Lehrich: 2003, 128-9.

<sup>186</sup> Horapollo: 1505, 57.

<sup>187</sup> Ibid., 129.

<sup>188</sup> E.g. MH, 5v “good Hieroglyphical arguments (optimis argumetis hieroglyphicis)”

<sup>189</sup> E.g. MH 4r “that all of this should be embodied in a single Hieroglyphic symbol (Et haec omnia in Uncio ...Charactere Hieroglyphico...)”

<sup>190</sup> Dempsey: 2000, nuances this view. He separates the Renaissance understanding of hieroglyphics into three unevenly distributed groups. The Neo-Platonic (366-372) which corresponds to our notion above, the Discursive (372-4) which can be “read” because their meaning has been habitually stabilized, and Paronomastic (374-376), the closest to a relationship between icon and phonemic identity, which is a sort of rebus. In Dempsey’s analysis the Neo-Platonic understanding is by far the greatest employed – the others mostly begin to exist in the late 16<sup>th</sup> and, especially, in the 17<sup>th</sup> centuries.

infinitely dense repository of secrets which could be unlocked through the gaze of the hierophant and none-else besides.<sup>191</sup>

This goes to the heart of an understanding of the incommensurability between Renaissance and Modern theories of language and representation. One of the central tenets of modern linguistics operates by separating between a theoretical “natural” and “conventional” language to conclude that all language, written and spoken, is, in fact, arbitrated by cultural and historical factors.<sup>192</sup> The Renaissance thinker like Dee would have likely had a slightly more nuanced view. As we have seen in Postel’s thinking, languages were both divinely ordained (created by God or the result of an ontological continuity with the cosmos) and thus “arbitrary” but also connected, in the pre-Babel period, perfectly to the objects which they represented and were thus simultaneously “natural.” Leirich points out precisely this thinking in Agrippa in such all languages are “not so disposed, and formed by hap, or chance, nor by the weak judgment of man, but from above, whereby they agree with the celestial, and divine bodies, and virtues.”<sup>193</sup> Dee echoes this sentiment, although with the Monas in priority, when he states that the Monas will restore current astronomical symbology, reveal the correct origin of letters in all languages as we have pointed out above. Thus, while the Monas would certainly, in Dee’s view, been able to incorporate and produce linguistic data, linguistic data could not have captured and produced the Monas. The quest for the Adamic language, while certainly known and of interest to Dee, is by-passed for a non-discursive system of representation.

A similar critique must be made of the notion of the Monas as “symbolic.” Much like the divide between “natural” and “arbitrary” language, many modern semiotic systems (we are following specifically Eco on this point) also divide between an “icon (non-arbitrary)” and a “symbol (arbitrary/conventional).” To situate ourselves in this distinction it is useful to engage and show the limits of Panofsky’s theory of iconism which separates between pre-iconography, iconography, and iconology.

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<sup>191</sup> This “hierophantic gaze” is mentioned explicitly by Dee at MH 17r “Raising towards heaven our cabbalistic eyes (that have been illuminated by speculation on these mysteries [the Monas]) we shall behold an anatomy precisely corresponding to that of our Monad...”

<sup>192</sup> The contemporary sense in which such semiotic and linguistic features are arbitrary character data goes back to Saussure’s *Cours*. Eco has continued this thinking with various attacks on Panofsky’s theory of Iconism.

<sup>193</sup> Agrippa quoted in Leirich: 2003, 135-6.

The pre-iconographic image is created and expresses its meaning prior to cultural mediation.<sup>194</sup> It is thus non-arbitrary and universal – the smiling face, a shining sun, a pointed object, or a countryside. For many Renaissance thinkers, the hieroglyphic image and therefore many magical images (such as those with celestial markers in Dee’s thinking<sup>195</sup>, angelic/demonic sigils and Paracelsian “signatures”) were likely to have been understood in this sense as well. Dee certainly felt that the mathematical character of the Monas could be instantly grasped by the *dianoëa*, that the structures produced “naturally” and thus “really” by geometry were basic to the formation of the Monas and likewise the cosmos. For Dee this basic character of the composition of the Monas affirmed its ontological primitivity and power.

The iconograph itself was based on the previous structures but filled-in with culturally informed, and thus arbitrary, data – the image of a crucified man, a dwarf holding a fish, a young boy with winged feet, etc....<sup>196</sup> These more arbitrary elements follow a logic of representation and can be created, memorized, reproduced, and taught. Likely for the Renaissance thinker such elements were extensions, of greater or lesser efficacy, of the previous, pre-iconographic structures. Rather than being learned, however, they were “discovered” or “recalled” in anamnetic sense.<sup>197</sup> The logic of correspondence webbed them back together into a coherent system of divinely ordained, primitive unity from the distended unharmonious world of matter in a chain of representation. In such a way the Monas is able to produce, slightly down the chain of being, the “cabala of that which is said” in terms of specific letters, alchemic formulae, and astrological symbols.<sup>198</sup>

Iconology is the ability to derive meaning through the application of a theory to the two previous structures of presentation as Panofsky states “through synthesis rather

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<sup>194</sup> Panofsky: 1982, 28-29, 33, 40.

<sup>195</sup> In MH theorem XII Dee discusses how the primal five signs of the Zodiac are derived directly from the point, line, and circle and thus are the most basic and thus “pure” in their transmission from the Magi.

<sup>196</sup> *Ibid.*, 35.

<sup>197</sup> Note that Dee speaks in terms of “restoration” of the astrological signs, alphabets, and mathematical transmutations. We cannot but help of the influence of the Lurianic notion of “Tikkun.”

<sup>198</sup> It is to be noted how Dee usually describes these as in their current lower form but in the Monas they are restored. The Astrological signs on 4v are now “quasi-barbaric” but in the Monas can become “...characters imbued with immortal life and should now be able to express their especial meanings most eloquently in any tongue and any nation.”

than analysis” – thus Marxist, Feminist, or Neo-Platonic iconologies.<sup>199</sup> For the Renaissance interpreter it is not a simply a question of coherent comprehension of meaning but also participating in the power dynamic of the ontological connectivity of sign-signified sets. The ability to correctly read the “book of nature” entails the ability to “reverse-engineer” the process of representation as well. Such a feat directly underlies Ficino’s theory of correspondences for his creation of amulets in the chapter of *De Vita Coelitus Comparanada* as he describes it “On the virtue of imagery, what power pertains to the figures in the sky and on earth, which of the heavenly configurations were impressed on images by the ancients, and on the use of those images.”<sup>200</sup> While, Grombrich situates such a thinking firmly within the scope of Renaissance Neo-Platonism stating “Philosophically it should be clear why the Christian Platonists had to lay such stress on this interpretation of symbolism as a code derived from God and handed down in history: in the Platonic interpretation of symbols the symbol is the imperfect reflection of the higher reality which arouses our longing for its perfection.”<sup>201</sup> While likely, Grombrich may not be taking serious the importance of the appropriated Lurianic notion of “tikkun – reparation” which significantly informs the discussion of Christian Cabala and hermeticism.

Dee’s notion of the reparation of iconography in this sense can easily be read in such a light of a concept like “tikkun.” The Renaissance constructor and manipulator of icons is not at all playing a game of semiotic deference in which the play of meaning is perpetually created by the viewer. Rather, as we will see in Dee’s MH, there is a real attempt to provide readers with a semiotic device which closes the loop, through a reparation in the chain of being itself, between the real, its representation, and the mental process which unites them both in the active intellect and in reality itself.<sup>202</sup> Again, while Warburg uses the term *Denkraumverlust* to describe, as Grombrich puts it, “this tendency of the human mind to confuse sign with the thing signified, the name and its bearers, the literal and metaphorical, the image and the prototype” this manner of intellection in the form of a breach or as cognitive dissonance does not seem to occur in the thinking of

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<sup>199</sup> Panofsky: 1982, 30-32.

<sup>200</sup> Szőnyi: 2001, explores this relationship between Ficino’s talismanic magic and the Monas in depth.

<sup>201</sup> Grombrich: 1978, 150.

<sup>202</sup> Indeed, this could serve as an ad hoc definition for much of Renaissance magic.



Agrippa, Dee, and Renaissance semiotics generally.<sup>203</sup> The “symbolic” and the “real” exist on a continuum rather than in dichotomy. Thus the notion of the Monas as being simply “symbolic” in the modern sense so simplifies the complex character of representation, both in its Renaissance and Modern expressions, that it profoundly deforms our ability to make sense of the MH itself.

As we have seen, the MH presents the reader with a serious hermeneutical difficulty. The Monas itself is not clearly simply a language and supercedes the “cabala of that which is said” in that it seems to exist prior to linguistic expression, reforms post-Babel languages, and is expressed “hieroglyphically, without words.” Secondly, it is certainly not a transitional state between pre-iconographic and iconological expression and does not yield itself to fitting easily into Panofsky’s iconographic taxonomy either. The Monas, for Dee, is dialectically composed of pre-iconographic forms and the fount from which they flow, are manipulated, and have their most “proper” meaning iconologically. In a strange way, the Monas is then iconologically *sui generis* in Dee’s thinking. This iconographic mobility most importantly occurs simultaneously on the level of the Monas’ composition of various icons and at its polyvalent intersections with reality. In other words, the logic of the Monas is one of semiotic and ontological recursion with the theorems of the MH being semi-systematic and tangential points of contact within this logic. An iconic analysis, while useful in describing many elements in the relation of image, object, and viewer, simply cannot accommodate this logic of recursion in its analysis or the ontological power of the Monas.

## 2.10 Previous Semiotic Approaches to the Monas

Despite the overwhelming amount of studies devoted to Renaissance iconology and semiotics generally, only two such analyses of the Monas have been produced. Szőnyi employs a taxonomy of icons largely influenced by Grombrich and Panofsky into which he wishes to group and understand the vast field of information-bearing-signification in the “occult sciences” of the Renaissance.<sup>204</sup> In the taxonomy he groups

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<sup>203</sup> Warburg: 1932, 491 in Grombrich: 1978, 125.

<sup>204</sup> Szőnyi: 1995, 250-63.

“Icons oriented around Tradition,<sup>205</sup>” that is, icons which are meant to diachronically broadcast coherent meaning to those outside of the individual who produced them. Such icons then fall into three types:

(1). Didactic Icons – correspond to an actual thing or process. The alchemic image of the green lion devouring the sun represents the caustic process of nitric acid on gold. These icons are cerebral and provide smooth correspondence to ontological entities.

(2). Revelative - correspond to “symbolic-intuitive” ideas or rarified philosophic processes. The ouroboros, or tail-devouring snake, represents unity in difference or the eternal process of creation and destruction. These icons provide a pictorial link via “intuition” to a non-rational idea.

(2). Powerful – or “occult” icons carry ontological power such that their very use can change reality. The use of a Goetic sigil can actually shape occult forces to align with one’s will. These icons bridge the gap between image, imagination, and reality.

Interestingly, Szőnyi points out that Dee himself calls the Monas a “gamaaea”<sup>206</sup> or talisman which stores power but does not manipulate it therefore he places it within the “Revelative” category of his taxonomy.<sup>207</sup> The Monas seems quite a bit more sophisticated and powerful in Dee’s thinking, however. Szőnyi’s error lies in his reading of the Monad as a compressed bank of alchemic and astrological information, prioritizing the systems of knowledge that the Monad itself is supposed to supercede – the iconological result of the heuristic error we have described above. As pointed, while the Monas has alchemical application it is far more than a database of alchemic memes. Szőnyi’s analysis of the Monas is unfortunately brief in this case and seems to fail to capture this “magical,” or “powerful” in his language, use of the Monas to alter reality. A more robust semiotic interpretation of the Monas is done by Szulakowska in which she sees the icon as having an “indexical quality.”

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<sup>205</sup> As opposed to direct images in the mind or asemic expressions which carry no mimetic content.

<sup>206</sup> The word is of Paracelsian origin but mysterious otherwise. Paracelsus felt that a “gamaaea” could “trap astral influences as in a box.” See *Ibid.*, 257 for a further discussion.

<sup>207</sup> *Ibid.*, 257.

