

THE NEW LIGHT OF EUROPE: GIORDANO BRUNO AND THE MODERN AGE

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ABSTRACT

GEOFFREY NEAL CASSADY MCTIGHE: THE NEW LIGHT OF EUROPE:
GIORDANO BRUNO AND THE MODERN AGE
(Under the direction of Dr. Ennio Rao)

Giordano Bruno (1548-1600) is an important figure in Hans Blumenberg's (1920-1996) *The Legitimacy of the Modern Age* (1966). In this dissertation I further situate Bruno in the German Philosopher's sweeping interpretation of the modern age through the Blumenbergian lens of Metaphorology. Herein I analyze metaphors in the lives and works of two thinkers who espouse Brunonian ideas: Nicola Antonio Stigliola (1546-1623) and Andrea Fodio Gambara (c.1588-c.1660). Bruno is a modern thinker because his radical reading of Copernicanism called for a reassessment of all facets of human inquiry into nature and morality. Accordingly, Bruno detailed a revolutionary infinite pananimism that inspired, among others, his compatriot, Stigliola, and the Calabrian Fodio Gambara. Although neither cited Bruno in their works, they directly and tangentially assumed Brunonian garb in the seventeenth century. The basis on which I argue this is both theoretical and substantive. Theoretically, I study each of these authors' works and lives as Blumenbergian solutions to problems integral to the development of the modern age. Moreover, I situate these metaphors in dialogue. The result is a picture of how an initial Brunonian spark brought on by Copernicus's flint, set a conflagration in the modern age that participated in the demise of Hebrew and Christian eschatological thought. Bruno replaced it with the fecund ash of cosmological and spiritual infinitism. Substantively, I employ Blumenberg's metaphorology, a synchronic approach to history,

in order to understand ideas. I study metaphors as Blumenbergian "reoccupations of positions," such as Bruno's *ars memoriae* and Stigliola's Encyclopedism as better solutions to the problem of the organization of knowledge in the infinite universe. This thesis is the only study to consider these three thinkers in tandem, the only English-language study of Stigliola and Fodio Gambara, and it is also an extension of Blumenberg's metaphorology to Giordano Bruno's thought.

DEDICATION

*Ai miei genitori e a mio fratello;
alla città di Nola, e alla Baronìa,
patria della mia famiglia italiana.*

"DE L'AMORE

*Amor per cui tant'alto il ver discerno,
ch'apre le porte di diamante e nere,
per gli occhi entra il mio nume, e per vedere
nasce, vive, si nutre, ha regno eterno.
Fa scorgere quant'ha il ciel terr'et inferno,
fa presente d'absenti effigie vere,
repiglia forze e trando dritto fere,
e impiaga sempr'il cor, scuopr'ogn'interno.
O dunque volgo vile, al vero attendi,
porgi l'orecchio al mio dir non fallace,
apri, apri (se puoi) gli occhi, insano e bieco.
Fanciullo il credi perché poco intendi.
Perché ratto ti cangi, ei par fugace.
Per esser orbo tu, lo chiami cieco."*

--G. Bruno, *De la causa, principio, et uno*, DFI 178

*"ELIOTROPIO Qual rei nelle tenebre avezzi, che liberati dal fondo di qualche oscura
torre escono alla luce, molti de gli essercitati nella volgar filosofia, et altri,
paventaranno, ammiraranno e (non possendo soffrire il nuovo sole de tuoi chiari
concetti) si turbaranno.*

*FILOTEO Il difetto non è di luce, ma di lumi: quanto in sé sarà più bello e più eccellente
il sole, tanto sarà a gli occhi de le notturne strige odioso e discarso di vantaggio.*

*ELIOTROPIO La impresa che hai tolta, o Filoteo, è difficile, rara e singulare, mentre
dal cieco abisso vuoi cacciarne, et amenarne al scoperto, tranquillo e sereno aspetto
de le stelle, che con sì bella varietade veggiamo disseminate per il ceruleo manto del
cielo."*

--G. Bruno, *De la causa principio, et uno*, DFI 181.

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seminar on Renaissance Poetics and Philosophy at Middlebury during the summer of 2001. He has served as an intellectual mentor to me ever since.

PREFACE

Two incidents stand out as important during my research of this thesis: 1) Having the unusual fortune of finding Bruno's Italian dialogues for sale on a small bookstand at a tie shop where the horrid Tower of Nona had once stood, which was the prison where Bruno passed his last night of life; and 2) while visiting Bruno's hometown, Nola, during the summer of 2006, I spent an afternoon at the Circolo Giordano Bruno. Ironically, an older member of the club, upon learning of my interest in Bruno, angrily told me that Bruno's reading of Copernicus was the work of the devil and therefore my studying him was akin to devil worship. He raised his finger to the air, opened his eyes wide, nostrils open like a bull's, and raised his voice so that all could hear. I believe that in these two moments I met the convergence of two worlds of Bruno's existence: 1) Bruno's belief in the transmigration of souls (he obviously sent me the book!); and 2) Explanation as to why Bruno was burned at the stake by the Church as an impenitent heretic. It was not "Copernicanism," but rather Bruno's pointing of his own finger, opening of his own eyes, and raising of his own voice so that all could hear his opinions about how the Copernican Revolution signified the necessity for the destruction and absolute renovation of centuries of dominant myth that ushered his demise.

After all is said and done, I have come to one invariable conclusion: Bruno must be studied. The Nolan is still *alive*. Bruno would say the same. He didn't (doesn't?)

believe in death—only the transmigration and transmogrification of souls and beings. It is modern man's duty, therefore, to find where his ideas live and understand them.

I hope that this thesis—my minor contribution to scholarship—shall do this great thinker a bit of honor. This, however, shall pale in comparison to what Bruno does for me. He often awakens my imagination from its modern slumber to the wonders and mysteries of the universe.

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LIST OF ABBREVIATIONS

- CA:* Andrea Fodio Gambara. *Camaleonte antipodagrico. Discorso enciclopedico*. Napoli: Ettore Cicconio, 1651.
- DC:* Nicola Antonio Stigliola: *enciclopedista e linceo: con l'edizione del trattato Delle apparenze celesti*. Ed. Andrea Cuna & Saverio Ricci. Roma: Accademia nazionale dei lincei, 1996.
- DFI:* Giordano Bruno. *Dialoghi filosofici italiani*. Ed. Michele Ciliberto. Milano: Mondadori, 2000.
- EP:* Nicola Antonio Stigliola. *Encyclopedia Pythagorea*. Neapoli: Appresso Constantino Vitale, 1616.
- OLC:* Giordano Bruno. *Opera latine conscripta*. Ed. Francesco Fiorentino, Felice Tocco, Girolamo Vitelli, Vittorio Imbriani, and Carlo Maria Tallargio (1879-1891). Reprint. 8 vols. Stuttgart: Friedrich Frommann Verlag, 1962.
- TIC:* Nicola Antonio Stigliola. *Il telescopio over ispecillo celeste*. Neapoli: Per Domenico Maccarano, 1627.
- TM:* Nicola Antonio Stigliola. *Theriace et mithridatia*. Neapoli: Apud Marinum de Alexandro in officina Aquilae, 1577.

CHAPTER I.I: INTRODUCTION

ALBERTINO: I would like to know what is this phantasm, this unheard of monster, this human portent, what extraordinary brain is this; what news does he bring to the world, or rather what obsolete and ancient things come to renew themselves, what amputated roots come to life again in this our age?

ELPINO: They are amputated roots that germinate, they are ancient things that return, they are occult truths that one discovers: it is a new light that after a long night rises above the horizon and hemisphere of our cognition, and soon approaches the meridian of our intelligence.¹

—Giordano Bruno, *De l'infinito, universo e mondi*, DFI 422

The small town of Nola along the slopes of Monte Cicala just outside of Naples, Italy, saw the birth of one of its greatest sons in 1548, the "nuovo lume / new light" of Europe, Filippo Bruno. Son of Giovanni Bruno and Fraulissa Savolino, young Filippo passed fourteen years in Nola before heading off to Naples where he followed the lessons of Giovan Vincenzo Colle. In 1565 Filippo took up the Dominican habit at the convent of San Domenico Maggiore in Naples, where he assumed the name Giordano. No more than one year would pass before Bruno showed the first signs of an uncompromising, inquisitive, and revolutionary mind that would go on to shape much of the cosmos of late sixteenth-century European letters and thought. That year Eugenio Galiardo da Napoli denounced the seventeen-year-old friar as a heretic for having accursed the blessed names of the Virgin Mary and the Saints. From Rome, where he was accused of homicide, to Padua to Lyon, from Toulouse to Paris to Oxford, and finally from Frankfurt to Venice,

¹ "ALBERTINO: Vorrei sapere che fantasma, che inaudito mostro, che uomo eteroclito, che cervello straordinario è questo; quai novelle costui di nuovo porta al mondo, o pur che cose absolete e vecchie vegnono a rinuovarsi, che amputate radici vegnono a repullular in questa nostra etade? / ELPINO: Sono amputate radici che germogliano, son cose antique che rivegnono, son veritadi occolte che si scuoprono: è un nuovo lume che dopo lunga notte spunta all'orizzonte et emisfero della nostra cognizione, et a poco s'avicina al meridiano della nostra intelligenza." Unless otherwise noted, all translations are mine. For all translations I provide the original in the form of a note for purposes of consultation.

the Nolan philosopher traversed and frequented nearly all of the intellectual circles of Europe. During this period of vagabondage, he saw over forty works to press. Twenty-five years after his first accusation of heresy in Naples, while lodged in Venice, the bitter nobleman and Venetian ambassador to France, Giovanni Mocenigo, wrote three consecutive letters to the Venetian Inquisition accusing Bruno of the most catastrophic of heretical beliefs. Thenceforth, Bruno's unwavering pugnacity and stern demeanor sealed his fate at the stake in Campo de' Fiori—with "lingua in giova" and head turned away from the imposed salvation of the crucifix, Bruno was silenced forever.² The brothers of the arch-confraternity of San Giovanni Decollato in Rome claimed that on February 17, 1600, Bruno "ended his miserable and unhappy life" (Firpo *Il processo* 348).³

Au contraire! What a life it was! In his extensive travels and countless confrontations, Giordano Bruno shaped the course of Western European thought. For that reason alone this dissertation aspires to a deeper understanding of the man, his contribution to the modern age and a new science in seventeenth-century Italy, and more widely, in Western Europe. Moreover, it aspires to understand the process of epoch making, and how Bruno contributed to the rise of the modern age. As such, this

² Excellent biographies are numerous, yet V. Spampanato's *Vita di Giordano Bruno* from 1921 remains, I believe, the most exhaustive. Monographic studies with biographies on Bruno began with C. Bartholmèss's *Jordano Bruno* in 1846. For an early English-language treatment see T. Whittaker's "Giordano Bruno." Widely cited sources are D. W. Singer's *Giordano Bruno His Life and Thought* and S. Ricci's monograph, *Giordano Bruno nell'Europa del Cinquecento*, Yates's *Giordano Bruno e la cultura europea del Rinascimento & Giordano Bruno and the Hermetic Tradition*, and L. Spruit's *Il problema della conoscenza in Giordano Bruno*. For a detailed historical analysis of Bruno's thought as it relates to his time see A. Corsano's *Il pensiero di Giordano Bruno nel suo svolgimento storico*. M. Ciliberto's contributions, esp. *Giordano Bruno* (therein is found one of the most exhaustive and helpful bibliographies) and *La ruota del tempo*, are essential, as is G. Aquilecchia's work, *Giordano Bruno*. Ingrid Rowland is currently compiling an up-to-date biography, which is much awaited. Of note, Brian Copenhaver has recently solicited the help of numerous renowned *brunisti* to produce up-to-date English translations of all of the Italian Dialogues.

³ "finì la sua misera ed infelice vita."

dissertation looks at Bruno's "reception," understood in the broadest sense of the term, in the period that is known as having seen the rise of the modern age, beginning c. 1600. Methodological difficulties abound, however, when writing history. Accordingly, it is after a careful and labored analysis that I have chosen to follow what is called "metaphorology," a term coined originally by the German philosopher Hans Blumenberg. Before I explain this approach, I wish to present the reasons for my decision.

First, history is unfortunately not self-evident. This makes any discussion of the past difficult. A great majority of studies into Bruno's reception—predominantly an Italian endeavor because of the Nolan's relative inaccessibility—have proceeded solely by means of traditional historicism, which places faith in the ability of the past to be reconstructed and understood. While this has been a fruitful endeavor, accurately discerning where Bruno is cited and echoed, it has its methodological and theoretical limitations.

Second, although the methodological approach is generally traditional historicism, there is, however, very little consensus about the nature of Bruno's influence. This is because Bruno's works are difficult to understand for anyone who has not read the philosopher extensively. The modern mind—and even the Nolan's contemporaries'—predominantly sees Bruno as an irrational and esoteric figure. No surprise, therefore, that there are as many opinions about Bruno as there are critics of Bruno. To support this claim, I shall briefly describe the major trends in Bruno studies in the following pages before presenting this dissertation's contribution.

To begin, one commentator posited that the only explanation for such incomprehensible thought is that Bruno was insane!⁴ Many others, for example, believe the answer to Bruno's life lies in understanding his death. In fact, one might argue that nearly all studies of Bruno since time immemorial have fixated over Bruno's death and its importance in history. Specifically, late nineteenth- and early twentieth-century critics like Giovanni Gentile saw in Bruno a martyr for the freedom of thought. The Italian Risorgimento along with radical and libertarian movements revered Bruno as a political and intellectual hero embodying the ideological convictions of the era, particularly the separation of Church and State.⁵ Shortly after Garibaldi unified Italy, in 1887 sculptor Ettore Ferrari, with the support of myriad nationalists, erected a monument in Campo de' Fiori honoring Bruno's life and thought [See appendix: Fig 1]. This monument, however, was most importantly the celebration of the significance of Bruno's death. The "Brunomania" of the late nineteenth and early twentieth centuries has influenced—whether negatively or not is to be judged—much of contemporary criticism, emphasizing his death as more important than his life.⁶ Outside of Italy, English mathematician and philosopher Alfred North Whitehead concurred, though on purely philosophical grounds, arguing that in Bruno's death "there was an unconscious symbolism: for the subsequent tone of scientific thought has contained a distrust of his general speculativeness" (1). This sentiment lives on today. On the fourth centenary of his death Les Belles Lettres in Paris published a French edition of his *Oeuvres complètes*. Hilary Gatti contributed an

⁴ See L. Olschki, *Giordano Bruno*, p. 89.

⁵ See H. Gatti, *Renaissance Science*, p. 253; and G. Gentile, *Giordano Bruno e il pensiero del Rinascimento*, whose reading of Bruno embodies the tensions between these two forces.