Employing the Peircean taxonomy<sup>208</sup> of symbol<sup>209</sup>, icon<sup>210</sup>, and index, Szulakowska describes the relationship between symbol-sets and how the Monad functions as an index rather than a simple referent.<sup>211</sup> An Index, she describes, creates a semiotic continuum “between the viewer’s space and the image itself.”<sup>212</sup> A dark cloud in the distance will not only symbolize rain but will actually mean that rain is approaching; likewise, the symptom of a disease actually occurs in the corpus of its expression. The index is the site of an ontologically viable metonym rather than an arbitrary process of reference. However, pointing to a general shift in alchemic iconography in the late 14<sup>th</sup>-16<sup>th</sup> centuries toward naturalism and especially the ability of images to stand independent of their textual counterparts, Szulakowska claims that the Monas is itself a “mobile cipher” in which alchemic theory and practice is perfectly captured such that it becomes a “metonymic continuum of physical and conceptual alchemy.”<sup>213</sup> In other words, it takes on a quasi-ontological status in relation to alchemic and astrological domains of semiotic structures – but only in relation to them. An index is always dependent on the web of signs onto to which it is made and into which it provides indexicality.

Szulakowska identifies this process as a response to the increasingly arbitrary character of the relationship between sign and signifier in the transition between 16<sup>th</sup> century epistemes.<sup>214</sup> Nominalism in its continued form as the rise of Humanistic philology eventually leads to a powerful severing of the world of correspondence and sympathy in which words and objects were held together by an occult force.<sup>215</sup> This semiotic-ontological anxiety led many toward Cabalists, such as Reuchlin, Postel, and Agrippa, toward the prioritizing of Hebrew as the linguistic bridge while Dee, perhaps

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<sup>208</sup> However, Szulakowska does not situate Dee’s semiotic in the more basic semiotic-triad of Representamen, Interpretant, and Object.

<sup>209</sup> Arbitrary and relative to context. An alchemic symbol for sulfur or salt for instance. c.f. Didactic as above.

<sup>210</sup> Carries even non-rational information, c.f. “Revelative” and “Powerful” as above.

<sup>211</sup> Szulakowska: 2000, 3.

<sup>212</sup> Ibid., 3.

<sup>213</sup> Ibid., 6-7.

<sup>214</sup> Ibid., 57.

<sup>215</sup> Szulakowska is admittedly thinking of Foucault’s analysis in *The Order of Things* of the Vintage/Pantheon edition 1994: 30-94.

sensing that even sacred Hebrew would face a similar fate, opted for a more radical solution.

To use Szulakowska's language, the Monas becomes "a condensation of a discursive text into a unique sign"<sup>216</sup> in which the economics of representational identity with reality are placed beyond encroachment by a diminishing in status for discursive language and syllogistic logic. The metonymic relationship of the Monas with reality itself provides a non-arbitrary cipher through which knowledge is standardized, critiqued, and transformed. While a radical step, the hermeneutical power of the Monas is reliant upon the deeper axiom that reality itself is not only co-continuous with, and thus transformed by, dependant upon Monas itself. While we agree that Indexicality is at work in the Monas we will break significantly with Szulakowska in our analysis below.

Combining elements of Szőnyi and Szulakowska's semiotic accounts it would seem that Dee's notion of the Monad has both the metonymic-ontological quality of an Index but also the ontological potency of the "Powerful" icon. As we saw above in theorem XIII, Dee felt that the Monad has achieved perfect semiotic continuity with the objects it represented. This ontological continuum between sign-index-object directly allows the Monas to create a viable simulacrum in which reality itself can be altered through the manipulation of the icon itself.

While Szulakowska's analysis is an important start, it fails to be semiotically robust and philosophically comprehensive. In order to produce a theoretical framework into which we may understand the device of the Monas in its operational logic, we will have to forward a semiotic theory<sup>217</sup> which captures the three central aspects of the MH: Firstly, we will need to cast the semiotic theory as a power set which captures the elements in which the Monas coheres philosophically. It must be able to make sense of the various approaches which Dee uses to present the Monas as coherent (cabala, alchemy, Pythagorean philosophic speculation, etc) – it must capture the "cabala of that which is said" and thus be able to *semiotinize the ontological*. Secondly, it must be able to capture and taxonomize the Monas in its various semiotic permutations. The Monas is an incredibly mobile system which connects itself internally to various semiotic tokens,

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<sup>216</sup> Ibid. 64.

<sup>217</sup> Especially, in this case, as opposed to a philosophy of language.

externally to tokens it produces, and to the recursive interplay of these systems. Third, it must be able to render the ontological connectivity and power of the Monas intelligible. In Dee's thinking the Monas will replace experimentation and have miraculous powers to transform reality, this ontological power of the Monas must be explained. In other words, to make sense of Dee's "Cabala of Being" we will need to employ a system which can *ontologize the semiotic*. Such a system must also have an isomorphic philosophic component which sufficiently analyzes the ontological situation and power of the Monas in addition to describing its recursive inner logic. Creating and employing this system of analysis will form the contents of the final section of this study.<sup>218</sup>

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<sup>218</sup> As a point of methodology we are not only trying to understand the Monas in contemporary terms but cast Dee's understanding of it in those terms. Dee relies on a non-arbitrary semiotic continuum with signs and being, an axiom most people reject and for good reason, however, to get at Dee's system in a coherent way we must allow him to "speak" through our language in order for us to understand his thinking and thus the puzzle of the Monas generally.

### 3.1 Towards a Technical Term – The Monas as a “Device”

Thus far we have employed an array of conventional and technical terms in describing the Monas – symbol, character, icon, hieroglyph, token, etc. These terms have been employed to suit a certain context of conversation but have not been very systematic in their application generally. Thus, we feel the need to forward a single term which will suffice to satisfy a maximal number of the conditions in which we seek to comprehend the Monas itself. For the purpose of our analysis, we forward the term “device” as the one that best captures the Monas for the following reasons:

1. The term “device” is a one generally employed in the developed and study of early-modern English emblematics<sup>219</sup> to indicate a combinatory, representational system which unites a sign with a discursive unit (usually a slogan or a motto) to produce a singular gestalt upon in the viewers’ field of perception.<sup>220</sup> The Monas performs a very similar function implicitly, in that as a sign it broadcasts a certain guided intellectual prompt (to alchemy and astrology) to its viewer, and explicitly, in that Dee situates it within the immensely popular and contemporaneous field of emblematic designs.
2. The term “device” is etymologically linked with the notion that a thing is “devised” or “created” by a certain craft or operational knowledge. Dee certainly produced the Monas from a varied and sophisticated pool of intellectual programs and practices ranging from mathematics to magic (not that Dee himself would have seen this as a “range” in the sense we use it here). Thus the Monas has a history, a context, and an intellectual genealogically – something, perhaps, like a image-etymology, which can be explored and into which it can be situated.

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<sup>219</sup> See Appendix III for some exploration of the relation of the Monas to 16<sup>th</sup> century emblematics in more detail.

<sup>220</sup> There is, however, no totally agreed upon definition for the variety of 16<sup>th</sup> century emblems, *imprese*, and allegorical systems of which explode in popularity around the time of the publication of the MH. We follow Daly and Whitman: 2000 in their definition. Manning: 1999, xiii describes the state of confusion in Latin and vernacular terminology for these systems even contemporaneously.

3. Finally, the term “device” is keen because it connotes a system which is active – which is itself productive – even performative.<sup>221</sup> Dee clearly imagines the Monas to be a powerful object by which and in which intellectual systems, their praxis and celestial objects together are manipulated in isomorphic parallel with the device itself. The Monas is expressive in that it not only represents but in its dramatic power to shape reality itself around its shifting contours. In short, we may link the Monas with what Liza Bakewell has called an “image act.”<sup>222</sup>

In these three senses, we employ the term “device” in regards to the Monas. While it certainly can be described in the terms we have used above, the need for a technical term is certainly transparent and we feel this term, as we have outlined it, serves maximally.

### 3.2 The Logic of Recursion in the *Monas Hieroglyphica*

We have discussed above that one of the primary hurdles in comprehending the MH as a text and the Monas as a system of representational ontology is the underlying logical system concurrently at work in both. As we have seen, the often confusing layering of various speculative strata in the MH does not follow a linear progression of deductive analysis. Rather, the ideas seem to move in various dimensions at once to model the various intellectual currents informing the MH in their erasure and are informed by the Monas in their reinscription.<sup>223</sup> Before we move forward we should trace the outlines of this logic in some detail. In effect the logic operates within three basic parameters: Durational Memory (formation), Nesting Feedback (causation), and Parity of Part and Whole (relation). All three operations are at work in various intensities in the text in the production of axiomatic theorems, the transitioning between them in the architectural sense, and finally in the inter-relations of their contents. These operations are not discrete and readily identifiable on their own, but penetrate beneath the sense of

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<sup>221</sup> As I have recently discovered, American copyright law also uses the term “device” for an object under its protection because it “produces” revenue based on branding. This indirect ontological link in terms of production is telling in how in even our time representation systems can still be thought to have ontic impact and thus draw one into ritual behavior. We can very likely classify such a sign as an “image-act.”

<sup>222</sup> See Bakewell: 1998, 22-32 for a more detailed explication.

<sup>223</sup> What we have called Dee’s process of “Miraculous Appropriation” above.

the text and its contents as a manifold of relations upon which the text, along with the system of the Monas itself, is bounded. Simultaneously, they rely both on themselves and each other to function in their totality to dynamize the MH and the Monas. This recursive character, that they assume themselves and each other in their functive operation throughout the text and within the Monas, is the unifying quality in which they are comprehensible. While we explore each of these operations in semi-isolation, their actual deployment in the text is much more obtuse and interpenetrative.

Durational Memory – The data which flows in the encoding and decoding process of the semiotic (representation) and mimetic (philosophic content) of the MH and within the Monas persists as ontologically ready-to-hand at any temporal point within that cycle. The duration of the Monas' memory is thus recursive: It may refer to itself in any semiotic permutation to produce mimetic content in any temporal direction. Thus, Dee is able to take advantage of the varying states of semiotic and mimetic polyvalence within the MH and the Monas to advance its content and employ its explanatory power.

An example of this operation can be most clearly seen in the production and use of the manifold character of the + device at the equatorial center of the Monas. For Dee, it is primitively described as “lines signifying the elements are produced by the continuous fall of [successive] drops becoming a flow (if we consider drops to be like mathematical points)”<sup>224</sup> which are immediately co-opted, in the following theorem, to form the Roman numeral X, the grapheme /t/, and proof of the Pythagorean quaternary as effectively related to the four elements.<sup>225</sup> Thus the semiotic faculty of the + is produced from point of singularity (“earth”), which “flows” into a binary, ternary, then a elemental quaternary with a specific geometric configuration all of which finally results in a dense, open semiotic repository which can be appealed to in order to produce mimetic content (graphemes, mathemes, alchemic elemental icons, philosophic speculations about the reparation of nature, etc...) at any state of its construction. Such a process can likewise easily be seen in the production and appeal to various astronomical symbols, influences, and transmutations. Thus the memory of any device produced within the Monas and any

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<sup>224</sup> 13r of MH Theorem VII

<sup>225</sup> MH Theorem VII and VIII which are the “remembered” via theorem XX



meme produced out of the Monas is perpetually ready-to-hand to its user temporally, semiotically, and mimetically.

Nesting Feedback – The data produced in the above process can be nested within previously produced micro-systems to yield synthetic macro-systems. One can think of this as if an acronym could be nested within another to carry the meaning of both.<sup>226</sup> Thus the relationship of the produced of novel to previous data by the Monas and within the MH is non-linear and non-mutually-exclusive. This nesting feedback is likewise recursive in that it refers to itself to persist but may be used as feedback to produce further novelty.

The clearest example of this process is the creation and use of various astrological and alchemic doubles throughout the text.<sup>227</sup> The elemental forces created in the early theorems seem to present abstract, primal elements which, through various cosmological influences, alchemic processes, and adaptation into the Monas are doubled into secondarily active elemental forces. This doubling affects virtually all the major elemental and astrological entities in the earliest forms of the Monas' semiotic production: the Sun, Moon, Mercury, and Aries. We can follow the genealogy of Mercury within the MH to see this clearly. Mercury itself seems to be produced by a tensive relationship between the Solar and Lunar influences by theorem XIII which, in turn, spirals cosmologically through the super-lunar system to be rejoined with Gold (a sort of philosophic mercury in the super-lunar world) or with the Moon (as a sub-lunar, living mercury). These processes do not seem to be simply the final results of cosmic influences but the creation of novel ontological entities which feature back into the Monas' power and within the MH itself – this is especially clear in the use of all thus far produced elements in the dizzying analysis of the inverted Monas of theorem XXI.. Thus the creation of this double-mercury, which both transcends the Solar and Lunar in one sense but is directly affected by them in another, represents the non-linear progression of the theorems in the MH and the ontologically important nesting feedback which is necessary for the dynamic movements of the Monas itself.

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<sup>226</sup> For instance, if in a business H.R.D. = Human Resources Department which is then nested into H.H. = Human Resources Department and Hiring. The nesting provides economy at the cost of intelligibility if one does not know the history of the code. For Dee, this history would be somehow apparent.

<sup>227</sup> We have discussed these doubles in more alchemical-theoretical detail above.

Parity of Part and Whole – Any semiotic or mimetic element produced by the Monas and encoded within the MH maintains a relationship of equal ontological parity to the elements which produced it. This is, of course, the classic Hermetic relationship of “as above, so below” but applied specifically within the confines of ontological bounds of the Monas.

Likely the easiest logical operation to detect within the MH, this is best shown by the most general example possible. The three elements features which compose the Monas (the Point, the Line, and the Circle) are ontic elements which not only compose the further astrological and alchemic elements graphically but ontologically ground them as analytic structures of being. Thus they are “latent in the folds of nature”<sup>228</sup> in a virtual sense and intensify themselves through their actualization into more and more discrete elements of reality (the Sun, Moon and further on to even minute elements of grammar). This process is schematized by Dee in the expansive theorem XXIII when he moves from “numeral” in the vague sense of the ontological viability of quantification to the discrete alchemical processes of “preparation, putrefaction, separation, etc” and their material counterparts of “the lapidific and the fermentative.”<sup>229</sup> While the eye reads this progression left to right as a linear process it is likely that Dee and other Renaissance thinkers would have seen such a process of wrapping around and within itself as a circular manifold in which each part connects within the whole of the other as a recursive matrix of causation and influence. Thus these basic elements of quantification bear in them the full expression of all reality and each part of reality points back and is informed by the basicity of those elements.

These logic processes are closely related and operate in relation to each other to produce the topographical character of the Monas and the MH – one, admittedly, that borders being a vertigo of conventional logic at times. Thus, while a more deductive procedure would prove more “logical” and likely produce a more comprehensible text to modern readers, these logical processes are provide Dee the necessary conditions for the Monas to operate in the framework of Dee’s intellectual priorities. Now that we have described the logic upon which the Monas operates, we can move onto to the final two

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<sup>228</sup> Theorem I on MH 12r.

<sup>229</sup> 26r, v.

issues in our analysis of the Monas and its function: modality and our semiotic analysis of Dee's "cabala of being."

### 3.3 A Methodological Rejection of Semiotic and Ontological Binarism

As we have seen, Dee, like many of his contemporaries, assumes a modal link between sign and signifier such that a pure form of representation will itself be ontologically affective – the MH is itself littered with such modal cues. We are not dealing with a simple language-world-isomorphism on Dee's part however. The recursive logic of the Monas and the need for representational reform in his thinking makes clear that not only is there a rupture in ontological nomenclature but that words alone, even holy ones such as Hebrew, cannot do the task of authentic, and thus transformatory representation. Dee however is clearly not giving up on such a task by a retreat into naïve linguistic realism or radical skepticism. It seems that Szulakowska is correct in following Foucault in seeing this rupture as part of a semiotic-ontological anxiety in which the medieval Nominalism will transform into a clear distinction by the 17<sup>th</sup> century between represented and representation and the explosion in theories of signs.<sup>230</sup> Due to the proximity of such a shift, Dee's thinking sits on a margin which does not lend itself to straightforward analysis or easy taxonomy in ontological or semiotic terms.

In Dee's maintaining of a modal relationship in the process of signification it does not make sense to retrofit any theory of semiosis which assumes ontological arbitrariness and thus sign-signified-binarism onto Dee's thinking in the MH. Here we clearly have Saussure in mind. While it is not commonly pointed out, for Saussure, the signified was a mental construct and only potentially an object in reality. This represents not a gap in his thinking but more likely a sense of modesty in his approach – he did not want to overstep the bounds of being a linguist into those of being a philosopher. For Saussure, the differential relation of signification was abstract and psychological, thus a "linguistic sign is not a link between a thing and a name, but between a concept and a sound pattern.

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<sup>230</sup> Szulakowska: 2000, 56-58 is admittedly thinking of Foucault's analysis in *The Order of Things* of the Vintage/Pantheon edition 1994: 30-94.

The sound pattern is not actually a sound; for a sound is something physical. A sound pattern is the hearer's psychological impression of a sound.”<sup>231</sup> In this way the Saussurean binary model in which sign and signifier is a wholly mental process of the differential play of signs in forming meaning cannot prove robust enough to deal with the ontological leakage which pervades Dee’s Monas and arguably Renaissance semiotics generally.<sup>232</sup> In this sense, there is an ontological leakage which the sign-signifier-binarism cannot wholly capture no matter how much “incessant sliding of the signified under the signifier,” to use the famous phrase from Lacan, occurs. We therefore require an analytic tool which makes use of a third semiotic term and thus we will employ a modified Peircean system.<sup>233</sup>

Similarly, the ontological properties and affects of the Monas are also not so easily parsed into “real” and “unreal.” For Dee, the Monas itself, precisely due to its continuum with being, is able to perfectly represent and transform material elements of the cosmos thus being the “the real cabala, or [the cabala] of Being (...realem nominavi Cabalam, sive του οντος)”<sup>234</sup> The Monas persists, as we will show in more detail below, on an ontological continuum in which it expresses itself and can be thus employed as a device in various modalities. While the Monas exists on such a continuum, representation is still fed through and informed by, in Dee’s thinking, the applicative power of the Monas itself. Thus the reality, representation, and the Monas itself share a certain ontological relationship which, through filtered through the Monas’ logic of recursion, form an ontological circuit. Finally, because Dee seems to indicate that the Monas operates analogically, through the registrations of intensities, rather than digitally, through modal binarism, we will employ the ontological categories of Deleuze to comprehend them.<sup>235</sup>

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<sup>231</sup> Saussure: 1916, 66.

<sup>232</sup> This does not mean that the Saussurean system is somehow then “false,” it simply means that semiotics is largely a descriptive affair and various historical periods have employed, although implicitly of course, varied semiotic systems. I often wonder if Saussure knew how much of his *description* would become a *prescription*.

<sup>233</sup> Modified in two central ways, to accommodate Dee’s semiotic non-arbitrariness and to focus on the performative value of the sign itself. This exploration is meant to be descriptive and we feel no need to criticize Dee philosophically only to seek an understanding of him.

<sup>234</sup> MH, 7r.

<sup>235</sup> Lehigh: 2003, 138-140 develops a similar notion in regards his reading of Agrippa employing the term “analog signification.”

Thus we propose to use a synthetic analysis directly informed by Peirce's three-fold semiotic system of Representamen, Interpretant, and Object isomorphically with Deleuze's ontological modalities of the Virtual, Intensive, and Actual.

### 3.4 The Representamen and the Virtual: The Reality of the Monas' Sign Set

C.S. Peirce was a man obsessed with triads and taxonomies and he produced dozens of versions of his semiotic theory during his lifetime. Thus we are forced to choose one system, in one form, and we must admittedly do so without being fully aware of the great depth of nuance in his thinking. Thus we choose to go with the most generic model, the often-cited triad of Representamen, Interpretant, and Object which Peirce had more or less settled on toward the end of his career.

Peirce's Representamen can be thought of as the genetic condition towards signification: a virtual 'sign' which stands for an intense then actual one. It is both the expressive tendency within a set of signs towards articulation and the sum of the members of that set although in an obscure form. Peirce writes "A sign, or Representamen, is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign."<sup>236</sup> The Representamen is an expression out of the differentiation within a set of signs towards a singular prompt in the process of semiosis. Its obscure signaling will create a more specific sign, the Interpretant, which we will discuss below.

Likewise, Deleuze's notion of the Virtual is the differential set of obscure conditions which becomes the Actual through Intensification. It is the "realm of problems," transcendental but not transcendent, universal but not general; quoting Proust he describes it "Real without being actual, ideal without being abstract"; and symbolic without being fictional. Indeed, the virtual must be defined as strictly a part of the real object."<sup>237</sup>,<sup>238</sup> It is the modality in which differential conditions exist and are

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<sup>236</sup> Peirce, A Fragment, CP 2.228, c. 1897. All references to Peirce are to volumes in the collected works by Harvard University Press.

<sup>237</sup> Deleuze developed his ontology throughout his career. We draw primarily from *Difference and Repetition*, Deleuze's most "standard" philosophical expression of the ideas rather from the more creative,

differentiated yet obscure and become differentiated and determined as the Actual.<sup>239</sup> As a purely difference internally and not a unified pleroma it is nor a “coincidence of opposites” or an overflowing emanation. Bonta and Protevi oversimplify it a bit to describe it as the “modal status of the set of possible<sup>240</sup> states of the system, along with the probabilities of attaining a particular subset of those states.”<sup>241</sup> It is the “plane of consistency” which is populated by multiplicities or better the differential relation of all haecceities as Deleuze borrows the language of Scotus. “The reality of the Virtual consists of the differential elements and relations along with the singular points which correspond to them. The reality of the Virtual is structural.”<sup>242</sup>

Most importantly for our isomorphic notion of the Virtual and the Representamen is that *both are fully real*. They are not potentialities. Deleuze follows Bergson’s argument that in thinking of the “possible” as somehow pre-existing we are actually taking an existing thing, adding a negation of its existence to it, then projecting that into the metaphysical past.<sup>243</sup> Then by reversing such a process we then “add existence” to this “possibility,” because the “real” is logically “more than the possible.” Bergson, and in turn Deleuze, reject this notion by saying that the Virtual is fully “real” in that it is Actualized. The undetermined states or bodies which may be individuated are not “unreal,” they are simply awaiting actualization; likewise with the Representamen. For instance, a blinking red light at an intersection is the condition for a more developed sign to be developed, that of the idea that “a blinking red light at an intersection means ‘stop.’” Thus such a state cannot be imagined alone (nor can the Virtual be reified separate from its connected ontological modalities), the blinking red light, if it cannot create this second level sign cannot mean anything but, clearly, is both real and needs to

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and at times, bewildering version in *A Thousand Plateaus*. Deleuze also significantly develops his notion of the Virtual and Multiplicity in his *Bergsonism*. For his discussion of the Virtual see Deleuze: 1968 (1994), 207-214.

<sup>238</sup> Deleuze: 1968 (1994), 209.

<sup>239</sup> Ibid., 209-10.

<sup>240</sup> The problem here is with the word “possible.” For Deleuze, the virtual is always defined by its “hereness / thisness.”

<sup>241</sup> Bonta and Protevi: 2004, 17. Note that Bonta and Protevi follow Delanda in their complexity theory reading of Deleuze. Because of the non-linear and recursive manner by which the Monas works, this language, although a bit jargon heavy, is complimentary to our discussion.

<sup>242</sup> Deleuze, 1968 (1994), 209.

<sup>243</sup> On this continuation of Bergson’s critique see Deleuze, 1968 (1994), 211-212.

be actualized to be a sing. The virtuality of the sign and the virtual sign are both fully real.

Dee declares<sup>244</sup> the contents of the Representamen which will form the semiotic system of the Monas very early in his project although in a non-linear order. Dee writes that the “First and most simple manifestation and representation of things, non-existent as well as latent in the folds of nature, happen by means of the straight line and the circle.”<sup>245</sup> Dee here indicates that non-existent or latent objects are both first and simply expressed through the straight line and the circle. Dee then backtracks in the following thesis to indicate “Yet the circle cannot be artificially produced without the straight line, or the straight line without the point. Hence, things first begin to be by way of a point, a monad. And things related to the periphery (however big they may be) can in no way exist without the aid of the center point.”<sup>246</sup> In this sense we may think of these shapes as the semiotic Power Set, the set of all sub-sets, which through various, infinite permutations this semiotic-ontology unfolds. For Dee, the straight line and the circle are virtual and real conditions to those things which only have relationship to another set of modalities, latency and non-existence.

Thus the being of other objects is determined by a differential relation to these geometric basicities but is also only expressed or represented through them. Things, as we will see, do not become “realized” through these shapes but are individuated through their various articulations. This backtracking finally has the feature of insinuating a non-hierarchical relationship between the primitive elements and the actual articulations of the Monas itself. While Dee indicates that they flow from each other in a logical sense, he has no trouble speaking about their efficiency in a non-linear manner. We may say that the non-linearity of the logic in the Monas, because it, after all is Dee’s priority, likewise emerges in the progression of the theorems of the text of the MH.

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<sup>244</sup> Peirce would call this a “Universe of Discourse” borrowing the term from predicate logic. We have resisted this term because we have used the term “discourse” in relation to discursive practices previously. Thus we have borrowed from the language of set theory for a similar theoretical tool.

<sup>245</sup> MH, Thesis I “Per lineam rectam, circulumque, prima, simplicissimaque fuit rerum, tum, no existentium, tum in naturae latentium inuolucris, in lucem production, representatioque.”