⁶ For more information on late-nineteenth and early-twentieth-century "Brunomania," see M. L. Barbera's article of the same name.

article to *Renaissance Quarterly*, "The State of Giordano Bruno Studies at the End of the Four-Hundredth⁷ Centenary of the Philosopher's Death," in which she reiterates Giovanni Aquilecchia's emphatic claim that on the fourth centenary:

[...] Bruno appears to have emerged not as *a* philosopher of the Renaissance but as *the* philosopher of the Renaissance, and perhaps even more, if we wish to adopt the fashionable terminology, as *the* philosopher who leads into the early modern world. (261)

Moreover, in the year 2000 Michele Ciliberto organized a commission specifically designed to celebrate the philosopher from Nola. Ciliberto stated that around the world was taking place a veritable "Bruno Renaissance" (*Rivista di storia* 303). This is surely an optimistic claim, but its quick appropriation by scholars in Italy and the United States has led us away from understanding its concealed and much more significant meaning. It is not without irony that Ciliberto chose the term "Renaissance"; Bruno, to many, appears a sort of mythical Phoenix who in the year 2000 was reborn from his own ashes. In Giuseppe Candela's "An Overview of the Cosmology, Religion and Philosophical Universe of Giordano Bruno," published during the period of celebration, the critic does not hesitate to mythologize Bruno in this same manner: "The fire that consumed Bruno's body was to have ended his baleful influence. Instead, his reputation has risen Phoenix-like from the flames" (362). At some level Bruno comes forth as the modern age's greatest parrhesiast—did he ever utter a lie?⁸ Certainly his death was symbolic, but Bruno is more than a death.

⁷ Merely seeking clarification for purposes of accuracy, note the following correction to Gatti's title: "Fourth Centenary" instead of "Four-Hundredth Centenary."

⁸ See the diverse transcriptions of *Discourse and Truth: The Problematization of Parrhesia*, a collection of six lectures given by Michel Foucault at the University of California at Berkeley between October and November of 1983.

Although many critics have emphasized Bruno's death as a means to understand his thought, over-attention to aspects of Bruno's life and thought are also commonplace in academic circles. Frances Yates's *Giordano Bruno and the Hermetic Tradition*, perhaps the twentieth-century's finest contribution to the understanding of Bruno's thought, inspired an *encore* of "Brunomania." Since then, scholars have either defended or disputed the Dame's thesis. As is well known, Yates labeled Bruno as the "Hermetic Magus" *par excellence*. Perhaps the most criticized claim put forth by Yates was her suggestion that by discovering Bruno's Hermetic roots, and hence the key to understanding his entire corpus of thought, it was possible to understand why the Nolan was an adamant supporter of Copernicus's heliocentric universe. Yates stated, "The truth is that for Bruno the Copernican diagram is a hieroglyph, a Hermetic seal hiding potent divine mysteries of which he has penetrated the secret" (241).

Over-attention to Bruno's Hermetic foundation prompted a number of counter-arguments, ironically resulting in the over-attention to the "dehermeticization" of Bruno. Veritable and well-founded anti-Yatesian polemics originated roughly ten years after *Giordano Bruno and the Hermetic Tradition* had been published. At that time, Robert Westman delivered a lecture at the Clark Library Seminar in California. In the lecture, later published, Westman denied that it is fully possible to purport that "Bruno and his fellow Hermeticists interpreted the Copernican theory as a magical hieroglyph and that, consequently, they adopted it for religious-magical reasons" (8). Moreover, Westman denied a link between the rise of a new science and strands of Neoplatonism, Hermeticism, and mysticism. Westman asked, "What important contributions did Hermeticism make to the Scientific Revolution" (72)? The result of the polemics is the

tendency to marginalize figures—or worse, aspects of figures—who did not contribute to what we now see as a systematic, exact, and experimental method that produces acceptable facts based on verifiable experiences. Westman's interpretation of the Scientific Revolution appears too rigid and, ironically, mystifies the nature and rise of a new science and the modern age. Conversely, some critics have adamantly supported Yates, like Italian critic Paolo Rossi, who writes in his chapter-article "Hermeticism, Rationality, and the Scientific Revolution" that

in defending the central position of the Sun, Copernicus calls upon Hermes Trismegistus and reveals the influence of the magico-hermetic world-picture as it had been elaborated by Marsilio Ficino. William Gilbert also refers to Hermes and Zoroaster when he links his doctrine of magnetism with universal animation. Bacon talks of the 'perceptiveness', the 'desires' and 'aversions' of matter; and he is generally influenced by the language and the models prevalent in the alchemical tradition. It is from the world of magic that he derives his definition of man as the servant and interpreter of nature which replaces the venerable definition of man as 'a rational animal'. (259-60)

This debate—whether or not Hermeticism and Neoplatonism had anything to do with the rise of a new science—continues today, though it appears that the only significant effect such questioning has had is the engenderment of a calumniated vision of history.

It is time to move beyond such questions. Fortunately, there have been efforts to extinguish scholarly obsession with Yates's thesis—even anti-Yatesian polemics. Ramon Mendoza recently recommended that all critics remove what he deemed the "Poltergeist of Yates" (19). But errantly and to much dismay a great portion of contemporary Bruno scholarship, having accepted Mendoza's suggestion, has not managed to configure new modes of inquiry. Hilary Gatti in her *Giordano Bruno and Renaissance Science* called for the reconsideration of "a dimension of Giordano Bruno's philosophy that has been ignored in recent years in favor of his Hermeticism and magic" (ix). In this work Gatti

adamantly argues for a reappraisal of Bruno's contribution to modern science, attempting to reconcile pre- and post-Yatesian criticism. The attempt is noble, but in the end it appears the result of Gatti's labors is an overly conservative Bruno who was set out on developing a very specific field of inquiry that he "thought of as his own, the philosophy of science" (9).

The greatest mistake, it appears, is that in many instances contemporary critics are the promulgators of a contradictory vision of our past that sees it no longer in flux. Such a vision need not be dismissed—no one can verify the true path to knowledge—though it is true that alternative methods of analysis must be promoted. All modes of reconstructing the past are inevitably doomed to a certain level of failure, but there are undoubtedly approaches that arrive closer to that elusive end. Or, at least, there are positions that are more sensitive to theoretical and methodological questions, and therefore should not be disregarded. It appears that, instead of putting forth new visions of how the new science and the modern age came to be, critics have reverted to pre-Yatesian modes of historical inquiry. Saverio Ricci's nearly exhaustive contribution, *La fortuna del pensiero di Bruno: 1600-1750*, published in 1990, underlines the above-mentioned pre-Yatesian sympathy toward reconstructing the past. In this work Ricci traces Bruno's disquieting and often unsettling appearance in the works of a plethora of seventeenth- and eighteenth-century writers. In the effort to trace the nature of Bruno's *fortuna*⁹ in the age that saw the rise of modern science and the modern age, Ricci limits himself to highlighting those instances where Bruno was either cited by or directly linked

⁹ I use the Italian word *fortuna* with caution. If translated in the English equivalent, "fortune," the term implies a positive form of reception, contrary to one's "misfortune." While I might use the Italian term *fortuna* at times in the thesis, I always intend the meaning as "reception" without bias.

to seventeenth- and eighteenth-century writers.¹⁰ For example, Ricci cites the famous Cartesian from Italy's Mezzogiorno, Tommaso Cornelio, who published his understudied, yet important *Progymnasmata physica* in Venice in 1663.¹¹ Cornelio has the Nolan philosophers Giordano Bruno and Nicola Antonio Stigliola as two of the three *personae* in the work's philosophical dialogue. This instance in the history of print stands as one of the more significant episodes of Bruno's seventeenth-century *fortuna* in Italy [See appendix: Fig. 2]. But the mere recognition or historical identification of this example serves little, if anything, to our present understanding of how history synthesized and subsumed it into its own evolutionary scale. The same applies to the following example, not mentioned by Ricci, of the obscure instance of Ovidio Montalbani's—"Academico della notte"—citation of "Iord. Br.n. de minim." [See appendix: Fig. 3] in his, one might argue, nearly forgotten *Charagma-Poscopia*, published in 1640 in Bologna.¹² The noting of such evidence further contributes to an historical compilation of facts—evidence of such sort is of distinct importance—yet it lacks any synchronical value. Such an evidence-based brand of history might not even require commentary, leaving its "story" outside of the texts in view. If this be the sole objective, then Simonetta Bassi's *Immagini di Giordano Bruno: 1600-1725*, prefaced by Michele Ciliberto, successfully reaches the goal of reconstructing a man's *fortuna*. Therein the Italian scholar organized her work

¹⁰ Along with Ricci's work into Bruno's *fortuna*, see the following contributions devoted to the Nolan's reception in Italy: R. Sturlese, *Bibliografia, censimento e storia delle antiche stampe di Giordano Bruno*; Ed. E. Canone, *Brunus redivivus*; N. Badaloni, *La filosofia di Giordano Bruno*, pp. 279-366 & "Appunti intorno alla fama del Bruno nei secoli XVII e XVIII"; M. L. Barbera, "La Brunomania"; S. Bassi, *Immagini di Giordano Bruno (1600-1725)*; P. Totaro "Un documento trascurato sulla fortuna di Bruno in Italia"; and V. Salvestrini, *Bibliografia di Giordano Bruno 1582-1950*.

¹¹ Cornelio is credited with bringing Cartesianism to the Italian south. For the most ample studies on the life and thought of Cornelio, see M. Torrini and F. Crispini's important monographs.

¹² To my knowledge, the only work to consider the connection between Bruno and Montalbani is that of Roberto Marchi.

according to the following mode: "At the beginning of each section is given the year in which the Brunonian depiction was found and the name of the author, at the bottom [of the page are given] bibliographic notes of the consulted texts"¹³ (27). In essence, the scholarly mode of inquiry is one of bibliographic compilation, which falls in the vein of Salvestrini's monumental work, *Bibliografia di Giordano Bruno 1582-1950*, wherein are presented solely those instances where Bruno is cited or referenced.

But what to make of the instances when Bruno is neither cited nor referenced? How does one come to understand how others perceived Bruno? Galileo's *Dialogo sopra i due massimi sistemi dell'universo* wittingly does not refer to Bruno, granting only dull echoes, if any at all, to similar concerns. Might this not stand as Bruno's most majestic instance of fortune given the fact that Galileo is so often attributed with having given rise to modern science—the fortune of having been intentionally ignored?¹⁴ What to make of Traiano Boccalini's *Ragguaglio LIX* wherein the cultural and political satirist mocks an inept "letteratuccio" who seeks remedy for his feeble memory, calling upon Apollo that the god teach him the art of memory?¹⁵ Does this not echo Bruno's own relations with

¹³ "All'inizio di ogni sezione si dà l'anno in cui il ritratto bruniano è stato tratteggiato ed il nome dell'autore, in fondo le note bibliografiche dei testi utilizzati [...]."

¹⁴ Hilary Gatti explores Bruno's possible influence on Galileo in her article, "Giordano Bruno's *Ash Wednesday Supper* and Galileo's *Dialogue of the Two Major World Systems*." See also G. Aquilecchia, "Possible brunian echoes in Galileo."

¹⁵ Born in Loreto, Italy in 1556, and having studied in Padova, Boccalini eventually assumed a position working for the Papal State. In 1612, having developed a strong anti-Spanish leaning, Boccalini moved to Venice, perhaps in hopes of finding the same sort of intellectual peace Bruno had sought in 1591. In Venice Boccalini published his *Ragguagli di Parnaso*, a work in which the author provides satirical social and political commentary, often disguising actual historical events under the guise of a mythological, Apollonian setting. His *Ragguagli di Parnaso* stands as one of the greatest literary contributions of the early seventeenth century. Frances Yates suggested in her famous *Giordano Bruno and the Hermetic Tradition* that Boccalini might have modeled his pro-France, anti-Spanish satirical work on Bruno's own work of satire, the *Spaccio de la bestia trionfante*. The *Ragguagli di Parnaso* might have a similar satirical overtone, but Boccalini scholars have been quick to dismiss Yates's suggestion.

the Venetian Ambassador to France, Giovanni Mocenigo, who requested Bruno's presence in Venice in order to instruct him the workings of the mnemonic arts, and eventually condemned the Nolan to the Inquisition?¹⁶ The passage readily appears a satire of Mocenigo and therefore stands as an instance of Bruno's reception in a social context. It is at this point that it becomes important to differentiate between modes of historical inquiry. Is it necessary to restrict ourselves only to searching out citations or mentions of Bruno? Is this a fair approach when many thinkers were afraid to mention his name, fearing a similar fate at the stake? I believe the answer is no.

How then does one trace Bruno's thought strewn throughout the minds or thoughts—not the writings—of seventeenth-century thinkers? How does one quantify an entire epoch's assimilation of one man's philosophy, making distinctions between

¹⁶ The passage follows: "Un letterato chiede ad Apollo l'arte di far buona memoria, ed è schernito da Sua Maestà.

"Nell'audienza di giovedì passato avanti Apollo si presentò uno assai ben spelato letteratuccio; il quale disse a Sua Maestà che'egli per le poche lettere che si trovava avere, non ardiva comparir ne' pubblici ginnasi, e che la sua debolezza nelle scienze nasceva dalla meno che mediocre memoria che gli aveva dato la natura, poche cose ricordandosi delle molte ch'egli studiava: e che, ardendo di una inestinguibil sete delle buone lettere, umilissimamente gli chiedeva qualche rimedio, col quale avesse potuto far acquisto di quella profonda e tenace memoria, che hanno quei gran letterati che si ricordano di tutte le cose che leggono: e che sopra tutto gratissimo li sarebbe stato il dono della memoria locale, la quale aveva udito dire che straordinario onore faceva a quelli che la possedevano. A costui rispose Apollo che dagli uomini innamorati delle scienze l'eccellente memoria locale era cosa da cantimbanco e da quei letterati dozzinali che pascano d'ostentazione e d'una certa boria di parer quelli che non sono: non da saldi e ben fondati letterati, appresso i quali ella affatto è ridicola, solo servendo per far stupire il vil popolaccio, il quale, quando alla mente ode recitar le carte intiere d'un autore, ancor che elleno non facciano a proposito di quello perché si recitano, grandemente trasecola. Replicò quel letterato che, poichè così era, egli desiderava migliorar la sua memoria coi soli remedi ordinari. A questo rispose Apollo che non sapeva che con altro più prestante medicamento la memoria degli uomini si potesse ridurre a perfezione, che col perpetuo studio: col quale l'assicurava che avrebbe conseguito tutto l'intento suo. Soggiunse allora il letterato ch'egli si era chiarito che nemmeno lo studio assiduo, ch'egli usava, rendeva buona la sua memoria: perché ultimamente, con diligenza esquisita avendo studiato il miracolo de' poeti latini, Virgilio, dell'infinita bellezze che vi aveva notate, tutte meritevolissime di giammai essere scordate, di pochissime si rammentava. Chiaramente mostrò Sua Maestà che quella nuova istanza l'era stata noiosa; perché con alterazione a lui insolita nelle audienze, nelle quali usa pazienza mirabile, disse a quel letterato che di nuovo tornasse a studiare Virgilio, ché nella seconda lezione molte cose sarebbero rimase nella sua memoria, che nella prima. Poi si voltò Apollo verso i circostanti, e disse che odiosissima gli era l'impertinenza di alcuni, che, per essersi un solo quarto d'ora fermati in un molino, avrebbero voluto uscirne tutti infarinati, come sono quei molinari che notte e giorno vi stanno tutti gli anni della vita loro" (210-11).

material traces and immaterial ones? How does one compile a history of silence? Of ignorance? Of disinterest? Italian critic Eugenio Garin noted that "Bruno is present all over seventeenth-century thought [...]. Wherever lives a disquiet meditation, an active thought, one meets Bruno, even if quietly, ambiguously, or for exiguous traces"¹⁷ (*Bruno* 75). Garin's suggestion is enormous—the mere similarity of intellectual temperament basis enough on which to map out Bruno's reception. But did the famous Italian critic write this purely for rhetorical flair? Or perhaps is there a tinge of truth in this seemingly exaggerated suggestion? Although we know that Bruno's *opera omnia* were placed on the Index of Prohibited Books on February 8, 1600, and many believe that his contribution to seventeenth-century thought was an active one, of which further evaluation is overdue, it is not implied that unearthing the strata locked inside the bedrock of history *is* possible, less so if the object of our search is to seek out Garin's elusive moments of "disquiet" or "active thought." Where would one begin such a task?