<sup>246</sup> Ibid, Thesis II “At nec sine recta, circulus, nec sine puncto, recta artificiose fieri potest. Puncti Monadisque ratione, res, et esse coeperut primo: Et quae peripheria sunt affectae (quantaecumque fuerint) centralis puncti nullo modo career possunt ministerio.”

In these first two theses Dee makes his two most important semiotic and ontological relationships. First he declares the contents of his Representamen in terms of the point, the line, and the circle. From these elements he will devise the Monas itself. It is important to recall from above that these elements are not simply place-holders to build up the Monas. They have already have articulation (the Monad is the “terrestrial body,” the lines are the elements, and the circle is the Sun/Moon) and Durational Memory in which these exchanges can be carried forward as influences within the system at a higher level of articulation. Early on we see the extreme mobility of the Monas which makes it both rich in its expressive capacity and its difficulty to describe in equilibrium.

Secondly, Dee links representation with being. The line and the circle first best represent which are in turn made up of the point “by which things first began to be.” Dee, as Håkansson has shown, is following Proclus in describing being emerging from the point but Dee links the Monad in the Neo-Platonic sense with the representing, geometric Monad. By Theorem III Dee links this combination of the Monas with the representation of the Sun and Moon and thus builds the first continuum between these primitive elements and the celestial world. It is clear that in Dee’s thinking, these elements have ontological status (especially the Monad in which representation and represented seem to all but collapse) and are the means by which more complex objects have their being in a, perhaps, roughly Pythagorean, geometric sense.

This all occurs well before the Monas itself, in its full form, is developed. These real elements, the point, line, and circle, then become the primitive semiotic set which will create in the perceivers’ mind another, more specific sign which will prompt an infinite cycle of ontological-semiosis.

### 3.5 The Interpretant and the Intensive: The Location of Signification

As we have pointed out above, the Representamen produces a secondary, more specific sign in the perceiver which narrows the process of signification into a singularity. As we allow Peirce to continue his thought from above “A sign, or representamen, is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or



perhaps a more developed sign. That sign which it creates I call the interpretant of the first sign. The sign stands for something, its object. It stands for that object, not in all respects, but in reference to a sort of idea, which I have sometimes called the ground of the Representamen.”<sup>247</sup> The Interpretant is the more specific sign and can be understood as similar to the Saussurean notion of the Signified. It can also be thought of as the sense made of the Representamen or as a specific configuration of the Representamen which conveys meaning to the perceiver. The Interpretant is the condensation of the Representamen in as determined by its Object. In this relation it “stands for” something definite outside the process of semiosis.

The Monas, in variously definite combinations representing certain external, although we will complicate this relationship of inside and outside, objects or processes forms the Interpretant in our analysis.<sup>248</sup> The combinatory system envisioned by Dee and appropriated from the Cabala allows the basic three elements to be permuted into myriad shapes and systems of shapes in various orientations to represent various Objects. Thus when Dee begins to build the Monas out of the early elements into various Astrological, Alchemical, and Linguistic features he does so because he expects them to link definitely with a specific object in the viewers mind. Thus the Monas is the optimal equilibrium state, as we discuss below, between the sign sets and their referents – indeed, for Dee, the Monas is the focal point for a project of radical transformation in those referents. As we have discussed before, one of Dee’s primary interests is the way in the Monas can be employed to perfectly capture through representation astrological, astronomical, linguistic, and numerical signs. Dee likely thought the Monas could perfectly replace Representation itself because of the primitive nature, both as basic signs and ontological firstness, of the Representamen set of which the Monas is primarily composed.

Deleuze’s notion of the Intensive captures this sense in which it is the “location of assemblage” the space and tendency of the Virtual to be conditions into a specificity as a connection between differentiating virtualities. It is the process of the actualization of the virtual and the site of its expression. While the modalities of the Virtual come together as Intense, they also rupture and disconnect from previous Actualities to couple to form new

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<sup>247</sup> Peirce, A Fragment, CP 2.228, c. 1897

<sup>248</sup> See illustrations in Appendix IV bottom of p. 95 for possible Interpretants of the Monas developed by Dee.

modes of expression. The Intense is the place where, through its defacement (the intense itself is always becoming-virtual or becoming-actual), ontological elements are presented, suspended, and propelled towards actuality and disassembled into the Virtual.<sup>249</sup>

In the composition and decomposition of the symbols of the Monas there is a sense in which the internal elements are coupled and permuted in a sphere of the real not yet actual but not an obscure virtuality. We may think of them as influencing or modeling reality but not quite replacing it as we discuss below. The combination of such elemental features of the Monas for Dee is temporary but always ontological substantial.

Perhaps this is most clear in the table of correspondences Dee builds on 23r which he describes as “from our Hesperidian gardens so that they may be viewed as a mirror (in speculo videndos); and yet we shall not be showing anything but our Monas (nihil extra nostrum monadem); for the straight line appearing in Alpha is homologous to the one [resulting] from that part of the last anatomy of the cross which is marked M. From that anatomy it can also be seen whence everything else [in the scheme which follows] came to this place:”<sup>250</sup> What Dee then displays is a table of correspondences in which the Monas is decomposed into the Interpretant elements of a miniscule alpha ( $\alpha$ ), a cross (+), and a miniscule omega ( $\omega$ )<sup>251</sup> which are then set into correspondence with various tripartite cycles. Likely because the table of external correspondences did not fit with Josten’s Neo-Platonic, psychologized reading of the MH, the table itself was not translated. We do so here:

$\alpha$	Existing before the Elements	Mortal Adam, Male and Female	Perishing	Enshadowed, Obscure	Born in a Stable
+	Arrangement of the Elements	The Genealogical Consummation of the Elements	The Cross	The Cross	Sacrificed on the Cross

<sup>249</sup> We are following Deleuze: 1968 (1994), 222-224, 232-235.

<sup>250</sup> MH, 22v, 23r. The Table of Correspondences is reproduced in Appendix IV, p. 96.

<sup>251</sup> Note that Dee has also shown the derivation of these signs previously. The elemental + occurs in Theorem VI, the derivation of the Taurus influenced alpha is found in the Annotatio of Theorem XV, with the Aries influenced omega developed toward the end of Theorem XXI (21v)

Ω	Existing after the Elements	The Immortal Adam	Resurrecting	Most Clear	Ubiquitous King
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Conceived by One Influence	Seed of Power	Creation of Matter	Earthly Marriage	Beginning	α
Death and Burial	יהיה Virtue of the Decad	Refining of the Elements	Martyrdom on the Cross	Middle	+
Risen by Own Virtue	Triumph in Glory	Transmutation	Divine Marriage	End	Ω

Similar tables can be found in Agrippa, however the Monas-centered arrangement is specific to Dee. Here disagree with the previous semiotic analysis of Szulakowska in which she describes the Monas itself as an Index. Rather, we would argue that by both relying on what Dee felt was a certain semiotic relationship in perception of his readership and in creating standardized links, such as the table above, of semiotic-to-ontological reference, Dee desires for the Monas to produce Indices rather than itself be an Index itself. Thus the individual elements which Dee creates to act as an ontological correspondent to an given object (alchemic signs to objective elements, linguistic signs to graphemes, numerical signs to mathemes, etc) are in fact the Indexes. The Monas itself, as it is actualized, is a much more robust semiotic device.

The MH is the record of experimentation with the Monas in order to display its various powers in perfectly representing Being or the Book of Nature. Because of the ontological character of Dee's semiosis, the boundary between the signs and their being in the world is continuous. The Monas and its Objects of representation themselves form assemblages which both emerge from the cabalistic interplay of the signs within the Monas and from the determination of the objects from which it is devised.

### 3.6 The Object and the Actual: The Reciprocity of Sign and Being

The Object for Peirce is the exterior thing or condition which bounds the process of representation and which is modeled by the semiotic loop between the Representamen

and the Interpretant. Peirce writes “[A sign] must be determined to correspond, according to some principle, and by some species of causation, with something else, called its Object. In a word, whether physically, rationally, or otherwise directly or indirectly, its Object, as agent, acts upon the sign, as patient.”<sup>252</sup> In another way we read something Dee would have likely understood his Monas as doing, “A sign is intended to correspond to a real thing, or fact, or to something relatively real; and this object of the sign may be the very sign itself, as when a map is precisely superposed upon that which it maps. It is a perfection of the sign if it separately represents its object; in which case it becomes a proposition and is true or false.”<sup>253</sup> Peirce’s notion of the Object is likely the easiest to comprehend yet it is one of the defining characteristics of his system as opposed to Saussure, in which the process of signification is always psychological and cannot philosophically discuss the relation of the conditions (or structure, which is, in fact, Saussure’s strongsuit) of signification, its relative objects, and the process by which this occurs.

Deleuze’s notion of the Actual as a state of equilibrium between forces as opposed to a concrete, absolute object in itself helps us to understand the reciprocal features of the Object within the Peircean triad and the “creations” Dee produces via the Monas. The Actual is a conditioned determination of the Virtual and the Intensive. It is a final, certainly not *the* final, state of the disjunctive process of differentiation. The Actual is a state with discrete properties but never a final absolute form. It carries with it its history as an intensive virtuality and thus can be subject to ever new intensities, variations, coupling with other actualities and dissolution back into the Virtual.<sup>254</sup>

The Monas for Dee, we argue, was specifically this state of a conditioned equilibrium between the optimal sign configuration of his primal set of Representamen in relation to the ontological status of the Objects upon which it was devised. Thus the Actual for Dee was a site of being in the midst of the Monas as a powerful sign and the Objects which were in need of metaphysical repair. In other words, we may describe the Monas as focal point between the virtual ontological status of the Representamen and the Actual ontological status of the Objects. However, the process, as we will describe defies

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<sup>252</sup> “The Basis of Pragmaticism,” MS 283, 1905

<sup>253</sup> Foundations of Mathematics, MS 9:1, c. 1903?

<sup>254</sup> We follow Deleuze: 1968 (1994), 214-221.

the Peircean model in an important manner: the link between the Object and the Representamen / Interpretant is much more reciprocal in Dee's thinking.

This triad then can be said to have two opposite but interlocking processes. First, the Object *determines* the conditions by which the Interpretant may be distilled from the Representamen. Second, the Interpretant through its appeal to the Representamen's set of signs bounds the possibilities by which the object can be encoded as a sign, it is the only possible conduit of the object's *representation*. This dual process within the interlocking Triad described above is at the heart of the semiosis for Perice. However, because of the link between the semiotic and the ontological Dee has been established in the Virtual Representamen, and persistently reiterated in the Interpretant, the dual process of Determination and Representation is polluted – its boundary is permeable. This ontological permeability with Peirce's triad of representation not only occurs in Dee's thinking but may be a key feature of much of Renaissance semiotics.

Because the Monas is devised from Objects (alchemical process, astrological entities, Pythagorean correspondences) it remains bounded and can only be as powerful as its original domain of extraction. This escape of such a bounding process by which the Monas is devised from various objects of Dee's intellectual and magical practice is, as one might have guessed, the process of "miraculous appropriation" discussed earlier. Because of the close proximity of the Representamen to the Divine or Primal Being (the purity of the point, straight line, and circle) when an object (fallen creation) is modeled through the Monas it is also reformed in Dee's thinking. Thus the Monas can be thought to proof-read the book of nature by a reforming semiotic ontologization..

Conversely, and more provocatively, because of the ontological interpenetration between the Intense/Interpretant and the Actual/Object, it is possible for the Monas, in a given configuration, to not only affect the Object but to replace it through the inverse process of the ontologization of the semiotic – here we arrive at what Dee calls "The Cabala of Being" which "teaches without words" and "was born to us by the Law of Creation...and is a more divine since it invents new arts and explains the most abstruse ones very faithfully...."<sup>255</sup>

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<sup>255</sup> MH, 7r. "...sine verba, ipsa docet," "quae creationis nobis est nata lege...quoque quaedam diviniore est: cum atrium ista sit inventrix novarum abstrusissimarum fidelissima explicatrix "

Perhaps the most striking instance of the physical manipulation of reality through the Monas is to be found in Theorem XXII<sup>256</sup>. After a discussion of alchemic theory in XXI, Dee “offers here for the contemplation of your Serene Highness, the vessels of the Sacred Art which are truly and completely cabalistic”<sup>257</sup> whereupon Dee decomposes the Monad into various elements “representing” alchemic instruments such as retorts, a mortar and pestle, and a “small vessel containing the mysteries.”<sup>258</sup> These “completely cabalistic” instruments are then immediately subject to a purely semiotic alchemic process. The conflation of the decomposed Monadic elements with ontological objects cannot be clearer than when Dee glides easily between the realms:

Within  $\lambda$ , the glass vessel, during the exercise of its particular function, all air must be excluded or it will be extremely prejudicial. The corollary of  $\omega$  is the agreeable man, ready, active, and well disposed at all times. Who, then, is not now able to procure the sweet and salutary fruits of this Science, which, I say, spring from the mystery of these two letters?<sup>259</sup>

The full force of such a project is found at the end of Theorem XXII which reads in full:

In these few words, I know that I give not only the principles but the demonstration to those who can see in them how to fortify the igneous vigour and the celestial origin, so that they may lend a willing ear to the great Democritus, certain that it is not mythical dogma but mystic and secret, according to which it is the medicine of the soul, the liberator from all suffering, and is prepared for those who wish for it and as he has taught; it is to be sought for in the Voice of the Creator of the Universe, so that men, inspired by God, and engendered anew, learn through the perfect disquisition of the mystical languages.<sup>260</sup>

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<sup>256</sup> This “lab” illustration from the MH can be found in Appendix IV, p. 95.

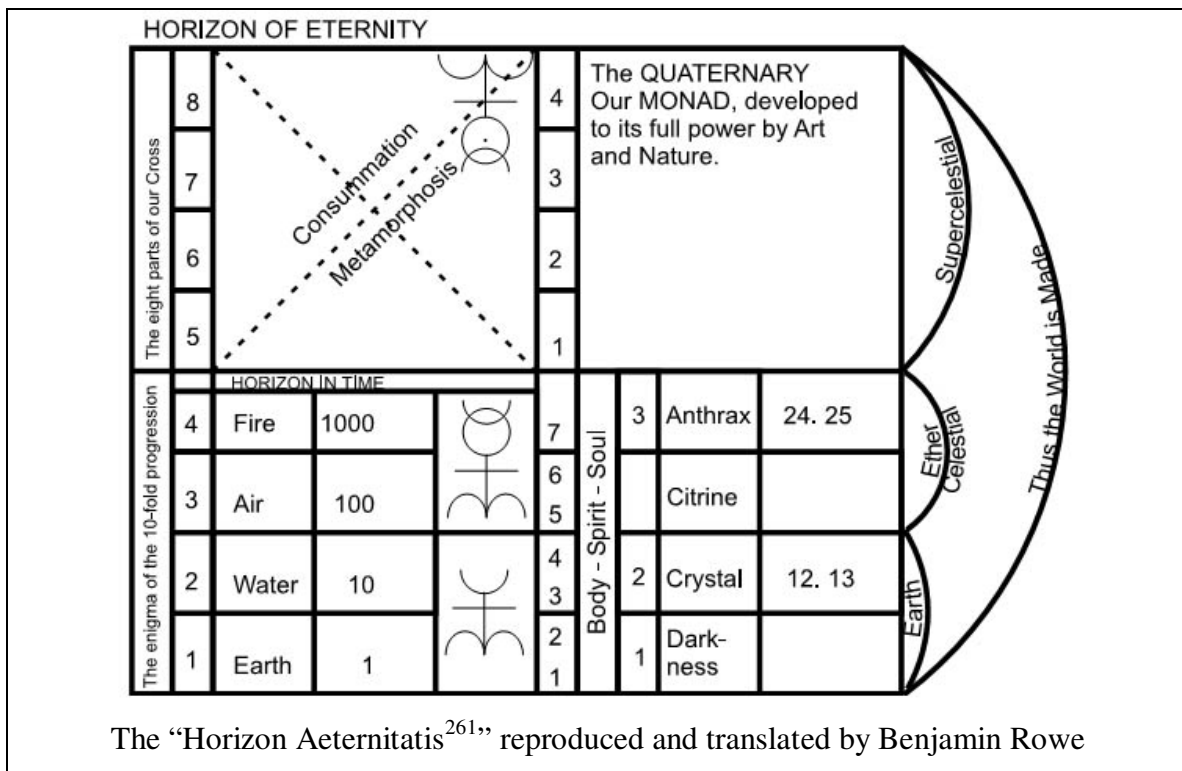
<sup>257</sup> MH, 22r. “Si secretiora quedam Artis Sanctae Vasa (omnio Cabalistica ill quidem) Solis initiat Revelanda, es eiusdem Monadis...nunc exhibuerim spectanda.”

<sup>258</sup> Ibid., v. “Denique quod cum  $\omega$  notatum videtis, Vasculum est, Mysteriorum Plenissimum...”

<sup>259</sup> Ibid.

<sup>260</sup> Ibid., 23r.

Here, it seems, Dee wishes to fulfill his promise in the introductory letter in which he promises to be able to replace the various physical elements by which natural philosophy was done with the Monas itself by building an ontological-semiotic alchemic laboratory and placing the Monas, in very provocative way, in an ontological continuum with the physical world itself through the *performance* of the Monas. Dee would end the MH with an even grander vision.

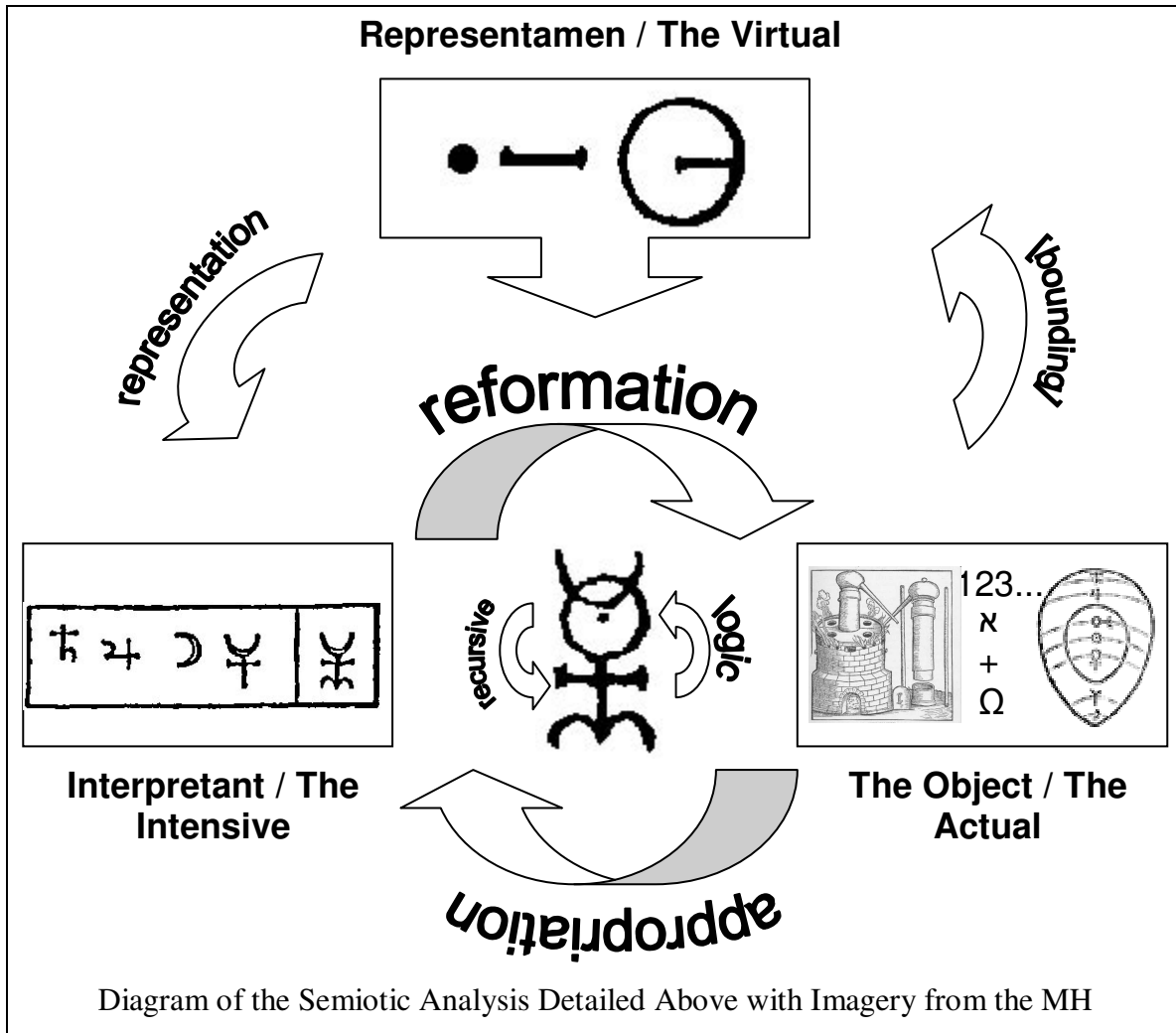


The "Horizon Aeternitatis"<sup>261</sup> reproduced and translated by Benjamin Rowe

In his final and perhaps most grandiose gesture Dee provides a map of the cosmos itself, with its elements, numerical relations, physical processes, temporal stages, and celestial strata which he describes as existing "After the Monas is correctly, wholly, and physically restored to itself and then it is indeed a most united Monad and what the Magi

<sup>261</sup> Dee likely borrows this phrase from Pico, 9>16-18 in the *Magical Conclusions*. Dee after being criticized by Andreas Libavius in 1594 threatened to write a text entitled *De Horizonte Aeternitatis, Liber Theologicus, Mathematicus, and Hierotechnicus*. Joseten: 1964, 97 indicates that the book was never written but indicates that Dee's interest in defending the project of the Monas had not waned in the forty years since he first published it. What Dee meant by the neologism "Hierotechnicus" remains an intriguing question as well.

deem oneness....”<sup>262</sup> This vision of a world restored to balance via the Monas, in the Monas, and as the Monas is Dee’s final vision as the *Monas Hieroglyphica* comes to a close wholly bridging the gap between the semiotic and the ontological.



To reiterate our analysis briefly, we have argued that an intelligible model of the character and purpose of Dee’s *Monas Hieroglyphica* can be rendered by employing Peirce’s triadic semiotic system and Deleuze’s three ontological modalities. By linking the primary sign structures of the Monas’ sign system as a set of virtual Representamen

<sup>262</sup> Ibid., 27r. The original “map” can be found in Appendix IV, p 97. The renders we place here is borrowed from the version of the MH by occultist Benjamin Rowe because we found his translation suitable.



we capture Dee's philosophic insistence on the "realness" of the Monas. By drawing a relationship between the Interpretant and the Intensive, it is possible to appreciate both the mobility of the sign-play and the role played by Dee's creation of semiotic Indexes and their relation to the physical world and its processes. Finally, by following the ontological rupture in the process of signification, we have show how the Dee's importation of objective data was thought to be restorative and conversely how the semiotic character of the Monas itself could be thought to replace physical objects making the Monas the site of a performance as well as a sign. This performative process, in which the intensive overlap between the semiotic and the ontological can be manipulated, is isomorphic, we have argued, with Dee's notion of the "cabala of being."

#### 4.1 From Map to Trace – Dee and the Twilight of the Monas

We opened our discussion of Dee in terms of maps and it should be best to end in just such a way. Deleuze and Guattari describe their notion of a “map” as opposed to a “tracing” in *A Thousand Plateaus* by linking the process of tracing as a task in hierarchical reproduction which fundamentally lacks expression and creativity. It is the reiteration of structures through blind repetition. They relate the “trace” to the arborescent process of the growth of leaves on a tree. The leaves are simply copies of a deep structure which cannot inform the mechanism of its production. The map on the other hand is, as they write:

Make a map, not a tracing.....What distinguishes the map from the tracing is that it is entirely oriented toward an experimentation in contact with the real. The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a meditation....The map has to do with performance....<sup>263</sup>

The map for Deleuze and Guattari is fundamentally about the recursive iteration which prompts and is prompted by difference as an actuality, an expression onto being. The map is the rhizome which connects within and without at a multiplicity of mobile points. We have shown that Dee’s Monas is just such a map: Dee certainly conceived of it as “oriented toward an experimentation in contact with the real,” with its performative, image-act character, it could be cabalistically manipulated and was thus “detachable, reversible, susceptible to constant modification.” Dee’s political gestures of using the Monas as a utopian semiotic mesh with it “conceived of as a work of art, constructed as a political action or as a meditation” and we cannot forget how it appreciated its aesthetic potential when he advised the “mechanic” on how to properly add flourishes and serifs in theorem XXIII. In this sense, Deleuze and Guattari capture elegantly the character of the

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<sup>263</sup> Deleuze and Guattari: 1980 (2005), 12-13.