This dissertation seeks a new vantage point. It stands as an original contribution to Bruno studies because it seeks to wed philologically grounded readings of Bruno's reception in seventeenth-century scientific, medical and astronomical writings—an indisputable component of accurate research—with a unique vision of the nature of influence and of reception. While from a strictly historical point of view this thesis takes as its object of study Giordano Bruno's reception in seventeenth-century Italy (as related to two understudied, yet important, Brunonian thinkers: Stigliola and Fodio Gambara), it speaks to a much broader concern.¹⁸ That is, how did Bruno contribute to the rise of the

¹⁷ "Bruno è presente ovunque nel pensiero del Seicento [...]. Dove vive una meditazione inquieta, un pensiero attivo, si incontra Bruno, anche se sommessamente, ambiguamente, per tracce esigue."

modern age in Western Europe? In an effort to answer this question this study utilizes (as mentioned a few pages before) a powerful critical-historical lens that has been often disregarded by Bruno scholars: Hans Blumenberg's innovative theory of the origin of the modern age as expounded in the twentieth-century German philosopher's trilogy of works, *The Legitimacy of the Modern Age*, *The Genesis of the Copernican World*, and *Work on Myth*.¹⁹ Blumenberg dedicated many pages to Bruno in his works. However, I will not simply reiterate another man's words. I seek to emulate his procedure—i.e., metaphorology—in an effort to provide an alternative vision of Giordano Bruno and the discussion in which his thought played an active role. At the closing of the curtains, I hope it will have been through an examination of the "new light" of Europe that the reader has experienced an instance of epoch making. To achieve this goal, the thesis is organized as follows:

POINT 1) Many historians of science, philosophy and literature have long situated Bruno at the end of the Renaissance and the beginning of the modern age. Why so? What is it about Bruno that signals the end of one epoch and the beginning of

¹⁸ Apart from the texts under consideration in the present study, primary European sources from the seventeenth and eighteenth centuries particularly deserving of further attention are: John Wilkens, *A Discourse Concerning a New Planet* (1640); Saverio Bettinelli, *Il mondo della luna* (1753); Ralph Cudworth, *The True Intellectual System of the Universe: the first part, wherein all the reason and philosophy of atheism is confuted and its impossibility demonstrated* (1671); Giuseppe Carletti, *L'incendio di tordinona* (1781); particularly interesting is Cesare della Riviera, *Il magico mondo de gli heroi* (1603); Vincenzo Viviani, post-1668 works (Viviani wrote to Lorenzo Magalotti a letter in 1668 in which he expressed a desire to obtain a copy of one of the works of "Jordani Barenii Nolani"; Gabriel Naudé, *Advis pour dresser une bibliothèque* (1627); Athanassius Kircher, *Itinerarium Exstaticum Coeleste* (1680); and Justus Lipsius, *Physiologia Stoicorum* (1604). The works of Leibniz and Spinoza, thinkers influenced by the Nolan, have received deserved attention, though there remains room for further commentators. Moreover, there remains considerable work to be done on Bruno's reception in the works of Johannes Kepler, Francis Bacon, and Marin Mersenne.

¹⁹ I use the term in the spirit of Blumenberg whose entire *corpus* of scholarship addresses the epoch as the *Neuzeit*—the *New Time*. Modernity, a term currently in *vogue*, refers to the same concept; that is, to that period which is distinct from the early or pre-modern period. I will not, however, refer to the period as "Modernity" in the course of this thesis, accepting instead Robert Wallace's translation "Modern Age." This is done primarily because this work's title might call to mind Blumenberg's own translated title, triggering correct connections in the reader's mind.

another? In this section I synthesize some widely accepted arguments both for and against Bruno's involvement in the modern age.

POINT 2) Once I have detailed commonly accepted arguments for and against Bruno's involvement in the birth of the modern age, I will present Blumenberg's powerful analysis of the modern age. Before turning to Blumenberg's theory, however, it is necessary that I describe in detail Karl Löwith's position—for which Blumenberg's work is a response—as proposed in the author's seminal study, *Meaning in History*. I then counter Löwith's thesis with an explication of Blumenberg's. The purpose of this section is to establish the historical and philosophical legitimization for Bruno's role as the one of the first modern thinkers.

For sake of immediate clarification, the German theorist's central claim in his philosophical trilogy is that the modern age came to be not because it was a secularized version of Christian and Hebrew eschatology, as Karl Löwith would argue, but because it is the result of unique instances of man demonstrating his "self-assertion"—the breaking away from "theological absolutism"—allowing for the arrival of attempted solutions to recurring problems that have plagued, and will likely continue to plague, man throughout his history. These problems fill what Blumenberg terms "empty positions," which are passed from generation to generation—i.e., baskets full of problems that are not in and of themselves solvable. These "empty positions" are, for example, eternal and distinctly human questions derived from man's biological preconditions: mortality brings about his fear of death, his fear of death pain, his fear of pain medicine, and so on and so forth. In his philosophical trilogy Blumenberg highlights how man throughout his history has filled these "empty positions" not with *answers to problems*, but with further *problems*

that act as better "solutions" to problems. Some of these—such as the solutions to the problem of why there is evil in the world—have had powerful implications. Each problem transfers another set of difficulties, or empty positions, to successive generations, and they, subsequently, do the same. No one knows the "final cause," hence this Aristotelian cause being dismissed by contemporary science as a profitable and/or justifiable enterprise. Blumenberg's theory does acknowledge epochal change, however; i.e., instances where man makes quantifiable and qualifiable leaps ahead of his predecessors. He seeks to understand the grounds on which the modern age sought to legitimize itself by seeking out occurrences in which man asserts his greatest potential solution to the empty set of problems handed to him—instances that lead to epochal constitution. Though seemingly not so at first, Blumenberg's approach is less arcane than those of previous critics. Blumenberg does not view man as a collective genus, but instead as a complex of individual organisms only later grouped into subsections of similar life forms. Individuals that comprise the genus *homo* and species *sapiens* are those bound by similarly recurring biological preconditions causing them all to struggle—as if one singular entity—in search of the final answer to the "empty positions" undesirably set upon their laps at birth. Blumenberg would believe it vain to presuppose genetics make us one. Löwith's and Blumenberg's interpretations of the modern age are mutually exclusive, leading us, thankfully, to one conclusive interpretation. I accept Blumenberg's interpretation of the modern age and therefore situate Bruno and two thinkers with Brunonian inclinations accordingly in this historical (anti)narrative.

POINT 3) What is the method by which Blumenberg studies the modern age? What philosophical framework does Blumenberg utilize? How does Blumenberg see the

world and history of ideas and how might I use this methodology in this thesis? In this section I carefully describe the answer to these questions by exploring the notion of metaphorology. The intention is threefold: 1) I wish to validate and justify my choice of this method; 2) I wish to provide my reader with an understanding of the process by which I come to my conclusions about Bruno's role in the birth of the modern age; by this I provide the reader with an analysis of metaphorology; and 3) I hope to engender discussion and promotion of this alternative means of reading human history.

POINT 4) Once I have outlined the theoretical model completely, I situate Bruno in this theoretical/historical context. I will syntactically emulate and apply Blumenberg's erudite and sweeping theoretical model of history and the modern age, extracting a congruent Blumenbergian reading of Bruno's reception. This is done through the analysis of metaphors that shine light upon disguised and nuanced corners of history. Analyzing metaphors will allow us better to understand how Bruno was perceived during the seventeenth century, and how his influence might be best interpreted. To achieve this end, I utilize Blumenbergian metaphorology. The goal is not solely to explicate and analyze, but to situate textual and historical metaphors in the larger context of how the modern age came to be. Through metaphors one comes face-to-face with the nature of human problems. Metaphors transcend history and allow insight into the complexity of the times in which Bruno lived, the century he inaugurated in Campo de' Fiori, and the influence and importance of his contribution in the creation of the modern age and science. Metaphors allow us insight into how man perceived problems before he proposed solutions. As such, a metaphorological history of the rise of the modern age will not demonstrate problems in *reverse*—that is, looking back on "completed

history"—but rather in *forward* motion, or the interpretation of the history of the ever-changing present.

POINT 5) Having briefly discussed Bruno through a few select metaphors, thereby arguing for the Nolan's role in the modern age, I then proceed to a discussion of metaphors that appear in two other Brunonian thinkers of the sixteenth and seventeenth centuries: Nicola Antonio Stigliola and Andrea Fodio Gambarà. Stigliola and Fodio are two seminal thinkers of Italy's Mezzogiorno. I have chosen these thinkers because little has been done on them in scholarship, yet their contributions to Italian intellectual history are important. Because these figures are undeservedly obscure, I first provide brief biographical information about them. Second, I highlight reasons—textual and historical—for which these two thinkers display not only a Brunonian inclination in their work but also instances of originality and divergence from Brunonian thought. I wish to emphasize, however, that because I am not so much concerned with an evidence-brand form of history writing, opting instead for a metaphorological approach, my primary concern is to discuss how each of these thinkers attempted to solve similar philosophical problems as Bruno. I analyze their use of metaphors, such as "celestial architecture," "the encyclopedic labyrinth," and the "correction of the celestial canons," in the effort to underline parallels and divergences in thought, and instances of both philosophical originality and failure. I wish to understand these thinkers' role in history by placing them in discussion with concerns that have been accepted as having played distinctive roles in the rise of the modern age. In the end I will have demonstrated how Bruno's contribution to the rise of the modern age is very subtle, yet vastly important and often

widely misunderstood. The goal is not to simplify or have the final word on the issue, but rather to initiate discussion, dispute and discovery.

I.II: GIORDANO BRUNO AS JANUS OF THE RENAISSANCE AND THE MODERN AGE: ONE MAN FACING TWO EPOCHS

Known particularly for his support of Copernicus's theory of a sun-centered universe, his belief in an infinite number of worlds, his practice of natural magic and the art of memory, but most certainly his woeful death at the stake in Rome, Giordano Bruno (1548-1600) has the reputation of being one of the most radical thinkers in the history of philosophy. Bruno's peculiarity has attracted great interest, largely in the past two centuries. There appear, however, nearly as many opinions about Bruno as there are scholars of Bruno. Myriad judgments, therefore, concerning Bruno's influence on science, philosophy and religion in the context of the seventeenth century, or the period that gave rise to the modern age—the object of the present study—are certainly not in shortage. The reasons for this are primarily two: 1) the object of study—peculiar, idiosyncratic, and at times downright droll—eludes any attempt at definition or simplification; and 2) many of the greatest and most revolutionary minds of the seventeenth century, perhaps and even likely influenced by Bruno, made no direct reference to the Nolan in their works because of fear. It is therefore difficult to assemble a clear idea of Bruno's influence in seventeenth-century Italy, let alone Europe. Regarding the first point, Bruno has always been difficult to understand. In an instance of ironic lucidity, Bruno concurs:

This book is difficult; I confess, in fact for him who does not know how to read such a form of writing I recognize that it is nearly impossible to understand it. For him who is not used to any serious discipline and even more for him who is only accustomed to grammatical notions, nothing of

it is easy; nothing of it is commendable, if one does not smell the sandal of false literature (*OLC* I.2.2 *De monade* 333-34)²⁰

To confuse matters further Bruno often supplemented his intricate prose with emblems and poems as means to explain already complex metaphysical concepts. As for the second point, most seventeenth-century authors did not cite Bruno in their works for fear of either torture at the hands of the Inquisition or suffering the same fate at the stake. Instead, many writers hid Bruno's influence inside fancy rhetoric. Writers whose pens were silent about Bruno often agreed with him. Conversely, those who frequently named Bruno in their works often stood in distinct opposition to the Nolan. As an example of the latter, one need only think of Giulio Cesare La Galla, Aristotelian Professor at the Collegio Romano, who cited Bruno in his *De phenomenis in orbe lunae* (1612) with the sole intent of pointing out the Nolan's failures and shortcomings. La Galla had no fear in hostilely naming Bruno because he thereby aligned himself with those in power. As an example of the former, Nicola Antonio Stigliola, whom I study in the present work, never cited Bruno, yet he echoed nearly all facets of Brunonian philosophy. In sum, Bruno's supporters likely made no mention of him; his critics likely pointed their fingers at his flaws.

Apart from these difficulties, one notion remains a point of consensus in modern scholarship. Historians of literature and philosophy have long granted Giordano Bruno the importance of an historical cornerstone. This is because Bruno's death coincides so neatly with the advent of the seventeenth century that it is hard to avoid such a triviality.

²⁰ "Difficilis est liber, fateor, immo et ipsam scripturam nescientibus legere, lectu quoque impossibilem esse cognoscimus. Homini indisciplinato, et amplius grammaticae sapienti, nihil potest esse facile, nihil potest esse commendabile, nisi crepidam illam oleat ludiliterariam." Subsequent citations of Bruno's Latin works are taken from this edition and cited as *OLC* along with the volume number, section and, if not cited in text, the title of the specific work.

However, it is not his place in time that is of importance, as ideas don't see human-imposed chronology, but rather in Bruno's works historians have found evidence of the shift from the Renaissance period (pre or early modern) to the modern age. Bruno is for a few scholars the first modern thinker, and for many others he is, along with the likes of Bacon and Galileo, one of the first European modern thinkers. One of Italy's greatest philosophical historiographers, Nicola Badaloni, claimed that "Considering solely the general picture of Bruno's thought one is able to open the road toward a real comprehension of his philosophical position that has, without a doubt, largely helped the birth of a modern conception of the world" (*Filosofia* 112).²¹ Moreover, well known Bruno scholar Giovanni Aquilecchia did not hesitate to call Bruno "the most significant thinker of the late European Renaissance" (*Bruno nel suo tempo* 22).²² Michele Ciliberto, Professor of Philosophy at the Scuola Normale di Pisa, and currently one of the world's most eminent *brunisti*, noted that many historians have recognized that the Nolan had the great ability to "project his view into the future, to individuate fundamental aspects of a 'modern' vision of man, of civilization, of the universe" (*Giordano Bruno* 4).²³ Frances Yates argued in her *Giordano Bruno and the Hermetic Tradition* that the Hermetic Magus's philosophy sits at the base of the new science, which appears in full force in the seventeenth century. It is no surprise, therefore, that when looking back Ramon Mendoza wrote that "The recent happy encounter and successful marriage of nuclear physics with astrophysics invites us to reflect on Giordano Bruno, the man who insightfully

²¹ "Solo considerando il quadro generale del pensiero del Bruno si può aprire la strada ad una reale comprensione della sua posizione filosofica che ha, senza dubbio, largamente aiutato la nascita di una moderna concezione del mondo."