Monas as an exercise in practiced cartography. However, one key feature must be added as the result of our study – the Monas existed for Dee in continuum with being and thus its performance was central to its nature, its being. Through our ontological analysis we have shown that just the Monas is a process in ontological cartography through which Dee navigated the straits of the anxiety brought on by a rupture in the relationship between represented and representation.

There is another map that Dee began in 1582, one much longer in the making and by 1582 it was entering into its most dramatic and final stage. On March 10<sup>th</sup> of that year, he met with a certain Edward “Talbot” and began conversations with what he felt were supernatural beings of all stripes. This process too became a kind of map making. Dee was wishing to discover “radicall truthes” one of which was to discover a language which would unite words with being itself. The “angels” would eventually “reveal” to Dee several “languages” in which, as the arc-angel Gabriel would eventually explain:

Every letter signifieth the member of the substance whereof it speaketh. Every word signifieth the quiddity of the substance. The Letters are separated, and in confusion: and therefore, are by numbers gathered together: which also gathered signify a number: for as every greater containeth his lesser, so are the secret and unknown forms of things knit up in their parents: Where being known in number they are easily distinguished, so that herein we teach places to be numbered: letters to be elected from the numbered, and proper words from the letters, signifying substantially the thing that is spoken of in the center of his Creator, whereby even as the mind of man is moved at an ordered speech.<sup>264</sup>

It is often noted that Dee abandoned the theory and application of the Monas in favor of the more radical system of direct communication with angelic beings. Certainly, there is a transition and the Monas is simply not employed in the degree to which he imagined – not by himself, not by his peers, and certainly not by kings and principalities. Dee’s bombastic proclamations concerning the Monas in his introductory letter simply did not pan out. The “magical parable” did not do what Dee claimed it could because it

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<sup>264</sup> Casaubon: 1659, 92. This section of the so-called spirit diaries is the most detailed discussion of philosophy of language during Dee’s later career. Curiously, he, nor the “spirits,” mention the Monas.

could not. In the end, the Monas was destined to be a symptom for the anxiety caused by the mid-15<sup>th</sup> century ontological rupture in representation, not a cure for it. The Monas does, for the large part, fade to the background - it cannot be denied. Dee does not solely manipulate the Monas in place of physical alchemy, nor does forward a Monas-centered geometry in his 1570 preface of Euclid's Elements. The fate of the Monas is one in which what it came to represent was precisely what Dee hoped it would replace. Indeed, while the Monas was developed to be a map by which to re-map reality, it does, in the end, become a trace. While for Dee the priority of the Monas does recede in its map-being, what does not is the general project – the cartography of being. Dee's desire to create a map of being in which the map itself captured and transformed reality persisted as one of his central goals – one in which the philosophic and the mystical amalgamate, no doubt “rendering the vulgar eye dark and considerably despairing.”

## Appendix I - A Structural Analysis of the *Monas Hieroglyphica*

In that a structural analysis of the MH has never been produced we do so here.

As stated above the MH is composed of twenty-four theorems of greatly uneven length which proceed without substantive deductive character. While the argumentative procession is apparently linear (there is little internal-self reference) much of the “deductions,” a term we must use loosely in this case, rely on a process of nesting and recursion to function logically (we explored this logic in our analysis above). Thus many of the theorems can be variously described as axiomatic, definitions, corollaries to others, demonstrations, and lemmas although Dee makes no such distinctions. Such an architectural muddle, in addition to the recursive logic operative within, only adds to frustrating attempts by readers, past and present, to produce sense from the text in a purely architectural approach. Despite such a condition, it is possible to provide some analytic clarity of the structural of the text both from small logical gesticulations offered by Dee and from the internal relationship of the contents of some theorems.

The MH can be modeled as composed by (1) three groups of theorems capped by summarizing remarks, (2) an interpolated paraphrase from Dee’s earlier PA, and (3) four independent explorations of the use of the Monas itself. In more detail we describe them thus:

1. Theorems I-X form a single set with Dee arriving at “one way of hieroglyphically considering our Monad” including a summary sentence of the theorems printed in majuscule text at X.
2. Theorems XI-XV ends with another majuscule printed cap announcing having arrived at the “cabalistic anatomy” via the proceeding theorems at XV. Theorem XVIII continues this thematic arc and subsequently belongs to this group as well.<sup>265</sup>

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<sup>265</sup> Dee bounds the theorem as following XII and XIII.

3. Theorems XVI-XVII are cabalistic exploration of the quaternary + of the Monas and should be grouped together.
4. XIX is effectively a cross-referencing paraphrase to aphorism CVI of the PA and appears to break the flow of the MH in its placement here.<sup>266</sup>
5. Theorems XX-XXIV are disparate and longer exploratory issues which either elucidate the Monas' composition (XX), deconstruct it for various reasons (XXI-XXII), describes how to draw it mechanically XXIII, and a final theorem to correlating it to the hours of the day and other twenty-four related correlations.

Of special note is theorem XXIII, the longest of the MH, containing numerous forms of detailed speculation on the relationship of the Monas to the cosmos itself. This internally diverse theorem could be itself parsed into sub-sections:

- A. The construction of the Monas geometrically
- B. A discussion of the Pythagorean Quaternary
- C. A schematic division of quantification
- D. The "Horizon Aeternitatis" scheme

Dee seems to describe subsections B-D after subsection A but what follows in XXIII does not seem to correlate. This again leads us to think that the MH was, in some fashion, not complete when it was published. Likely Dee had a much larger project in mind. While the XXIV conveniently caps to correspond to the hours of the day, we can imagine Dee ending it here much like Pico expanded his cabalistic conclusions just before printing to make a mystical correlate with the number seventy-two. Structurally, we can conclude that the text itself, while not enjoying the deductive beauty of Spinoza's *Ethica* or even Proclus, does contain a partially continuous and partially logical progression which we have outlined above.

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<sup>266</sup> It seems to better fit into group 2 (theorems XI-XV).

## Appendix II – Dee’s Astrology in the MH

Astrology, in its various capacities, was a fact of life for the intellectual life of the 16<sup>th</sup> century and it is universally recognized that Dee was an expert in the field.<sup>267</sup>, <sup>268</sup> We should look no further than the fact that he chose the proper day for the coronation of Queen Elizabeth I to serve an indicator of these two realities. Dee’s astrological thinking is, like much of his intellectually career, a strong carry-over and curiously revolutionary. While this is not the place to explore that thinking in detail, we should say some words about the relationship of the Monas to Dee’s astrological thinking.<sup>269</sup>

Dee first laid down his dual theory in the PA in which he posits that astrological entities, primarily the Sun<sup>270</sup>, emit both influential rays (in the Al-Kindian sense) which wash over the surfaces of objects and a form of early magnetic theory (he compares this second influence that of the power of the lodestone) in which another force, for lack of a better word, can penetrate through the surfaces of things. This implied serious complications for astrological theory, (1) since the influences are caused by rays they would be subject to the laws of optics and thus prediction *and alteration* could be had in a novel way and (2) because various elements are subject to magnetic force in various capacities one had to know the degree-to-which this second force was acting on a given object. In the PA Dee is trying to provide a systematic, and rigorously material basis for the given fact of astrological influence and had such a theory been picked up it would have had serious implications for the whole discipline of astrology.

Dee does not introduce any new astrological theory into the MH and assumes readers will have known of his thinking in the PA (although it seems that Dee does not

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<sup>267</sup> Characteristic of Dee, obsessively at that, he meticulously noted in his diary, with specials symbols composed of astrological signs, when his wife would start her period (also remarking on the degree of flow in English ciphered with Greek letters), when they had sexual intercourse, even his gruesome dissection of his own miscarried fetus, and any other astrologically significant moments.

<sup>268</sup> Because of my inferior knowledge of astrology I closely follow Dunn’s 2006 analysis. Also important is the meticulously analytical presentation of Dee’s theory in the introduction of Shumaker and Heilbron’s 1978 translation of the PA. For understanding Dee’s astrological milieu I would recommend Broecke 2003 study (which requires a bit of background which I admittedly lack) *The Limits of Influence: Pico, Louvain, and the Crisis of Renaissance Astrology*.

<sup>269</sup> Especially in that for Dee, in his own words, the permutation of the celestial world (astronomia) was directly linked to changes in the terrestrial world (astronomia inferior). They were a unified discipline.

<sup>270</sup> Dee seems to fluctuate on this issue. At times, because of his geocentrism, he states that only the sun gives off these rays and others simply reflect them like colored (influencing) mirrors and in other places they seem to have their own light (and heat) as well. Aries for instance, as we have seen the MH, is a source of its own light/heat/fire.

carry the radical elements of the PA's theory into the MH and we should resist thinking of the MH as a sequel to the PA as part of a critical approach on Dee's part). Even on this assumption, Dee's focus is very much, as we have discussed above, on the problem of representation and not novel theorizing (except in Monas-izing these disciplines). In the MH, astrology is, of course, implicit, but subject to two predictable shifts: One representational, the other concerning ontological replacement.

The first is Dee's stated desire to reform the astrological signs themselves (which he says are actually "semi-barbarous"<sup>271</sup>) into more perfect, and thus more powerful, Monas influenced objects. Dee goes on to offer a few, but not many, new forms of the common astrological signs. Importantly, while alchemists took note of this process and many seemed to have been influenced<sup>272</sup>, I can find no evidence that astrologers changed their signs to be more Monas-like and we may conclude that the influence of the Monas in this sense was minimal to non-existent.

Secondly, Dee displays the plasticity of the Monas by revealing that it can model (and replace, as we will see, Dee felt he could create a readable cosmos much like the onto-semiotic alchemy lab) various astrological schemes. Thus on 20r,v Dee deconstructs the Monas to show how it can model the planet arrangement of Plato<sup>273</sup> in addition to the one current understood in his day. We could say, in the language of our analysis, that the Virtual Platonic scheme is Nested within the Monas. In seeming contradiction to his work in the PA in which, because the rays have the same nature of optics and thus require conventional observation, Dee lampoons this early empirical tendency in respect to *both* astronomia and optics (their proximity is likely telling of Dee's treatment of their theoretical affinity) stating on MH 6r:

And will not the astronomer (astronomus) be very sorry for the cold he suffered under the open sky, for [all his] vigils and labours, when here, with no discomfort suffered from the air, he may exactly observe with his eyes the orbits of the heavenly bodies under [his own] roof, with windows and doors shut on all sides,

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<sup>271</sup> MH 4v.

<sup>272</sup> One example is shown in Newman and Principe 2002: 194 in which Starkey, 1656, subtracted Dee's Monas-influenced form of Aries a symbol to indicate the absence of Iron (which is astrological sympathetic to Mars) from his Regulus.

<sup>273</sup> I.e., Earth, Moon, Mercury, Venus, Sun, Mars, Jupiter, Saturn.



at any given time, and without any mechanical instrument made of wood or brass? And the optician will confound the stupidity of his art: he worked in all manner of ways to shape a mirror into the parabolic line of a (suitably rotated) conical section, so as to attack any matter (liable to fire) with that incredible heat [issuing] from the Sun; yet here is a line revealed resulting from a triangular section of the tetrahedron after whose shape, when rendered three-dimensional, a mirror may be formed which (even when there are clouds before the Sun) can reduce any stones or any metal to, as it were, impalpable powers by the force of (truly the strongest) heat.

Again, as with alchemy, Dee's theory is that the refined form of representation will have ontological affects and thus could/should be replaced with the Monas. Unlike his fiery contemporary Giordano Bruno, Dee never dabbled in heliocentrism in the MH (or at all) although we are sure he could make the Monas dance to this new rhythm as well. As for the magnetic aspect of the theory put forward in the PA, it is silent in the MH and only the Ray types of influences are spoken of.

As I mentioned above, it does seem that, unlike the alchemic reception upon which it had various impacts (even if only symbolic), the Monas project had little to no affect on astrological theory or representation. It is also apparent, as Dunn points out, that even in Dee's own private astrological work he himself did not incorporate this radical approach in any sense. We can conclude that Dee's astrological thinking, like his intellectual life generally, is a tension of radical reform and strict observance of tradition and that astrology, like all disciplines, were to be erased, intensified, and replaced by their Monas-ized counterparts. We can also conclude, as with virtually all the other disciplines, that such a change never occurred – even in Dee's private life.

### Appendix III - Some Brief Remarks on Emblematic Analysis and the Monas

The study of emblems is a vast, technical and obscure field of research.<sup>274</sup> It is not because I can pretend any substantial competence on the subject that I venture some brief presentation of the MH in this regard. Rather, it is because virtually no attention has been paid to Dee's contribution in this field. Indeed, even in the list of related books of the 16<sup>th</sup> century found in Daly and Manning, there is no mention of the MH as employing or useful to the field of the study of emblems.<sup>275</sup> While it is not directly related to the subject matter of our study, nor does it present overly significant fodder to the study of emblems generally, we would still forward some preliminary presentation such to be an initial foray into future discussions.