²² "il pensatore più significativo del tardo Rinascimento europeo."

²³ "proiettare il suo sguardo sul futuro, di individuare aspetti fondamentali di una «moderna» visione dell'uomo, della civiltà, dell'universo."

anticipated some of their basic presuppositions four hundred years ago" (*Acentric Labyrinth* xi). Why is it that histories of philosophy—such as Nicola Abbagnano's *Storia della Filosofia* or Copenhaver and Schmitt's *Renaissance Philosophy*—end the period known as the Renaissance, or find traces of its demise, with the philosophy of Bruno? Furthermore, why do numerous literary anthologies, such as Ettore Bonora's *Storia della Letteratura Italiana* (1981), place Bruno in the *Seicento*, a century of which he saw only 48 days, and not in the *Cinquecento*? What is it about Bruno that was ahead of his time? The answers to these questions are complex and deserve attention in the following pages. As a point of precision, it is to this end that this dissertation aspires: What is it that constitutes the birth of an epoch and how did Bruno contribute to the epoch known as the modern age? To begin to answer this last question I turn to Bruno himself. It is apparent that Bruno was well aware of his critical position as an historical cornerstone. At the outset of the dissertation, I cited a quote from Bruno's *De l'infinito, universo e mondi* in which the philosopher makes a clear distinction between the old and the new in history. Bruno ingeniously identifies his role in the process of epoch making as one who demarcates the "old" and the "new," the "dark" and the "light":

ALBERTINO: I would like to know what is this phantasm, this unheard of monster, this human portent, what extraordinary brain is this; what news does he bring to the world, or rather what obsolete and ancient things come to renew themselves, what amputated roots come to life again in this our age?

ELPINO: They are amputated roots that germinate, they are ancient things that return, they are occult truths that one discovers: it is a new light that after a long night rises above the horizon and hemisphere of our cognition, and soon approaches the meridian of our intelligence. (*DFI* 422)²⁴

²⁴ "ALBERTINO: Vorrei sapere che fantasma, che inaudito mostro, che uomo eteroclitico, che cervello straordinario è questo; quai novelle costui di nuovo porta al mondo, o pur che cose obsolete e

In this passage, by means of the interlocutor Albertino, Bruno refers to himself as both the bringer of new and old things to the world. Through Elpino, Bruno refers to himself at the metaphoric "new light" who has arrived after a "long night". Bruno appears fully aware that he is situated at a significant point in history—one view looking to the future and the other to the past. Bruno is Janus of the modern age. But what of these two epochs? What of the "old" light and what of the "new"? What is Bruno looking upon?

vecchie vegnono a rinuovarsi, che amputate radici vegnono a repullular in questa nostra etade? / ELPINO: Sono amputate radici che germogliano, son cose antique che rivegnono, son veritadi occolte che si scuoprono: è un nuovo lume che dopo lunga notte spunta all'orizzonte et emisfero della nostra cognizione, et a poco s'avicina al meridiano della nostra intelligenza."

GIORDANO BRUNO AND THE END OF THE RENAISSANCE

In the following pages I codify the "old" and "new" Bruno in the effort to provide a background on which in the second and third chapters I will be able to paint a new vision of Bruno's originality and importance in the history of ideas. Before I attempt to explore reasons how the "new" Bruno contributed to the ushering in of the modern age, highlighting those aspects of his thought generally accepted by scholars, I begin by exploring the "old" Bruno through an elaboration of common arguments for how he did not. The question of central concern, therefore, is what is "old" in Bruno? Or rather, what in Bruno marks the end of the Renaissance? Bruno lived in a period that was on the verge of moral, philosophical and scientific reform. It is for this reason that historians have assigned the end of the Renaissance and the beginning of the modern age to the end of the sixteenth century. Although I agree with critics that Bruno sits at the fore of the modern age, the legitimization upon which many critics have based their theories of that change does not appear, in my opinion, complete. In these final chapters, therefore, as I have stated earlier, I employ metaphorology, which has not yet been applied in any study of Bruno, besides that of Hans Blumenberg. In order to understand Bruno's role in the rise of the modern age, I read Bruno's ideas, the epoch in which he lived, and those thinkers with whom he corresponded and influenced, as metaphors of an era on the verge of complete transformation. I do this because I believe Bruno reveals the mounting philosophical and theological tensions of late sixteenth-century Europe. I agree with those scholars who assign Bruno the role as one of the first modern thinkers, yet I wish to *legitimize* his role. The goal of my work is not merely to reiterate, but rather validate history's assigning Bruno the cornerstone of the edifice known to us as the modern age. I

believe that Bruno and his works serve as the most enlightening metaphors of the traumatic scission that now delineates the pre-modern and modern ages.

Bruno & Mathematics

The first reason why Bruno did not contribute to the modern age was that he was a poor mathematician. It has been argued that the Scientific Revolution gave motor to the rise of the modern age. Herbert Butterfield defends the Revolution as the greatest historical episode in the development of the western mind in roughly two thousand years: "it outshines everything since the rise of Christianity and reduces the Renaissance and Reformation to the rank of mere episodes, mere internal displacements, within the system of medieval Christendom" (8). It is well known that this great historical episode placed heavy emphasis on mathematics as the language of nature. Unlike Copernicus, Bruno was unable to grasp, let alone produce, complex mathematical formulas. Edward Gosselin identified numerous instances in Bruno's defense of Copernican cosmology wherein the Nolan misunderstands and misrepresents important mathematical aspects of Copernicus's theory.²⁵ Bruno is therefore the antithesis of one of modern science's most certain fathers: Galileo. Math is the language, according to Galileo, in which God wrote his verse in the book of nature. Any astute observer of nature's principles shall have to come to grips with nature's complex mathematical prose. In the *Saggiatore* Galileo famously wrote that the book of nature is "written in the language of mathematics, and its characters are triangles, circles, and other geometric figures without which it is humanly impossible to understand a single word of it" (*Discoveries and Opinions of Galileo* 238).

²⁵ See E. McMullin's article, "Bruno and Copernicus," in which is provided a detailed examination of Bruno's mathematics. See also G. Aquilecchia's "Bruno's Mathematical Dilemma in His Poem *De Minimo*."

Scrupulous knowledge of the language of mathematics, therefore, is akin to a mastery of Latin in order to understand the books of Cicero or of Greek in order to understand Aristotle. Without a mastery of the mathematical language, it is nearly impossible to come to know nature's principles, motives, and—to invoke the sentiment of the seventeenth-century mystics—its secrets. Math is the language of the modern era. It is to be uncovered in nature, not created or imposed upon it. Bruno's ignorance toward the mathematical language demonstrates one way in which the Nolan did not contribute to the birth of the modern age.

Bruno, Mythology & Religion

A second reason for which Bruno did not contribute to the rise of the modern age is that the Nolan philosopher was deeply entrenched in the "finite," mythical, religious and ancient belief systems, which were assimilated and reformed in the rise of science.²⁶ Science in the seventeenth century replaced myth—it did not reject it, nor did it secularize it. Bruno's use of arcane and out-dated belief systems as a means to understand the world stood paradoxically side-by-side with his own newly established "infinite" freedom announced throughout his works. Even though Bruno hinted to man's liberation from exhausted dogma in his poetry and prose, in the gamut of his works one finds the lingering remnants of a previous order and the contours of a burdened mind not yet freed from the chains of medieval scholasticism, particularly *coincidentia*

²⁶ For studies on the use of religion, myth and tradition in the works of Bruno, see G. Candela, "An Overview of the Cosmology, Religion and Philosophical Universe of Giordano Bruno"; M. K. Munitz, *Theories of the Universe: From Babylonian Myth to Modern Science*; and G. Gentile, *Giordano Bruno e il pensiero del Rinascimento*.

oppositorum.²⁷ Moreover, myth and religion equally partook in the ill fate of the Aristotelian definition of the efficient cause and the eventual demise of the final cause. This is because these causes, astray from almighty empiricism, proved most illusive to the sharpened mind of the seventeenth-century. The focus, instead, was aimed at the substantive in nature—the material and formal causes of things. The erasure, or at least postponement until another aeon, of these causes is no better exemplified than in the works of Galileo and Newton, two thinkers that set out to re-write the canons of the past. Notwithstanding Bruno's so-called martyrdom has been read as a defense of *libertas philosophandi*, he did not exhibit total freedom from the weight of tradition or dogma. Actually, one could claim the opposite: Bruno, as any fine humanist, turned to classical and mythological figures at an alarming rate throughout his works, citing hundreds within the leaves of his over forty works. For example, in his *Spaccio de la bestia trionfante* (1584), Bruno turns to Pythagoras; in *De la causa, principio et uno* (1585) to Democritus and other pre-Socratics. In his *De gli eroici furori* (1585), Bruno combats Petrarch and the Renaissance Petrarchan tradition, and in the *Cena de le ceneri*, Bruno addresses Ptolemy and Aristotle. In his works on the art of memory, such as *Cantus circaeus* (1582) and *De umbris idearum* (1582), Bruno resurrects Ramon Lull and re-mythologizes Circe and Apollo. Lastly, in numerous works Bruno claims Moses one of the world's most astute and venerable magicians. Bruno beckons the arrival of early modern Europe's scientific and philosophical *avant-garde*, yet his boundlessness remains half trapped inside the remnants of the past.

What does this mean? The new science of the seventeenth century marks the assimilation and reconstitution of old belief systems into the new order of the modern

²⁷ For a recent study of the coincidence of opposites in Bruno's works see A. Calcagno.

age, a switch to which countless important theorists, including Foucault and Agamben, have pointed.²⁸ At the cusp of the old and the new, of darkness and light, Bruno struggles to find his way in the astrography of the infinite universe. Perhaps insentiently, however, Bruno imposed moribund coordinates upon the infinite and uncoordinated universe. *Coincidentia oppositorum*, a substratum of all of Bruno's thought, implied a ladder of ascension toward the divine, which thereby implied man's *location in relation* to other objects. But in an infinite world where left and right, and up and down, had recently lost their referential points of departure and arrival, Bruno's *coincidentia oppositorum* is shipwrecked. This is because Bruno's *coincidentia oppositorum* contradicts Bruno's infinitism. Bruno emerges upon seventeenth-century thought as the last thinker to writhe in the wake of Copernicus's universal disruption. Thenceforth the Scientific Revolution, in its Newtonian culmination, embraced the doctrine of heliocentricity. Ironically, today we are all unquestionably heliocentrists, yet many remain ethically geocentric. Bruno is much like Janus—one of his faces looks to the future and one to the past. Bruno hints to the future man who is to be driven by a new set of ethics, which are themselves guided by the spiritual contours of a newly defined God.

Although the Nolan provides a method by which early modern man might overcome the weight of dogma, Bruno does not replace doctrine with wholly original and/or alternative methods. Instead, Bruno argues for the necessity of complete moral reform. Bruno calls for what he is not yet prepared to do: *enact* reform. While the

²⁸ For example, Foucault writes in *The Order of Things*: "At the beginning of the seventeenth century, during the period that has been termed, rightly or wrongly, the Baroque, thought ceases to move in the element of resemblance. Similitude is no longer the form of knowledge but rather the occasion of error, the danger to which one exposes oneself when one does not examine the obscure region of confusions. 'It is a frequent habit,' says Descartes, in the first lines of his *Regulae*, 'when we discover several resemblances between two things, to attribute to both equally, even on points in which they are in reality different, that which we have recognized to be true of only one of them'. The age of resemblance is drawing to a close" (51).

Humanists, such as Leonardo Bruni and Poggio Bracciolini, returned to the past in order to rediscover what had until then been lost, ancient knowledge harboring secrets, thereby both resurrecting and redefining that knowledge, it is not this rediscovery that is of prime importance in the birth of the modern age. It is, instead, the replacement of tradition with new modes of perceiving nature: The triumph of Galilean science over Aristotelian, Copernican cosmology over Ptolemaic, Harvey over Galen. To invoke the language of Blumenberg, the modern age is best understood as a series of *reoccupations of positions*; or better, ideas that provided solutions to ever-changing, yet seemingly recurring problems. These problems, though, are always subject to change because they arise in a world without constants: Tomorrow the earth might cease to rotate; the sun might not appear to rise.

Bruno & Irrationality

A third reason for which Bruno did not evidently contribute to the rise of the modern age is that he lacked the cool rationality, the prism of lucidity, that we find in his better-known successors, such as Galileo and Descartes.²⁹ Despite that Bruno articulated the parameters inside of which the magus was to perform marvelous acts of natural magic, his magical method did not offer the objective, quantifiable, empirical results that Galileo's method provided. In *The Order of Things* Michel Foucault describes this process of change into the "new configuration," which he also labels "rationalism":

²⁹ For a detailed discussion and response to Yates's thesis, and an argument against Bruno's involvement in the development of "rational" science, see R. Westman, "Magical Reform and Astronomical Reform: The Yates Thesis Reconsidered"; see also T. Kuhn, *The Structure of Scientific Revolutions* and *The Copernican Revolution: Planetary Astronomy in the Development of Western Thought*.

[...] the empirical domain which sixteenth-century man saw as a complex of kinships, resemblances, and affinities, and in which language and things were endlessly interwoven—this whole vast field was to take on a new configuration. This new configuration may, I suppose, be called 'rationalism'; one might say, if one's mind is filled with ready-made concepts, that the seventeenth-century marks the disappearance of the old superstitious or magical beliefs and the entry of nature, at long last, into the scientific order. (54)

Bruno, conversely, emerges as one of the Renaissance's most paradoxical, contradictory, whimsical, arrogant, impatient, disturbing and pugnacious thinkers; qualities of which we find tinges in figures like Campanella and Della Porta, but never in equal breadth and volume. Bruno's complex, yet refined, metaphysics, elaborated most beautifully in his London dialogues, is all but lost to his reader inside a maze (even though an intentional one) of mysterious terminology, and convoluted and obtuse rhetoric. Bruno assumed this petulant demeanor in his works written during his stay in England because he believed that the world needed someone willing in the face of death to proclaim a new role for man in the universe. Amongst his many works, I recognize those that deal specifically with the new dimensions and cosmological implications of an infinite universe and a plurality of worlds: *La cena de le ceneri* (1584); *De la causa, principio et uno* (1584); *De l'infinito, universo e mondi* (1584); *Spaccio de la bestia trionfante* (1584); *Cabala del cavallo pegaseo* (1585); *De gli eroici furori* (1585). These works, known as the two sets of trilogies (The Italian Dialogues), Bruno wrote during his years spent in England (roughly speaking, the first set dealing with the philosophical and scientific speculations of the universe, and the second set dealing with the moral and ethical implications of a changed conception of the universe). Along with Campanella, the prophet of millenarianism, and along with Martin Luther, Giordano Bruno is the most emblematic Reformation thinker because he relentlessly battled against academic pedants, stagnant

orthodoxy and religious dogma. In Bruno's *opera omnia* one comes face-to-face with the most precise definition of *reform*, yet one also senses the onerous weight of the *unreformed* past. Although many have perceived Bruno as irrational because of his inflated and mysterious prose, the Nolan's philosophy, I uphold, is rather lucid. Bruno's philosophical system is composed of clear, concise, and essential components, which together amass a comprehensive and ornate system of thought. I think that only a superficial reading of Bruno caught up in the maze of his rhetoric sees his ideas as incomprehensible.

GIORDANO BRUNO AND THE BIRTH OF THE MODERN AGE

Now that I have outlined numerous reasons for which it has been argued Bruno did not contribute to the modern age, with particular emphasis on science, how then have scholars argued that Bruno contributed to this epoch? How is Bruno the "new light" of the Europe? I believe that Bruno contributed on numerous fronts, yet I limit myself to discussion of the following six points: 1) the infinite universe; 2) the plurality of worlds; 3) monadism and atomism; 4) the art of memory and a new systemization of knowledge; 5) a martyr for the freedom of thought; 6) the end of Humanism.

Bruno & Infinity

Perhaps the most important contribution Bruno made to the modern age was his radical reading of Copernicus.³⁰ Bruno took Copernicus's argument for a sun-centered universe and stretched it to infinity.³¹ His most thorough expositions of this concept are found in the following works: *De la causa, principio et uno* (1584); *De l'infinito, universo e mondi* (1584); *De innumerabilibus, immenso et infigurabili* (1591). At the outset of the third dialogue of *De l'infinito, universo e mondi*, Bruno describes the contours of the Copernican universe:

PHIL. [The whole universe] then is one, the heaven, the immensity of embosoming space, the universal envelope, the ethereal region through which the whole hath course and motion. Innumerable celestial bodies, stars, globes, suns and earths may be sensibly perceived therein by us and

³⁰ See M. A. Granada, "L'interpretazione bruniana di Copernico e la 'Narratio Prima' di Reticus."

³¹ On this point see J. Abela, *The Concept of the Infinite in the Life and Works of Giordano Bruno (1548-1600)*; M. Campanini, "L'infinito e la filosofia naturale di Giordano Bruno"; L. DeBernart, *Immaginazione e scienza in Giordano Bruno: l'infinito nelle forme dell'esperienza*; S. T. Greenburg *et al*, *The Infinite in Giordano Bruno: With a Translation of His Dialogue Concerning the Cause, Principle, and One*; and R. Mendoza, *The Acentric Labyrinth: Giordano Bruno's Prelude to Contemporary Cosmology*.

an infinite number of them may be inferred by our own reason. The universe, immense and infinite, is the complex of this [vast] space and of all the bodies contained therein. (Singer 302)³²

Although Thomas Kuhn, like Robert Westman, dismissed Bruno's "mystic" involvement in the Copernican Revolution, the famous historian of science did not hesitate in writing: "But whatever his motives Bruno was right. The sun need not be at the center; in fact, no center is needed. A Copernican solar system may be set down anywhere in an infinite universe" (*The Copernican Revolution* 235). Bruno claimed throughout his *opera omnia* that the universe is, in fact, *all* center. It follows, therefore, that no single "center" is privileged, though it also paradoxically implies that since all is center, all is therefore the unique and privileged center of the divine. Even if Bruno agreed with Copernicus's idea that the Earth revolves around the Sun, he disagreed with the notion that the center had been *relocated* to the Sun. It is fair to posit, therefore, that Bruno did not believe in any form of centrism, whether planetary (geocentrism) or solar (heliocentrism). From a Brunonian standpoint, the Copernican Revolution, consequently, not only destroyed the anthropocentric illusion, but also expanded the universe to the point of infinity, thereby removing any hierarchical, relational, and/or situational forms of knowledge and belief.

The Plurality of Worlds & Extraterrestrial Life

Bruno's infinitism brought with it a number of consequences. As the title of Bruno's didactic poem, *De innumerabilibus, immenso et infigurabili*, suggests, the Nolan philosopher's readings of Copernicus not only implied an infinite universe, but also

³² "Uno dunque è il cielo, il spacio immenso, il seno, il continente universale, l'eterea regione per la quale il tutto discorre e si muove. Ivi innumerabili stelle, astri, globi, soli e terre sensibilmente si veggono, et infiniti ragionevolmente si argumentano. L'universo immenso et infinito è il composto che resulta da tal spacio e tanti compresi corpi" (*DFI* 375).

suggested the possibility of a plurality of worlds. To Bruno the fixed stars appeared a plurality of suns around which countless planets circled, upon which innumerable forms of life might have lived.³³ Galileo's gaze toward the heavens in the first decades of the seventeenth century proved Bruno correct. Furthermore, this suggestion still baffles science's dreamers. For example, on the homepage of SETI League (Searching for Extra Terrestrial Intelligence) members ask, "Are we alone? It's a fundamental question, which has haunted humankind since first we realized that the points of light in the night sky are other suns" (<http://www.setileague.org/> 4/14/07). Although Bruno never appeared haunted by the possibility of extra-terrestrial life—he most certainly did not know one day man would master space-flight, nor did he, for example, fathom H. G. Wells's apocalyptic suggestion of inter-stellar war—the Nolan did believe it probable that other life-forms occupied the universe. The suggestion of this, I believe, was a unique point of interest for Bruno because it further dismantled the anthropocentric illusion, thereby allowing for Bruno's quest for universal reform, *mutar stato*, which like-minded Campanella called *mutazione di stato*.

Bruno & Monadism

Bruno's concept of infinity served numerous philosophical purposes. Most important, Bruno's infinitism was concerned with the non-conceptuality of the idea of infinity. By non-conceptuality I mean that which is not out of the bounds of sensory conceivability to the human mind, such as string theory and the notion of parallel universes. To emphasize this non-conceptuality, Bruno resurrected the ancient theory of

³³ On this point see S. J. Dick's "The Origin of the Extraterrestrial Life Debate and its Relation to the Scientific Revolution," pp. 3-27, esp. 4-6.

monadism, which has a distinct and paradoxical relation with the concept of infinity. Monadism upholds that infinitesimally small objects called monads make up all matter in the universe.³⁴ Monads are indivisible. Bruno derived the concept from the pre-Socratics, Leucippus and Democritus, though he found substantiation of it in Copernicus. Bruno recognized that in Copernicus's infinite universe, populated by innumerable stars, planets, and probable extra-terrestrial life, he needed to reconsider the spatial relationship between objects, such as size and distance. To further assist him in this theoretical endeavor, Bruno turned to the prophet Hermes Trismegistus. The Thrice-Great Hermes wrote the books comprising the *Corpus Hermeticum*, which is a set of Gnostic works that Bruno and many other Renaissance mystics, such as Lazzarelli, Pico and Ficino, believed to have been written thousands of years before Christ. Inspired by Thoth and the Egyptians, one of the basic tenets of the Hermetic tradition is found in the brief and mysterious Emerald Tablet, *That which is above is like that which is below*. This fundamental precept of the Hermeticism—the branch of knowledge from which Bruno took a great deal—insisted that objects, regardless of size and/or appearance, are comprised of parts that are mirrored in the universe. Even though the Emerald Tablet implied a duality—above and below—Bruno pressed the theory to an even further extreme. He both accepted the idea of this duality, but also contradicted it. The Nolan believed that in an infinite universe all objects are composed of tiny particles (the Hermetic notion of "below"), called monads, in which are reflected the absolute workings of the entire universe (the Hermetic notion of "above"). This notion is explored in Book IV of the *Corpus Hermeticum*, a discourse between Hermes and Tat regarding the

³⁴ Horowitz provides a insightful analysis of the monad in *The Renaissance Philosophy of Giordano Bruno*. See pp. 92-105.

monad.³⁵ Bruno uses the term monad in many of his works, yet the concept is most deeply explored in *De monade, numero et figura* (1591) and *De triplici minimo, et mensura* (1591). Bruno believed the monad the true essence of all things; the basic material with which God constructed, animated and shaped all matter. The contradiction follows.

An Early Modern Paradox and the Demise of the Final Cause: Monadism & Infinitism

Although historians of science today credit Bruno as having contributed to the acceptance of monadism (the ancestor of modern atomism), the Nolan's belief that the monad was the smallest particle in nature contradicted the idea of infinitism.³⁶

Monadism is at odds with the belief that in an infinite universe the space occupied by a single monad must also be infinitely vast, and it is therefore impossible to differentiate size, shape and relation between objects. If monads are in fact the smallest particles of nature, and thereby indivisible, then all objects in space should be measured against them. From a purely logical point of view, infinity eliminates the possibility of spatial relativity.

Infinity presented the seventeenth century the greatest intellectual conundrum. While the mind is inclined to think of infinitism in terms of expanse, this proves to be a contradiction. Infinitism marks the collapse of the notion of space, let alone the expanse of space. One thinks of infinity as an expanse because it is impossible to understand any concept of space apart from size, shape and relativity. When the human mind awkwardly stretches itself toward the "outer-limits" of the universe it greatly falters. As a point of

³⁵ See the *Corpus Hermeticum*, pp. 111-23.

³⁶ For a discussion on the ontological implications of monadism see R. Mendoza, *The Acentric Labyrinth*, pp. 109-22.

precision, infinity is a non-conceptual notion.³⁷ It simultaneously accepts and rejects size, shape and relativity. Man perceives objects in space, leading him to conclude that some objects are bigger than others and vice-versa, though he postulates that infinitism is as equally expansive in an atom as it is in the sun. Nicholas of Cusa explored this contradictory notion well before Bruno. As is known, Cusa famously claimed that the infinite circle is the infinite line. If a circle is stretched *ad infinitum*, man shall witness what appears to be the straightening of the curvature of the circle leading eventually to an infinite line. Curvature and linearity are relative to man:



Fig. 1: Thomas J. McFarlane, "Nicholas Cusa and the Infinite." 23 March 1999. 4 May 2007. <<http://www.integralscience.org/cusa.html>>.

Bruno and Cusa boldly put forth this claim because it was built around the convergence of opposites and the fabric of non-conceptuality: paradox. How an infinite circle becomes an infinite line is a mystery, yet a powerful one that was used to convince others of the power of an infinite God. The implication of a newly founded philosophical mystery was, as man has often done in history, the assignment of God or myth to that which he does not understand. Bruno interpreted infinitism as a metaphor of the necessity of mythological revolution, and the further empowerment of the divine in a new universe.

³⁷ I later discuss Blumenberg's theory of non-conceptuality. For more information now, however, see Blumenberg's essay, *Prospect for a Theory of Nonconceptuality* in *Shipwreck with Spectator*.

Bruno based much of his philosophical system on *coincidentia oppositorum*, the coincidence of opposites. Bruno claimed that the paradox of the monad and infinity affirmed God's omniscience: Only God is able to understand the humanly unintelligible coincidence of opposites—night and day, good and bad, large and small. The Nolan refined this theory, I believe, in order to reconcile and strengthen two essential philosophical assumptions on which much of his comprehensive philosophy depended: 1) Nicholas of Cusa's reading of *coincidentia oppositorum*; and 2) If God represents the totality of things, then space would necessarily require a referent. The monad stands as this material referent that validates divine immensity and omnipotence.

Regarding point one, Bruno believed that only God is able to understand the juncture of two opposites, such as infinitism and finitism. As such, he managed to affirm both God's omnipotence and omniscience, but at the same time he exalted his own powers as magus. Bruno believed that his grasping the point of juncture where paradox existed brought him closer to God. Where in history did Bruno find this concept? The basic premise on which *coincidentia oppositorum* is based is derived from the Book of Genesis. Therein Moses exclaimed that during the seven days in which God created the universe, He had emphasized numerous important dichotomies in order to house and hold together the fabric of the universe. These dichotomies, which are found in the first one-hundred words of Genesis, are all-encompassing and universal opposites: Earth / Heaven; Day / Night; Wet / Dry; Man / Woman. Both Bruno and Cusa believed that in order to understand the universe man needed to come to understand how and why God created it through the process of opposites. To "grasp" this humanly incomprehensible and non-conceptual notion, man would have to either 1) place his faith in a cause outside the

realm of the mind; or 2) devise a mythical—fantastical—interpretation. Bruno chose the former: *coincidentia oppositorum*.

Regarding point two, Bruno upheld that the infinite God represented the totality of the universe. This implied that God, though infinite and "shapeless," possessed a "shape" inside of which all matter existed. This paradox appealed to Bruno because of his dependency on Hermetic ontological dualism and Cusa's *coincidentia oppositorum*. Bruno's fatal philosophical flaw, however, was that in his philosophy he placed too heavy an emphasis on the tenet of the Hermetic tradition that *that which is above is like that which is below*. If the monad is the smallest particle, then all things in nature are to be understood in proportion to it; and, therefore, that which is "above," the universe and other worlds, is a mere reflection of the monad, which is "below". Thus, to understand God from a Hermetic purview—so Bruno's argument logically follows—a man should focus his attention on the infinitesimally small, as it will reveal the workings of the immensely large. Bruno's concept of monadism, even if arcane and highly mystical, to a great degree correct inspired modern atomism. Bruno's Leucippian and Democritean idea of monads calls to mind modern science's concept of atoms (which, in ancient Greek, means "indivisible"). The purposes for which he arrived at this concept, however, were entrenched in what Bruno perceived as the necessity of paradox. Today, the atom, however, is not understood to be the smallest particle in nature; it is rather the smallest particle to make up a chemical element.

By means of monadism, Bruno's speculative philosophical system arrived very close to yet another correct assumption, like those he proposed regarding innumerable worlds and the possibility of extra-terrestrial life. Once the seventeenth century's most

resolute minds managed to extract from Bruno's labyrinth of mysticism the simple logic of the Nolan's theory of monadism, the concept enjoyed great success. For example, historians of science and philosophy often point to Bruno's influence on two philosophers of great European renown whose philosophical systems greatly depended on the theory of monadism: Spinoza and Leibniz.³⁸ Modern science, however, has shown little tolerance for Bruno's intention. To him, monadism was a mirror that revealed the God of Tradition, and modern science has insentiently invested itself in the creation of a new God. Regardless, during his fifty-two years on Earth, Bruno's employment of the two principles of "above" and "below" removed the veil covering many of the secrets of nature. That is because the interpretive lens developed by Bruno served a functional purpose: it allowed man to view nature in an alternative way. The Hermetic world-view of "above" and "below" depended on similitude, which allowed for diverse interpretations of the relationships between things, leading ultimately to insight regarding their processes. Eventually, however, Brunonian dualism would be reconstituted into a Foucaultain "new order" in the seventeenth-century by many of the greatest proponents of the modern age. Michel Foucault, along with his many disciples and contemporaries, have argued that the modern age marks the disappearance of similitude—that is, what one might call the Hermetic world-view, or the unexplainable juncture of opposites. The modern age no longer believes in opposites—no night, no day.

An Extension of Monadism: The End of the Final Cause

³⁸ In a recent article, "Monadology and the Reception of Bruno in the Young Leibniz," Stuart Brown discusses the "common tradition" found in Bruno and Leibniz and formulates a convincing argument for Leibniz's indebtedness to Bruno's thought. See p. 390.