The emblem, as we discussed, earlier, is usually the combination of an allegorical image with a motto or legend intended for a range of descriptive and didactic uses. Contemporaneously, there were known by dozens of names in the vernacular<sup>276</sup> and began to appear roughly in the 1540's with full emblems books appearing by the close of the 16<sup>th</sup> century. Dee's Monas appears during this blossom of emblematics as a form of condensed symbolic representation was employed later to become a symbolic referent for Hermetic philosophy, in its sundry articulations, even until this generation.

Two distinct emblems occur in the MH itself, both at the end.<sup>277</sup> The first occurs directly after Theorem XXIV (over):

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<sup>274</sup> The AMS series of studies in the Emblem counts more than twenty-one densely prepared volumes alone.

<sup>275</sup> Daly and Manning (eds.): 1999, 256-263.

<sup>276</sup> Manning: 1999, xiii provides an illuminating list: *imprese* (Italian), *symbolum* (Neo-Latin), *sinnepoppen* (Dutch), *sinne-bild* (Dutch), *sinnbild* (German), *jeroglificos* (Spanish), *insignia* (Neo-Latin), *cognizances* (English), *device* (English), and on.

<sup>277</sup> Note that we are not examining the frontispiece here. The analysis of frontispieces is a more complicated and separate field of inquiry.

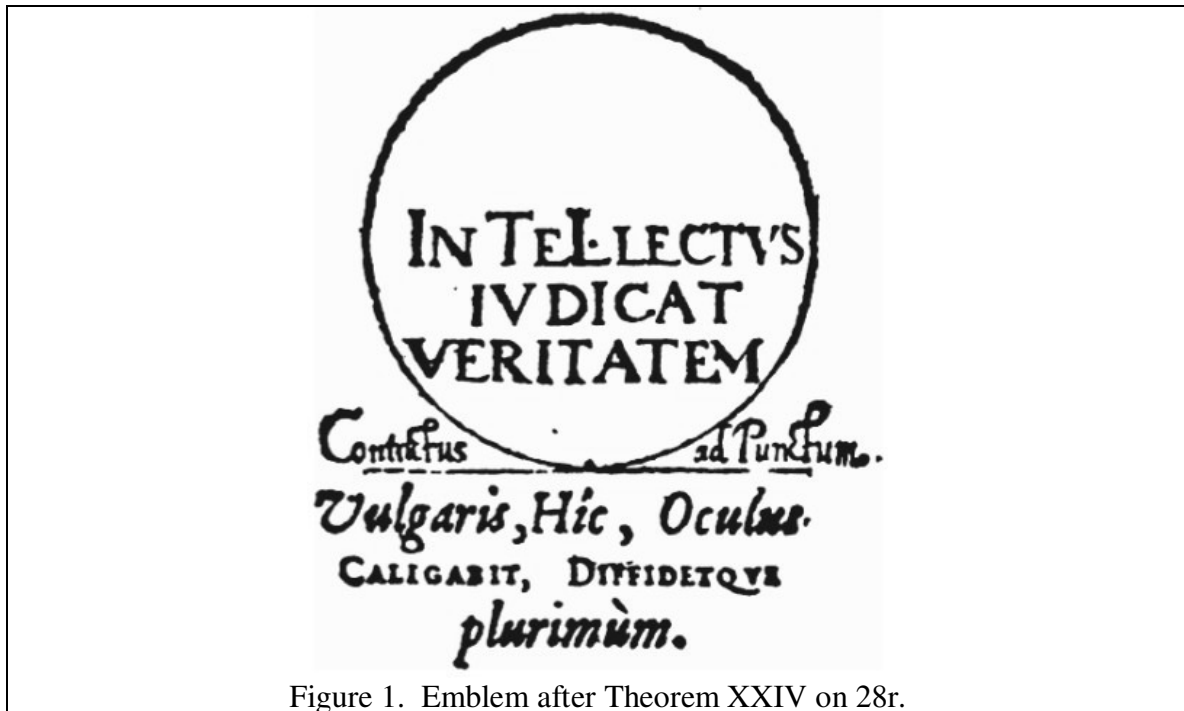


Figure 1. Emblem after Theorem XXIV on 28r.

This primitive emblem is a geometric shape befitting the contents of the MH. It betrays none of the elaborate artistic flair, replete with mythological and biblical symbols, of other, and especially later, emblems. The graphic elements are a Circle, with a central Point noted, which meets tangentially with a Line, itself equal to the circle's diameter. Thus we have the three central elements of the Monas (point, line, and circle) in another, rearticulated form.

Within the circle is the legend "INTELLECTVS IUDICAT VERITATEM" which Josten renders as "The intellect examines the truth" or a possible alternative, "The intellect judges the truth." It is unclear why the /I/, /T/, and /L/ are printed in majuscule. Below this the legend reads "Contr[ac]tus ad Punctum" rendered by Josten as "Contact at a point" but it seems that there is a misreading of the ligature in this case, rendering the alternative, and perhaps improved, "Contracted to a point." Below the equator, and likely the main motto of the emblem, is famous expression "Vulgaris, hic, oculus, caligabit, diffidetque, plurimum" which Josten renders as "The vulgar eye will here be blind and most distrustful" or, alternatively, "Here the vulgar eye will be darkened and will much despair."

Josten's analysis is that it "appears to be that the human intellect is a point of contact between the infinite, expressed by the circle, and the finite, expressed by the tangential straight line of limited extension....the circle may be interpreted as relating infinity to the idea of alchemical gold, of which the point within the circle is the conventional symbol."<sup>278</sup> In that emblems are so heavily reliant on culturally and temporally grounds and reader response formed by certain intellectual habits, we cannot disagree with Josten except to reiterate our above caveat concerning the centrality of the subjective and individual in this interpretation. We would also add, although it is unclear if Dee would have known it, that the differential point of contact between the circle and the linear tangent is a limit – its point of contact is infinitely divisible. Forshaw points out that these legends go on to have further currency in later alchemic texts in the years after Dee's publication of the MH.<sup>279</sup> Similarly, we are unsure if this emblem occurs first in its career in the MH.

The second emblem (reproduced on following page) is both more elaborate and contains two legends like the one above and occurs on the final page of the MH (it also occurs in a similar form in both editions of the PA). The device is graphical here rather than simply geometric and shares many elements with the frontispieces of both the PA and the MH including imagery of the sun (left flanked) and moon (right flanked) and also contains a heraldic, perhaps, helmet element. In addition to flourishes (the *asemia* of which is not sure in emblematic studies), the *Monas* in full form is surrounded in the alchemic egg (which also occurs on MH 17r and many other alchemic texts as well ) with a clothed woman holding up a seven-pointed object (a star?) in her right hand. The dual legends suspended vertically and flank the woman and read on the left "Supercaelestes roretis aquae" and on the right "Et terra fructum dabit suum" which Josten does not render, for reasons unknown, but can be read as "Let the (super-)Heavenly waters drip" and the right "and the earth will give (forth) her fruit." Notably, Dee reproduces this emblem himself in a MS in which he himself is depicted next to a similar, less elaborate device, flanked by his Latinized initials /I/, /D/ with the same legend in his autograph.<sup>280</sup>

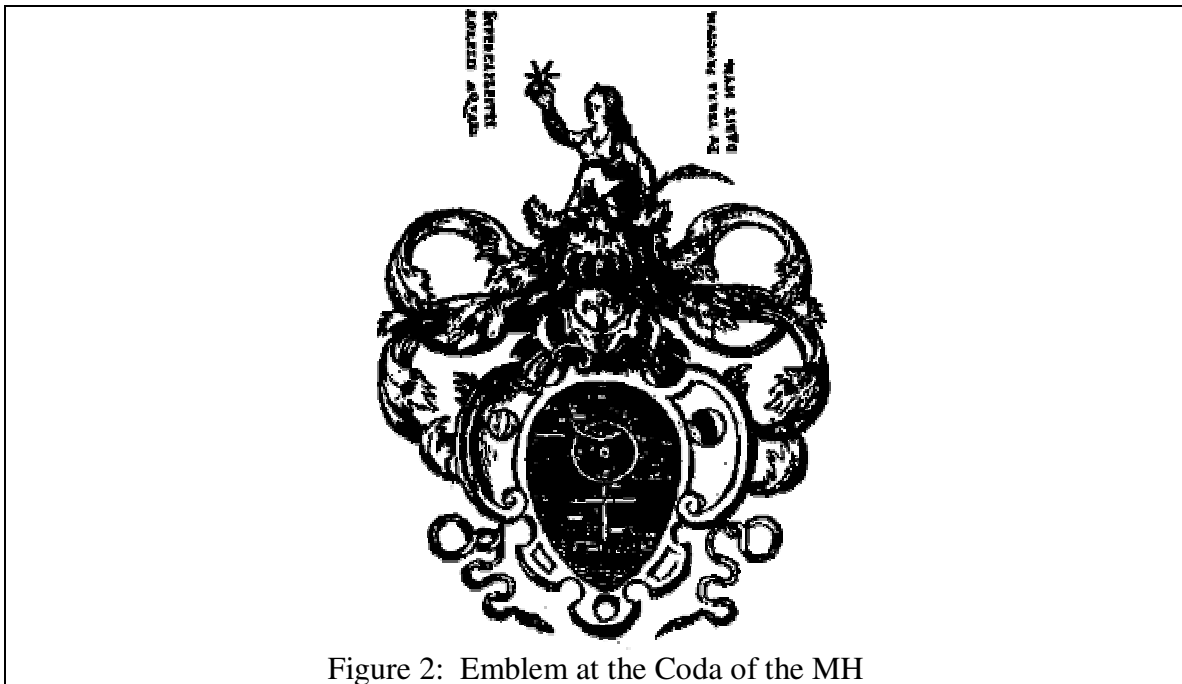
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<sup>278</sup> Josten 1964: 219, note 131.

<sup>279</sup> Forshaw: 2005, 250-2.

<sup>280</sup> British Library, MS Cotton Charter XIV, article 1.

This leads us to believe that Dee had some hand in designing at least this device and perhaps the former as well.



A final, but likely inconsequential note of interest, is a comparison of the woman at the crest of Dee's emblem here to many of the women who occur in the "celestial" sections of the enigmatic and undeciphered Voynich MS:



Figure 4: Detail from the "Aries" page of the Voynich MS (Yale Beinecke 408, 72).

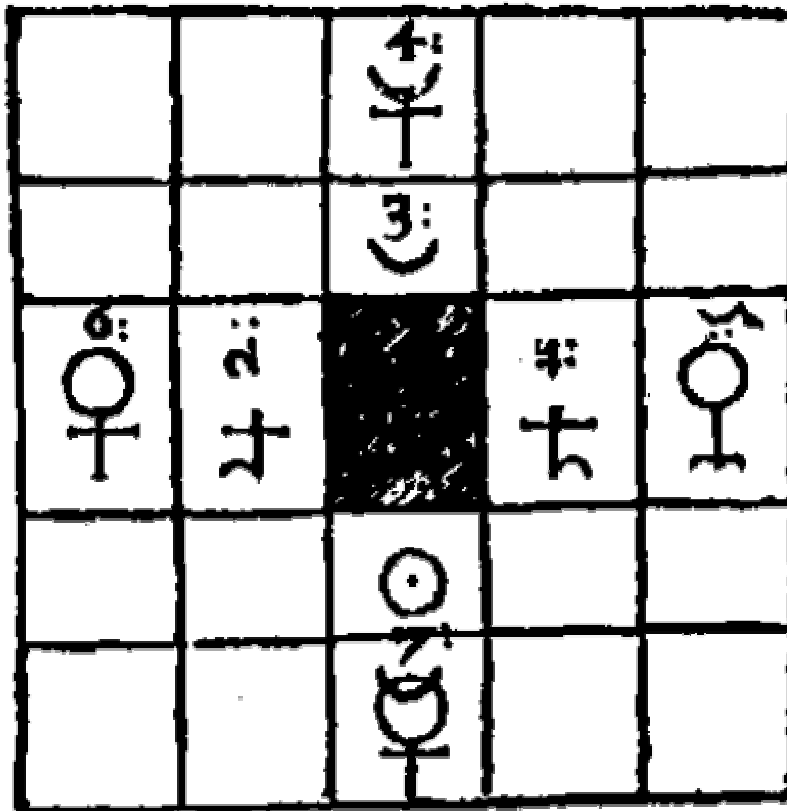
While this figure is clothed, many others are nude. The figure is holding similar 7-pointed "star" but in her left hand, as opposed to the right in Dee's emblem. Like many of the Voynich figures she appears "pregnant." The Voynich MS is replete with hundreds of such figures the meaning of which, like the rest of the manuscript, remains a total enigma.