Although I have mostly explored Bruno's monadism as it relates to *coincidentia oppositorum*, I believe it is also helpful to understand the latter concept's connection to the Aristotelian "final cause". Bruno's idea delves deeply into this Aristotelian realm, though he would have likely avoided any comparison.³⁹ Like Socrates, Bruno famously purported superiority over other wise men because he believed that his recognition of not knowing provided him with greater wisdom than that man who does not make such a claim. Although he remained ignorant, Bruno's acceptance of "not knowing but also cognizant of not knowing" granted him a privileged philosophical vantage point. This vantage is reachable by all through humiliation in front of God, the only truly wise one. Although Socrates exalted this philosophical position, Bruno resurrected the notion for a different purpose. Bruno labeled this the philosophy of the ass, or asinity.⁴⁰ Bruno's recognition of what he calls his own "asinity" hints to another early modern theory of non-conceptuality.⁴¹ With this notion, I believe, the Nolan has unknowingly hinted to what would be the eventual demise of interest in the final cause. The premise is: Man cannot understand the seemingly impossible convergence of two opposites, yet he presumes its plausibility. It is unnecessary for man to speculate as to God's motives because he *cannot* understand them. Only God may understand the absence of paradox in paradox, the finite in the infinite. Where man sees paradox, God sees harmony. Although Bruno's monadism now appears to many the archaic remnant of a lost,

³⁹ On Bruno's Aristotelianism and anti-Aristotelianism see J. Powell, "Perfection as a Cosmological Postulate: Aristotle and Bruno."

⁴⁰ Bruno's most important work on this topic is *Cabala del cavallo pegaseo* (1585). See esp. the work's opening tailed sonnet, "In Lode de l'Asino," *DFI* p. 683.

⁴¹ See N. Ordine, *Giordano Bruno and the Philosophy of the Ass*; and M. Ciliberto, *La ruota del tempo*, pp. 24-65.

mythically-based order, which blossomed in the soil of an era unsure of its future, one may argue that many of his assumptions, though divided and Janus-like, hinted to what would become the future preoccupations and concerns of philosophers and scientists of the modern age.

Bruno & The Art of Memory

Scholars have long pointed to the above arguments for Bruno's influence on the rise of the modern age.⁴² In comparison, few have detailed the importance of his complex system of mnemonics known as *ars memoriae* or *ars combinatoria* on the advent of the modern age. Frances Yates, Lina Bolzoni and Paolo Rossi⁴³, however, have demonstrated that careful attention to this aspect of Bruno's thought has shed light on many of the Nolan's contributions to the seventeenth-century, specifically Encyclopedism and collectionism. Bruno's art of memory is most deeply indebted to the thirteenth and fourteenth-century theologian and philosopher-poet, Ramon Lull. Inspired by Arabic and Greek philosophy, Lull devised a system of mnemonics that functioned by combining images (Platonic shadows) with words. Lull's system facilitated not merely knowledge of things, but primarily knowledge of the complex inner-workings of the divine mind. Having studied Lull fervently for many years, Bruno, gifted with outstanding faculties of mind and unbridled ingenuity, amassed great fame throughout Europe for his outstanding

⁴² See R. Mendoza, *The Acentric Labyrinth*, pp. 71-93.

⁴³ Of particular and unequivocal importance see P. Rossi's *Logic and the Art of Memory: The Quest for a Universal Language & Clavis universalis: arti mnemoniche e logica combinatoria da Lullo a Leibniz*; L. Bolzoni's *La stanza della memoria: Modelli letterari e iconografici nell'età della stampa*; and F. Yates's *The Art of Memory and Lull & Bruno*. See also C. Vasoli's article, "Bruno e l'arte della memoria'."

memory.⁴⁴ Mnemonics became Bruno's stock in trade. Pope Pius V, in fact, was interested in learning the art of memory. Having heard of Bruno's outstanding memory, the Pope thereby requested the mnemonist's presence in Rome. Though there is no documentation of this encounter, Bruno claimed at his trial that he had dedicated in 1568 a small book to Pius V entitled *L'Arca di Noè*.⁴⁵ I believe that in this now-lost work, which refers to one of the ancient time's greatest collectors, Noah, Bruno provided Pius V with instructions on how to benefit from the patient improvement of memory. Shortly after his meeting with Pius V, Bruno's fame as a mnemonist continued to spread across Europe. Henry III of France requested Bruno's presence in Paris. Bruno stated on May 30, 1592, while on trial in Venice, that "King Henry III called me one day, seeking to find out if the memory I had and professed was natural or the result of magical art; to whom I gave satisfaction; and with that I told him and made him try himself; he learned that it was not by means of magical art but science" (Firpo *Il processo* 161-62).⁴⁶ The fruit of this encounter was a book. Bruno dedicated to Henry III what is perhaps his best-known treatise on the art of memory, *De umbris idearum* (1582).⁴⁷ This work is the first of Bruno's on the art of memory to survive the grueling test of time (we know that numerous earlier works to which Bruno referred during his trial also pertained to the mnemonic arts, such as the *Clavis magna*). Even if no one will ever know how Giovanni

⁴⁴ On this point see A. Nowicki, *Il pluralismo metodologico e i modelli lulliani di Giordano Bruno*.

⁴⁵ Bruno also mentions this work in *Cabala del cavallo pegaseo* (1585). See *DFI* p. 679.

⁴⁶ "il re Henrico terzo mi fece chiamare un giorno, ricercandomi se la memoria che havevo et che professava era naturale o pur per arte magica; al qual diedi sodisfattione; et con quello che li dissi et feci provare a lui medesimo, conobbbe che non era per arte magica ma per scientia."

⁴⁷ A. G. Farinella's recent article, "Giordano Bruno: Neoplatonism and the Wheel of Memory in the *De Umbris Idearum*," is a fine study that explore Bruno's indebtedness to Ficino and Neoplatonism. For a study on Bruno's thoughts on *ars memoriae* in London see S. Clucas.

Mocenigo first learned of Bruno's art of memory, knowledge that thereby impelled the Venetian patrician to request the Nolan's presence in Venice, nor will anyone likely know why Bruno chose to return to hostile territory, critics have put forth numerous theories.⁴⁸ First, it is likely that Mocenigo, Venetian Ambassador to France, first heard of Bruno on one of his many visits to Paris. It is certain that Bruno would have amassed quite a reputation in Paris because he earned Henry III's admiration, though Bruno's reputation might not have always been a good one as Henry III jeopardized his own reputation amongst the people. Second, it is also probable that Mocenigo became familiar with Bruno's work in Venice because the city was a well-known center for publishing and many of the Nolan philosopher's works were in circulation there.⁴⁹ Mocenigo, perhaps

⁴⁸ Most theories are based on the following depositions from Bruno's trial found in L. Firpo, *Il processo*, pp. 9-13, 149-50, 154-55.

⁴⁹ Much work needs to be done on Bruno, Venice and the transmission and dissemination of Hermetic literature in *La Serenissima*. Moreover, a study of the life of Giovanni Mocenigo is long overdue (his ambassadorial dispatches from the days he hosted Bruno are preserved in the Archivio di Stato di Venezia). If one were to select an Italian city most accepting of Bruno's thought, in all appearance it would be Venice—though, ironically, it ended up being the least. Well before Bruno was born, Venice was already a thriving epicenter for the transaction of Hermetic, Gnostic, and Neoplatonic literature with works arriving at its ports in the fourteenth and fifteenth centuries. Venice was and still is a city that loves its books. In fact, as Antonio Rigo points out in his article, "From Constantinople to the Library at Venice: The Hermetic Books of Late Byzantine Doctors, Astrologers and Magicians," in *Magia, alchimia, scienza dal '400 al '700. L'influsso di Ermete Trismegisto/Magic, Alchemy and Science 15th-18th centuries. The influence of Hermes Trismegistus*, the explosion of hermetic literature in Byzantium in the 14th century, with or without clear reference to Hermes Trismegistus, often found home in fifteenth and sixteenth-century Venetian libraries, private and public. On 14 May 1468, just a few years before Ficino's translations of the *Corpus Hermeticum* were to be published, the Humanist Cardinal Bessarion donated, according to Marino Zorzi, in his article in the same volume, 1,024 titles to the Republic of Venice. Thus began the story of Venice's state-owned library "La Libreria di San Marco" (126). Bessarion was a devout Christian, and a strong supporter of Christian-Hermetism. In Bessarion's collection were found a Greek manuscript of the Pythagorean, and a Latin manuscript of the Asclepius. Aldo Manutius, famous for publishing in the late fifteenth and early sixteenth centuries works in occultism, notably Colonna's *Hypnerotomachia Poliphili*, opened shop in Venice. Manutius often utilized manuscripts from private Venetian collections. As Marino Zorzi points out, a number of libraries, including those of Ermolao Barbaro, Giorgio Valla, and Gioacchino Torriano, possessed a Humanistic orientation (128). Pico della Mirandola, friend of Barbaro, found many with equal passions for Cabala, Neoplatonism and Hermetism in Venice, including Cardinal Domenico Grimani and Francesco Zorzi, author of the famous hermetic work, *De harmonia mundi*, which would go on to inspire Kepler's own work with a similar title a century later. Pico della Mirandola died in 1491, and left over one thousand titles to a private collection, eventually bought by Grimani in 1498 (129). Grimani's books, however, ended up in the Monastery of San Giorgio

wishing to avoid inculcating himself, stated at Bruno's trial that he merely stumbled upon Bruno's writings in Venice while passing by Ciotti's book shop. Regardless of the reason, Bruno's fame reached all the corners of Europe, from the highest ranks of Venetian nobility, to both the French King and to the Pope. Although Bruno developed an unfortunate international reputation as the self-proclaimed "Academic of No Academy" (*Candelaio* 113)⁵⁰ during his years of vagabondage, he simultaneously managed to earn great respect as the genius of *ars memoriae*.

Bruno & A New Systemization of Knowledge

Although I have demonstrated how Bruno earned great respect throughout Europe for his powerful memory, it is only significant if one relates it to the success mnemonic

Maggiore, and were lost in a 1687 fire. Francesco Zorzi, born in the middle of the 15th century, managed to turn his Franciscan monastery, San Francesco della Vigna, in what Marino Zorzi called, a "European centre for Hermetic and cabbalistic philosophy" (130). Two further names that appear commonly in the tradition of early Venetian libraries are Marin Sanudo, whose 1533 library held an unprecedented 6,500 titles; and Tommaso Giannotti da Ravenna, known as Tommaso Rangone, an astrologer and philosopher with many titles in the hermetic tradition. Toward the end of the sixteenth century—through Bruno's life and shortly thereafter—two names stand out as particularly important in Venetian libraries: Leonardo Donà and Marcantonio Celeste. Marcantonio Celeste, astronomer and author of a work on celestial bodies, possessed a large collection in the early Seicento (2,700 vols). Celeste's library, based on his personal interests, was composed primarily of astronomical and philosophical texts. We know for certain that Trithemius, Agrippa, and Francesco Zorzi all had a place on his shelves, as did Giordano Bruno. Bruno's texts were placed on the Index at the time of his execution. But, as in Celeste's library, Bruno's works did continue to circulate. From Giovanni Mocenigo's letters to the Venetian Inquisition, and from Inquisitorial depositions given by two well-known Venetian acquaintances of Bruno, notably Giovan Battista Ciotti (printer) and Giacomo Briciano (printer), we know for certain that Bruno's *De minimo*, published in Frankfurt just a year before coming to Venice, his *De gli eroici furori*, and *De l'infinito, universo et mondi*, all were found in Venice. Furthermore, because Mocenigo was particularly interested in developing his skills in the art of memory, it is with relative certainty that we can imagine he possessed or had heard of Bruno's memory treatises, such as *Sigillus sigillorum*, or *De umbris idearum*. In fact, Giacomo Briciano in his second deposition to the Inquisition on 26 May 1592 stated: "Ho visto diversi libri suoi, uno intitolato *Cantus circeus* stampato a Parisi, un altro *De memoria* stampato in Parisi, un altro *De lampade combinatoria* stampato in Praga, et altri, che ora non mi ricordo, li quali però non ho letto; ma quando alcuno ha ragionato delle opere di costui, ho sentito a dir a tutti, che sono opere curiose et di bell'ingegno; et credo de haver un policino de tutte le opere del detto Iordano, datomi da lui medesimo, il qual cercarò, et trovandolo lo porterò subito al Sant'Offitio" (Firpo *Il processo* 154). Bruno's physical presence in Italy, as we can see, was preceded by the immaterial presence of his ideas.

⁵⁰ "Academico di Nulla Academia"

systems generally received in the seventeenth century, along with the century's impulse to reorganize diverse branches of knowledge. Since Bruno's art of memory was fundamentally a system for organizing, recording and manipulating images and ideas, and given that it enjoyed great popularity in Europe, it follows that other systems of organizing, recording and manipulating images and ideas, such as Encyclopedism and collectionism, were invested in a similar Brunonian quest for the Foucaultian "new order." Like Bruno, the most famous encyclopedists of the seventeenth century, such as Alsted, sought a complete reorganization and systemization of knowledge. In a world no longer governed by the anthropocentric illusion and the weight of earlier myths assigned to a previous ordering of the heavens, the concept of "book" had shifted from that of the divine word, and thereby truth, to that of nature's word. Nature, in short, became the book that was to be read and understood according to its own language. To transcribe this book many seventeenth-century natural philosophers turned to an ancient fount of knowledge, Mother Encyclopedia. They believed that together they could describe all natural occurrences in nature in the form of a book. To do this, man first observed nature, interpreting its laws and codes, and then described these laws and codes in succinct, yet rich, passages that were typically no longer than a paragraph or two. This book they called the Encyclopedia.

It is no coincidence that the circular, coronal wheels of education known as the "Encyclopedia," are similar to the circular, coronal wheels of the art of memory. According to Bruno, these wheels were worn in the mind much as one wears a crown. The mnemonic crown was imbued with the letters of diverse alphabets, such as Greek, Hebrew and Latin, and Arabic numerals. To each letter or number, the mnemotist

associated a part of nature, typically through a phonetic and/or lexical alphanumeric correspondent: P for Pig, or 2 for Gender (male & female). Here are two of Bruno's memory wheels from his Latin treatises (Figs. 2 & 3):



Fig. 2. Memory Wheel from *De umbris idearum*
8 May 2007 <<http://giordanobruno.signum.sns.it/index.php?id=1183>>

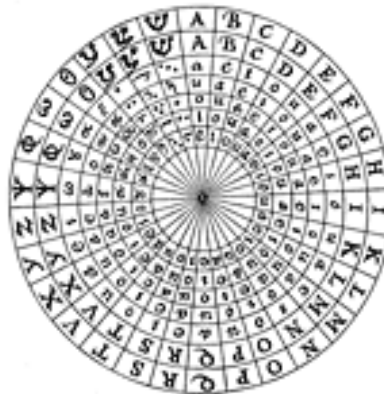


Fig. 3. Memory Wheel from *Ars memoriae*
8 May 2007 <<http://giordanobruno.signum.sns.it/index.php?id=939>>

If one sought to record all of the types of insects found, for example, in Nola, Italy, letter A could be made to correspond to Ant, B to Beetle, C to Cockroach, and so on and so forth. This process not only simplified recollection of the insects' names, but also allowed for the more important act of combinations. If one were to place numerous wheels together (like the latter of the two above, one wheel inside of another), then spin

each wheel independently, the letters would randomly fall into different orders. Then, if A and B were to align themselves, through a form of mental gymnastics the mind of the wearer of the mnemonic crown would be able to imagine an insect that does not exist on the earth, a combination of both Ant and Beetle. Bruno believed this process to be nearly divine and resembled the very act of genesis initiated by the Creator of the Universe. According to Bruno, combination was the "Great Key," the *Clavis magna*, which opened nature's box of secrets.

The art of memory played an integral part in the development of the modern age. For example, today it is accepted that creative minds utilize a similar thought process to that proposed by Bruno. The acceptance of this opinion about combinations lies, I believe, at the base of Enlightenment thought. For example, the Scottish Enlightenment philosopher, David Hume, argued in his *Treatise on Human Nature* (1739-40) that if a person were first presented a chromatic—a mathematically proportionate scale of colors—and second asked to imagine a color that 1) he had *never* seen before; and 2) was also absent from the mathematically perfect gradations of the chromatic scale, he or she would not be able to invent the color based upon its placement in the scale.⁵¹ For example, had a person never seen the shade of red absent from the image below (fig. 4), he might be led to conclude that the gradation between the two colors of red to both the left and right of the empty space is equal to the gradation between any other two colors.

⁵¹ Hume writes, "Suppose, therefore, a person to have enjoyed his sight for thirty years, and to have become perfectly acquainted with colors of all kinds except one particular shade of blue, for instance, which it never has been his fortune to meet with. Let all the different shades of that color, except that single one, be placed before him, descending gradually from the deepest to the lightest; it is plain that he will perceive a blank, where that shade is wanting, and will be sensible that there is a greater distance in that place between the contiguous color than in any other. Now I ask, whether it be possible for him, from his own imagination, to supply this deficiency, and raise up to himself the idea of that particular shade, though it had never been conveyed to him by his senses? " (*On the Origin of Ideas*, 6 October 2007, http://www.cooperativeindividualism.org/hume_ideas.html).

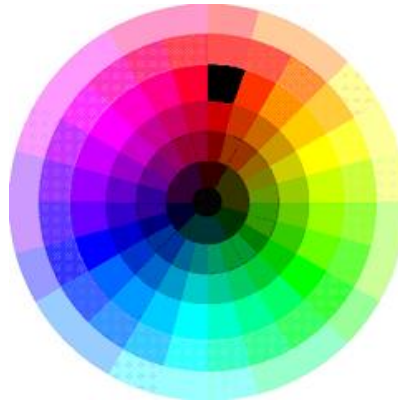


Fig. 4. Color Wheel

8 May 2007 <<http://www.howdesign.com/blog/content/binary/ColourShading.png>>

The mind, conversely, will likely recognize that a color is missing based upon other evidence (the easily observable fact that the table is disrupted by the misplaced presence of black), yet, based upon this information, the mind will still not be able to "imagine" the color itself. David Hume also concluded that a man who is blind since his birth cannot imagine *any* color, as he has not had any means to see colors, which would have allowed for recollection. This product of the Occam-like razor of Enlightenment is exemplary of the entire period's perception of the imagination; i.e., man is not capable of imagining anything that he has not previously witnessed. Imagination and its limits is essentially a process of combinations; the greatest leaps in human creativity are fruits of the most efficacious of combinatoric minds.⁵²

Bruno & The Italian Literary Tradition

Unlike Bruno's philosophically inclined works, his one work of "literature," *Il Candelaio* (1582), defies simple categorization. Its role in literary history must be redefined. I believe, in fact, that the work reflects much of the Nolan's comprehensive

⁵² On Bruno and imagination see L. De Bernart, *Immaginazione e scienza in Giordano Bruno*.

philosophy. As such, its influence—if traced—would likely reveal a philosophical vein throughout Baroque and Mannerist poetry and prose.

Critics have long been puzzled by Bruno's *Candelaio*, leaving little consensus as to why Bruno—author of over forty philosophical, scientific and ethical works—chose to write a comedy. At the outset of the play, however, Bruno hints at the text's philosophical lean by recalling the title of his well-known treatise on the art of memory, *De umbris idearum*. There he states that the *Candelaio* "will be able to clarify somewhat certain Shadows of ideas" (*Candlebearer* 59).⁵³ Though Bruno's allusion to the *De umbris idearum* is evident, few critics have dedicated efforts to understanding the broader implications of this reference. I believe that the *Candelaio* is not solely a literary work, but also a philosophical treatise exemplary of Bruno's complex system of mnemonics propounded most notably in the works he wrote at the same time as it, such as *De umbris idearum* (1582), *Cantus Circaeus* (1582), and *Sigillus sigillorum* (1583). The *Candelaio*, which likely went on to influence Della Porta's numerous comedies,⁵⁴ should be shelved neatly beside the Nolan's seemingly more philosophically inclined works on the art of memory.

Most critics have analyzed the *Candelaio* with regard to the literary tradition of Italian Renaissance Theater. Few, however, have linked the comedy with Bruno's comprehensive philosophy, much less so with Bruno's art of memory. Of those few, one commentator, Jo Ann Cavallo, suggested that the *Candelaio* be read as a "Hermetic

⁵³ "potrà chiarire alquanto certe *Ombre dell'idee*" (*Candelaio* 119).

⁵⁴ See V. Spampinato, "Somiglianze tra due commediografi napoletani (G. Bruno e G. B. Della Porta)."

Puzzle."⁵⁵ Cavallo argued that the play's principal characters mirror the four stages of Hermetic ascension articulated in Bruno's *Ars reminiscendi* (1583). Julie Stone Peters further suggested, though only in passing, that the *Candelaio* be read as a form of "memory theater." She writes, "It is the play, then, that ultimately becomes the 'candlebearer' to the audience seated in relative darkness but capable of glimpsing shadows of ideas through the flickering candlelight of the memory theater" (195).⁵⁶ Though Peters' claim appears substantiated, no one has yet provided an exhaustive mnemonic reading of the text. I believe that the *Candelaio* syntactically and theoretically emulates the very memory systems Bruno proposes in his well-known treatises on the art of memory, many of which he wrote at the same time as the *Candelaio* (1582): *Cantus Circaeus* (1582); *De umbris idearum* (1582); *Sigillus sigillorum* (1583); and *Ars reminiscendi* (1583); among others. To begin, the play's three unusual prologues resemble the doors of the mind that Bruno described in his memory treatise, *Cantus Circaeus*. Therein Bruno states that in order to mobilize the powers of memory, one must initially open the "door" to "common sense," then the door to the "fantastic faculty," which then opens to the "cogitative faculty," accessing, ultimately, "memory."⁵⁷ Similarly, Bruno's reader/spectator passes through the play's three prologues before reaching the memory theater: the space that corresponds to the actual content of the play.

⁵⁵ See J. Cavallo's succinct and informative article, "The *Candelaio*: A Hermetic Puzzle."

⁵⁶ See J. S. Peters's article, "Theater and Book in the History of Memory: Materializing Mnemosyne in the Age of Print," one of her many works on the history of memory and theater.

⁵⁷ The passage follows: "Satis famosum est, atque concessum: quatuor esse cellulas, pro quatuor sensibus internis, quarum: Prima, sensus communis appellatur, situata in anteriori parte cerebri. Secunda, usque ad cerebri medietatem, phantasiae domicilium nuncupatur. Tertia illam contingens cogitativae domus dicitur. Quarta veró memorativae. Hoc modicum est ut ad praesentem spectat considerationem: praeterquam ea de causa, ut habeamus ordinem operationum istarum potentiarum, ad perficiendam memoriae operationem" (*OLC* II.1.3 217-18).

To follow, once the reader/spectator has passed through the final "door" to memory, the protagonists transmogrify into mnemonic *imagines agentes*: pristine shadows of ideas. There is extensive textual evidence, which I shall not elaborate here, that underlines this claim (for example, specific references to mnemonic concepts, textual variations of Brunonian memory wheels, and mnemonic lists, as similarly described in *De umbris idearum* and *Cantus Circaeus*).⁵⁸ To conclude, I therefore believe that any *fortuna* that the *Candelaio* enjoyed in Italy or Europe in the seventeenth century is to be properly understood when linked with broader philosophical questions about how memory was perceived and used in the early modern period. The "Theater of Memory" that is the *Candelaio* is akin to the "Theater of Memory," similar to Giulio Camillo's, that went on to inspire much of the seventeenth century's systems for the reorganization of knowledge: such as collections, encyclopedias, dictionaries and museums.

Bruno & The End of Humanism

The Nolan philosopher's life and thought reveal the intense convergence of numerous advancements brought forth by the Humanists of the fourteenth and fifteenth centuries. Amidst such philosophical and theological tension, the Nolan's death appears almost inevitable. Although Bruno's thought is indebted to the Humanists and the Renaissance, his philosophical system is best understood as the end of the Humanist model. The end of Humanism signaled the rise of the modern age.

Giordano Bruno's originality was inspired particularly by seminal texts from antiquity. For example, Bruno fits neatly in the long branch of Neoplatonic and Hermetic

⁵⁸ Thanks to Dr. Rao for letting me explore these ideas and present them in a series of three lessons to his Italian Renaissance Theater Graduate Seminar, Fall 2006.

philosophers stemming directly from Marsilio Ficino's translation of Plato's philosophical works and also the *Corpus Hermeticum* in 1463 (before Isaac Causaban's 1614 dating of the *Corpus Hermeticum*, thought to have been penned by Hermes Trismegistus; hence considered divine, pre-Platonic, Egyptian works).⁵⁹ Bruno's philosophical system is deeply rooted in magical and Hermetic philosophy. Those who considered the Hermetic texts of great importance, like Bruno, would certainly have believed to have found in them a key granting access to secret and occult knowledge. Central to Yates' thesis is the notion that with the rise of interest in Hermetic philosophy, man's role in nature reversed. He took on the role of operator and master of natural forces; a true magus was born. In fact, Yates labels Bruno as the "Hermetic Magus" *par excellence*. Bruno, however, was certainly not the only Hermetic thinker. Hermeticism touched countless other figures in the Renaissance period, amongst the many I remember in particular: Pomponazzi, Pico della Mirandola, Copernicus, Cardano, Paracelsus, Telesio, Patrizi, Campanella, and Cremonini.⁶⁰ Allen Debus notes in *Man and Nature in the Renaissance* that as a result of Ficino's translations there was:

[...] a surge of new interest in natural magic and all its allied fields. Students of astrology, alchemy, the cabala, and Pythagorean numerology vied with each other in their search for a new key that would unlock the mysteries of the universe. (133)

Besides Bruno's purely Hermetic platform, it is also certain that his ideas were influenced greatly by the classical authors Ptolemy, Plato, Aristotle, Pythagoras and

⁵⁹ Ficino is often credited with having translated the entire *Corpus Hermeticum*, however, Ludovico Lazzarelli, in fact, translated the work's last two tractates. For more information on Lazzarelli and his brand of Christian Hermetism see W. Hanegraaff and R. Bouhoorn's monograph and translation, *Ludovico Lazzarelli (1447-1500): The Hermetic Writings and Related Documents*.

⁶⁰ See Cicuttini, *Giordano Bruno*, pp. 68-73.

Epicurus. All of these works enjoyed great success in the fifteenth and sixteenth centuries in Italy.

Although Bruno drank often from the fount of Humanism, he was ultimately left with a thirst for something new. Bruno was a rebellious philosopher who helped cue the shift from conservative scholasticism to the modern mind. In Bruno many strands of classical, Hermetic and Neoplatonic influences converged creating a thinker of profound complexity. Even today, Bruno remains an esoteric and quasi-impenetrable thinker, just as he did during the late-Renaissance period in Europe. Bruno deeply invested himself in the evolution and creation of a new science, which was bound up in, as Allen Debus states, the "humanistic strain" that was "Hermetic, magical, and alchemical." Debus believes, however, that Bruno sought out classical sources because they allowed him to "study God's Creation so that he might better understand the Creator himself" (133). As such, Bruno did have an influence on the emergence of a new mode of thinking that would show its greatest face in the mind of Isaac Newton, a thinker also inspired by Hermetic thought, toward the mid to late-seventeenth century. Were it not for Humanism's triumphs, Bruno might never have come into existence. He is remembered, however, not so much for his Humanism as much as his recognition of the necessity of its end.

Bruno as a Martyr for the Freedom of Thought

A final mode by which Bruno appears to have contributed to the great cause of modern science, and therefore the modern age, is that ever since his woeful death at the stake, he has been read as a martyr for the freedom of thought. It is of interest to note

that although politically left-wing scholarship has long assigned Bruno the role as the anti-clerical, martyr for the freedom of thought—thereby turning him into a/the hero of secularism—the Nolan did not utter those ever-important words: *libertas philosophandi*, though, I note, he referred to "philosophicam libertatem" in his 1588 *Oratio valedictoria* to the professors at Wittenberg (*OLC* I.1 23).⁶¹ Why then have so many liberal scholars granted Bruno this role? Why is Bruno often referred to as *the* martyr of science or *the* martyr of philosophical speculation?

Science prides itself on having freed itself from bias. Its tried-and-true method takes no stance with regard to the object of its study. Science's method assures a path to knowledge. Those who championed for the freedom of thought in the later years of the sixteenth and throughout all of the seventeenth centuries have become the heroes of the Scientific Revolution, the period in which this very intellectual freedom had been secured. Science has many heroes: Campanella passed almost thirty years in the prisons of Naples and Rome in defense of his reformist beliefs and Galileo fought many long and tiresome years in guard (and ingenious disguise) of his Copernicanism. However, perhaps no one thinker compares to Bruno. He made the greatest sacrifice of them all in choosing death over life for the sake of truth. Bruno famously proclaimed at his trial that he feared death less than his accusers feared condemning him to death. Even in his last breath of life, Bruno turned his eyes from the crucifix thrust before him. Irving Louis Horowitz, in his examination of the complexities of Bruno's philosophy, *The Renaissance Philosophy of Giordano Bruno*, writes in the prologue entitled, "A Sixteenth Century Martyr and the Struggle for Intellectual Freedom," that:

⁶¹ On this point see R. B. Sutton's "The Phrase *Libertas Philosophandi*." For a broad, albeit brief, overview of the concept as it relates to astronomy see O. Struve, "Freedom of Thought in Astronomy."

The struggle to secure intellectual freedom has a long, bitter history. And one of the earliest and most glorious chapters in this struggle was waged by a small, frail man who was destined to become the greatest philosopher of the Renaissance, Giordano Bruno. (3)

Although Bruno's supposed "martyrdom" had little to do with the rise of the scientific method, its ideological, cultural and intellectual significance inspired, and still inspires, countless creative minds. In this manner Bruno's death helped usher in the arrival of modern science. Without inspiration, curiosity and the freedom to pursue knowledge, as we know it today, modern science might not exist.