We are hesitant to forward an interpretation of these emblems for the following reasons we paraphrase from Daly:<sup>281</sup> (1) It is unknown without in depth historical analysis what can be considered a-priori non-emblematic, (2) the knowledge needed by way of selective comparative analysis in which characteristic, habitually occurring emblems may be given generic description and application, and (3) a method which, historically grounded, describes the relationship of pictures of words in the emblematic device. Simply put, we lack such an expertise and only add this appendix in the hopes that a future study may be forthcoming.

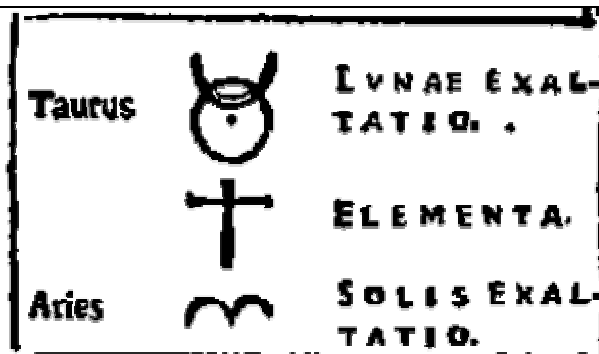
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<sup>281</sup> Daly: 1979, 9.

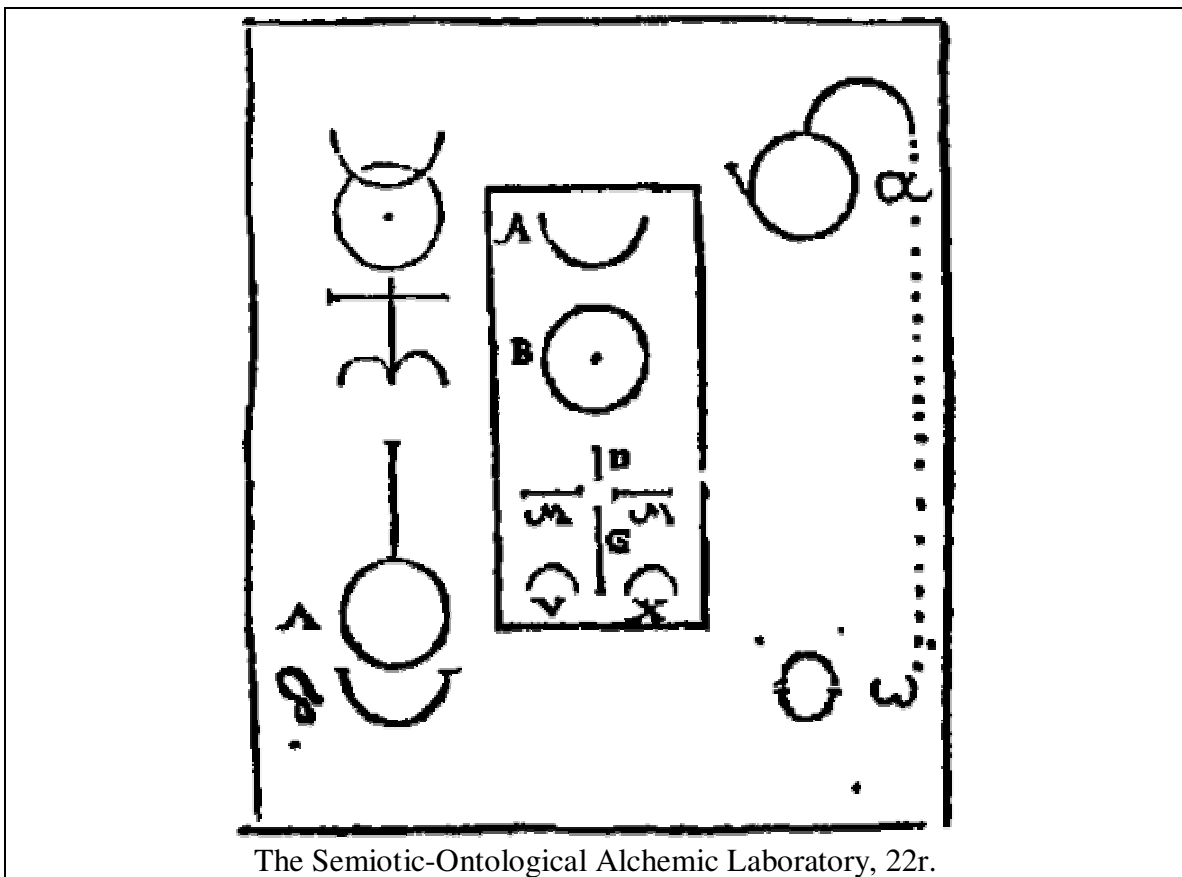
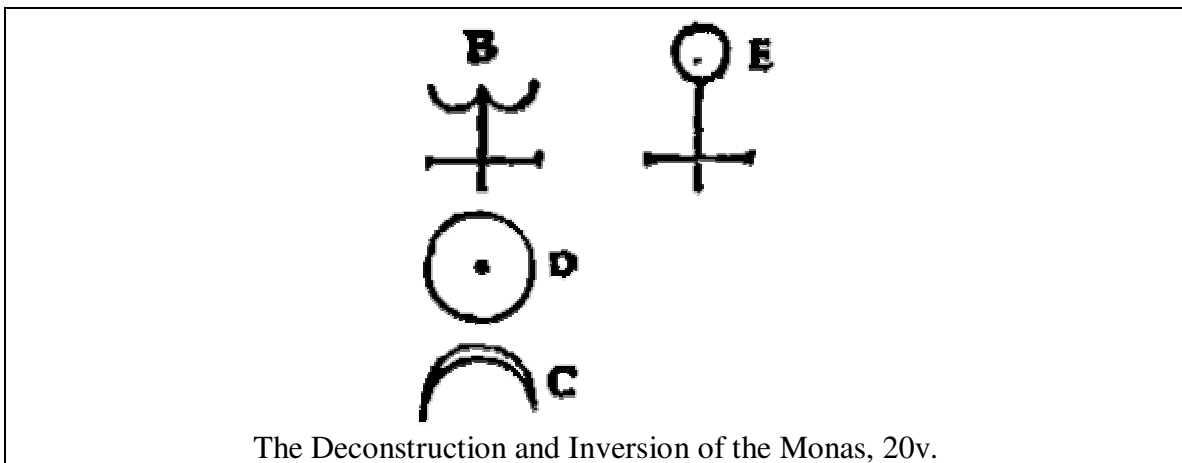
Appendix IV – Images References of Interest (from the first, 1564 Edition).










The Procession of the Elements, 14v. Note the dual solar-Mercurial nature of point 7. Although obfuscated in this reproduction, the Monas appears in the center section although shaded over.



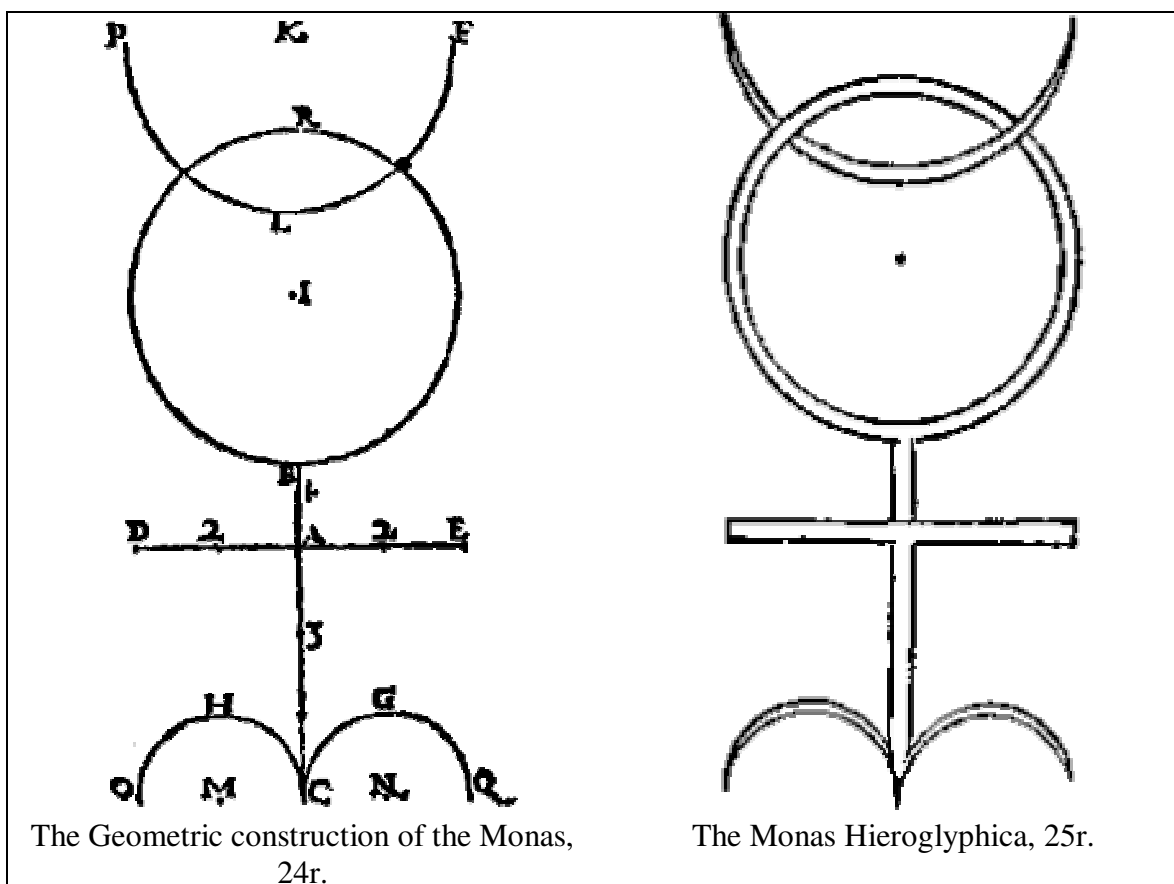
The First Deconstruction of the Monas to Show its Astrological Interpretants, 15r.





	Existens ante Elementa.	Adam Mortalis Masculus & Femina.	Mortifi- cans.	Adumbra- tur.	Natus in Stabulo.
	Elementaris oeconomia.	Elementalis Genealogiæ Consum- matio.	Cruz.	Cruz.	Holocaus- tum in Cruce.
	Existens post Elementa.	ADAM IMMOR- TALIS.	Vivificans.	Manifestif- simus.	Rex Regum Vbiq.
Conceptus Singula in- fluentia.	Potentia Semina.	Creatio Hylea.	Matrimo- nium Ter- restre.	Principium.	
Passus & Se- pulchus.	 Virtus Denaria.	Depuratio Elementalis.	Crucis Martyriū.	Medium.	
Resurgens, propria vir- tute.	Glorie Triumphus.	Transfor- matio.	Matrimo- nium Divinum.	Finis.	

The Table of Correspondences, not translated in Josten, 23r.



**GLYPHICA.**  
**HORIZON AETERNITATIS.**

**QUATERNARIUS: quo Numero. MONAS notatur ARITHMETICAE: ARITHMETICAE: quae vincuntur per POTESTATEM.**

8	METAMORPHOSE CONSUMMATA	4
7		3
6		2
5		1

HORIZON TEMPERATIS

**Antiquorum insignia, Decemque Proportiones, explicat.**

4	Ignis	1000.	MONAS	7
3	Aëris	100.		6
2	Aquæ	10.		5
1	Terræ	1.		4

MONAS

**REGNUM**

3	Anthrax	14-15.
2	Citrinus	
1	Strenuus	12-13.
1	Tenebræ	

**MONAS**

3	Anthrax	14-15.
2	Citrinus	
1	Strenuus	12-13.
1	Tenebræ	

**SIC FACTUS**

The "Horizon Aeternitatis," not translated in Josten, 27r.

### Issues for Further Research

Continuing this project would also include a cross comparison to Dee's Mathematical theory and issues in the philosophy of language in the so-called "Spirit Diaries." Because this paper has focused exclusively on the MH, another continuing study would likely prove enlightening as to the relation of such ideas to Dee's intellectual habit overall.

In general, it seems that much more scholarly work must be done on Renaissance and "Hermetic" semiotics and visual culture generally. Future studies in this field would prove exciting.

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