I.III: THEORETICAL MODEL. WHY SPEAK OF EPOCHS? THE (IL)LEGITIMIZATION OF THE MODERN AGE: KARL LÖWITH AND HANS BLUMENBERG

I have summarized how it has been argued that Bruno sits at the crux of the modern age and the dénouement of the Renaissance. As I argued, Bruno is a sort of historical Janus figure, looking both upon the old and the new. But why speak of epochs, let alone the "end" of the Renaissance, or the pre- or early-modern, and the "beginning" of the modern age? What constitutes epoch making and why differentiate amongst epochs? Why not speak of history as a linear succession of events in which *no* real delineation occurs?

I believe that it is only worth dividing Bruno as Janus, as many scholars have done and I have demonstrated in the previous pages, if the division is based upon a verifiable instance of epochal innovation. In the following section I discuss in detail Hans Blumenberg's theory of the modern age, and then provide insight into the theoretical brainwork behind such a sweeping theory of history. In the end, I once again

place Bruno at the crux of the old and the new. At this point, however, I base my claims upon a revised and original view of history and epochs.

[T]he interpretation of the past becomes a prophecy in reverse, demonstrating the past as a meaningful 'preparation' for the future.

—Karl Löwith, *Meaning in History*, p. 6.

Man-made history has an appearance of predictability.

—Hans Blumenberg, *The Legitimacy of the Modern Age*, p. 34.

Just after the Second World War had ended, Heidegger's student, the German philosopher and historian, Karl Löwith, published his now famous work, *Meaning in History* (1949). One wonders if geniuses, or those at work on the highest planes of imagination, foresee the impact of their efforts before they reach their culmination. If so, the great success Löwith's work enjoyed throughout the European intellectual scene would have come as no surprise to him. His theory, in fact, had at one point become standard currency within the walls of certain academic circles. But, as with some theories, Löwith's is not without its Achilles' heel. Before seeking to expose that crippling epicenter around which great commotion has been made, I will briefly outline the German's theoretical framework and argument for a "meaning in history."

Löwith begins his discussion by defining the term "philosophy of history," coined with its modern sense, as the author notes, by Voltaire. Löwith defines the term "to mean a systematic interpretation of universal history in accordance with a principle by which historical events and successions are unified and directed toward an ultimate meaning" (1). As Löwith claims, "[t]aken in this sense, philosophy of history is, however, entirely dependant on theology of history, in particular on the theological concept of history as a history of fulfillment and salvation" (1). Löwith's work combats those of the opinion that "proper historical thinking begins only in modern times [,]" as with Voltaire, adhering to the proposition that "philosophy of history originates with the Hebrew and Christian faith

in a fulfillment and that it ends with the secularization of its eschatological pattern" (2). From this vantage point, the notion of progress is firmly rooted in a belief that the world, in proper Christian terms, has its beginning—Creation—and will ultimately have its end. Löwith finds no other explanation for this sort of future-based progressivism than one that sees temporal boundaries and therein interprets all movements as *forward* moving. As such, regressions into "Dark Ages," or other similar historical instances, are to be read as examples of man's faltering on his way to his ultimate goal; the taking of one step back before the taking of two steps forward. Hebrew and Christian thought, according to Löwith, introduced the Western world to a linear form of history—a beginning from nothing and an ending in something—that countered the Greek, Hellenistic interpretation of history which saw the vehicle of life as moving in recurrent, cyclical harmony with the cosmos. The Greeks did not, Löwith argues, possess the Hebrew/Christian "history of salvation[.]" and they therefore lacked the very notion "of a philosophy of history and its quest for a meaning" (5). For example, Löwith points to the father of history, Herodotus, who believed that "history shows a repetitive pattern, regulated by a cosmic law of compensation mainly through *nemesis*, which time and again restores the equilibrium of the historiconatural forces" (7). Such a radical shift in mind from a cyclical view of events could only arise from a system of belief that has an "ultimate purpose" (5).

History [...] is meaningful only by indicating some transcendent purpose beyond the actual facts. But, since history is a movement in time, the purpose is a goal. Single events as such are not meaningful, nor is a mere succession of events. To venture a statement about the meaning of historical events is possible only when their *telos* becomes apparent. (5)

The *telos* of the modern age is derived from modern man's concept that history has meaning because the Hebrew/Christian theological framework has it that events have

significance—an event is not meaningless because the whole of which it is irrevocably a part is implicitly meaningful.

At the time that Löwith penned his work, *Meaning in History*, he noted that around him was found a generation "just awakening from the secular dream of progress" (2). The concept of history as a "'preparation' for the future" had, at the time Löwith was writing, begun to see its decline; man's deep and comfortable slumber was disturbed by a decline in faith and in an inherited, seemingly intrinsic goal-oriented sense of time and progress. While this notion has begun to crumble in the twentieth century, no idea has replaced this notion of progress, leaving us, paradoxically, not with an empty hole, but with the lingering remnants of a previous order. That is, the notion of a goal-oriented view of history—Marx's communism as secularized Biblical Paradise, for example—no longer holds full currency, yet its grip, its internal structural pattern, remains the form through which the contemporary period continues to read history. Until the theory of secularization is fully replaced, it will continue to sway observers of the past and influence observers of the future. Löwith concludes that

The modern mind has not made up its mind whether it should be Christian or pagan. It sees with one eye of faith and the other of reason. Hence its vision is necessarily dim in comparison with either Greek or biblical thinking. (207)

Löwith's argument is a powerful one—or so it seems. As with many great writers, the argument's weakness is disguised inside its marvelous rhetoric. In 1966 the young German philosopher, Hans Blumenberg, published his first major work, *The Legitimacy of the Modern Age*.⁶² In this massive work of more than six-hundred pages, Blumenberg dedicated all of his efforts to the dismantling and replacement of Löwith's

⁶² For an alternative, succinct and informative discussion of the debate see R. Wallace, "Progress, Secularization and Modernity: The Löwith-Blumenberg Debate."

claim. In *The Legitimacy* Blumenberg argues that Löwith's argument falters because Hebrew and Christian eschatology could not have provided the notions of a modern idea of progress. Löwith argues, for sake of clarification, that concept B is a secularized version of concept A, and concept C a secularized version of concept B, thereby implicitly suggesting that one concept is derived from another and subsequently develops into an inevitable secularized result of it. The argument also implies that if the secular models are to continue, there will inevitably be a conclusion to all human events. While concept B might be altogether different than concept A, Löwith's historical model still presumes that concept B is somehow unoriginal—just a secularized version of something else that appears at a point in man's history because it is, one might say, predestined to arise. From this point of view, we see that concept B does not assume the empty position of concept A, though it is entirely indebted to it, but stands as the next step in a progression fully aware of its past as it is of its future—thereby suggesting that the past is understandable and the future is predictable. A knows B as B knows C. It is man's duty, therefore, to merely uncover these successively disguised steps. Man partakes in an immanent progression of history.

Such an interpretation robs the modern age of its legitimacy—the belief that the modern age marks an instance of pure epochal innovation that stands not as a mere inevitable result of a succession of events, but as an original instance in history. Blumenberg brooks no such claim to its illegitimacy. He suggests, rather, that "[m]an-made history has an appearance of predictability"; history cannot be read in reverse as a continuum of prophecy (*Legitimacy* 34). The modern age, according to Blumenberg, constitutes a rupture. Blumenberg legitimizes the modern age by claiming that it came

about as man's attempt to solve the recurring problems regarding God, man's purpose, and the nature of the world. Robert Wallace, prominent scholar and translator of

Blumenberg, provides a succinct and useful description:

The nature of what one undertakes is deeply determined by the problem—the contingency of existence in the world—that one is addressing. And that problem is evidently not an 'eternal' one. [...] It is posed, and becomes inescapable, at a particular historical point for particular historical reasons, which we have to reconstruct if we want to understand our age and ourselves. (*Legitimacy* xix)

History is not inherently meaningful, but is rather the reflection of an ever-changing confluence of ingredients that converge upon one historical instance and decide what is and what is not important to a single man and how he is equipped to handle his very own condition. Man-made history is invariably composed of man-made concepts. Epochal change occurs when man challenges his very condition and history—both of which he has passed unto himself. If we are to understand the modern age as being a unique, decisive, and entirely distinguishable epoch, we must also accept that history—a seemingly intelligible autobiography of sorts—is without, as Löwith argues, any direction or goal. Man-made history has no end.

So how do we interpret this rather chaotic conglomeration of changes taking place in an endless succession of events? Let us begin by example. At the outset of life, man awakens to find himself in both a certain environmental position and a certain biological condition. Blumenberg writes in *The Genesis of the Copernican World* that:

The combined circumstance that we live on Earth *and* are able to see stars—that the conditions necessary for life do not exclude those necessary for vision, or vice-versa—is a remarkably improbable one.

This is because the medium in which we live is, on the one hand, just thick enough to enable us to breathe and to prevent us from being burned up by cosmic rays, while, on the other hand, it is not so opaque as

to absorb entirely the light of the stars and block any view of the universe. What a fragile balance between the indispensable and the sublime. (3)

Man wakes to find himself in a "combined circumstance": not only in a place that has stars, but also in a place where man is able to see stars. This "combined circumstance" converges upon man—from the exterior and the interior—constituting what Blumenberg titles in his *Work on Myth* as the "absolutism of reality." This term is defined as that which goes on in the totality of a "situational leap"; that is, a change of place that is brought on because an organism seeks to survive and therefore takes great risks in an effort to avoid death. Blumenberg provides an example and explanation:

Whatever may have been the appearance of the prehuman creature that was induced, by an enforced or an accidental change in the environment it inhabited, to avail itself of the sensory advantage of raising itself upright into a bipedal posture and to stabilize that advantage in spite of all its internal disadvantages in the functioning of organs—that creature had, in any case, left the protection of a more hidden form of life, and an adapted one, in order to expose itself to the risks of the widened horizon of its perception, which were also those of its perceivability. It was, as yet, no forward thrust of curiosity, no gain in pleasure from the broadened horizon, no exaltation at acquiring verticality, but merely the exploitation of a favorable opportunity for survival by avoiding the pressure of selection, which would have driven toward irreversible specialization. It was a situational leap, which made the unoccupied distant horizon into the ongoing expectation of hitherto unknown things. (*Myth 4*)⁶³

Blumenberg emphasizes that man's biological and environmental conditions alter the necessary and impending questions that are pertinent to him—here we find echoes of Darwinism and German philosophical anthropology. Considering, however, that environmental and biological conditions have the tendency of reappearing in similar forms, and have led us to place our faith in its apparent constancy, man has thereby constructed his history according to its seemingly eternal nature. This is done through a

⁶³ I. Couliano puts forth an interesting Darwinian reading of the rise of modern science in *Eros and Magic in the Renaissance*. See pp. 182-83.

process that Blumenberg meticulously explains in *The Legitimacy of the Modern Age*. Man receives from his predecessors what Blumenberg labels "empty positions" that act as "reoccupations." These "empty positions" are recurring existential and philosophical problems. Man attempts to fill these empty positions with solutions, but this, it appears to some, is done in vain. Many modern men, like the existentialists, awoke from the utopist dream of knowing everything as God does. These types of men accept in utopia's place the unalterable truth that man will never master reality. But the dream of conquering reality, not dead to all, particularly not so in primitive societies, has provoked mounting anxiety about the imminent future. The ultimate expression of this anxiety reveals itself in man's creation of God and myth—the sort that provides a man, filled with fear, feelings of solace or comfort, hope or aspiration. God, like myth, is an answer to an inextinguishable human problem. "Myth," as Blumenberg states, "allows man to live" (*Myth* 31). While God and myth stand out at the farthest reaches of the imagination, within its field are found all the examples of man's attempts at solving the recurring problems of his existence. Bacon's disposal of the Idols, Newton's explanation of gravity, Galileo's development of method, Descartes's quanto-rationalism, Bruno's pananimistic infinitism, and Einstein's relativism, are all, at their root, born out of a unified human inclination to solve problems.

If we are to accept Blumenberg's approach, why at the end of the sixteenth and start of the seventeenth centuries and not, for example, during the fifth or second centuries, do we see an epochal shift from the medieval to the modern? What constitutes epochal change? In order to answer this question, one must first understand how, as Blumenberg explains, "[t]he modern age is the second overcoming of Gnosticism"

(*Legitimacy* 126). As such, "[a] presupposition of this thesis is that the first overcoming of Gnosticism, at the beginning of the Middle Ages, was unsuccessful" (*Legitimacy* 126). The discussion begins with Plato and the Platonists who explain that a demiurge created the material universe basing all matter upon immaterial predecessors, or Platonic Ideas, which stood as referents and decided the form and structure of matter. As Blumenberg argues, this explanation did not reveal how there could also be bad or evil things in the world. In an effort to reconcile this philosophical quandary, Neoplatonism provided the following solution: "The world appears as the great failure to equal its ideal model" (*Legitimacy* 128). Matter was demonized, as Blumenberg elaborates, and Ideas were theologized—one corrupt, one pristine. As is understood, Blumenberg believes that in all eras man is faced with empty sets of positions and, in an effort to find solace, man temporarily reoccupies these empty positions with solutions (better understood, I believe, as "postponements"). Gnosticism thus "bears a more radical metaphysical stamp [than Neoplatonism]. Where it employs the Neoplatonist system, it is nevertheless not a consistent extension of that system but rather a *reoccupation of its positions*" (*Legitimacy* 128; my emph.). Gnosticism sees the demiurge as the antagonist of the God of Salvation—the demiurge "has [therefore] become the principle of badness" (*Legitimacy* 128). The panacea proposed by the Gnostics is the removal of divine blame: "the good God has never had anything to do with the world" (*Legitimacy* 128). This concept is best exemplified by the famous Gnostic philosopher, Marcion, who was excommunicated in Rome in 144 C.E. Blumenberg explains:

The fundamental thought that underlies Marcion's Gnostic dogmatics is, I think, this: A theology that declares its God to be the omnipotent creator of the world and bases its trust in this God on the omnipotence thus exhibited cannot at the same time make the destruction of this world and

the salvation of men from the world into the central activity of this God.
(*Legitimacy* 129)

We know, in fact, that Marcion held that Christ was not son of the God of the Old Testament, but son of the Good God, different from the evil demiurge. Marcion's solution relieved the Good God from the burdens of responsibility, yet his proposal slighted God's omnipotence and pantocracy. Augustine proposed that man accept full blame for the evil in the world, thereby removing what had hitherto filled the position: Gnostic dualism. This first over-coming of Gnosticism—Augustine's—imposed upon man a massive sense of guilt, he was to blame for all evil in the world, but it concurrently relieved man of the burden of blaming his God, therefore holding together the God of salvation and the God of creation. The Middle Ages, governed by this notion, was to end with the second over-coming of Gnosticism. Blumenberg states that it was human self-assertion, in the form of an "existential program," not of "naked biological and economic preservation," that caused the destruction of the scholastic tradition and prompted the arrival of the modern age (*Legitimacy* 138). The modern age was brought on by the appearance of new cosmologies, particularly those that called for an infinite universe and the plurality of worlds. These possible cosmologies were born out of Nominalism's "disappearance of order" (*Legitimacy* 137).

A 'disappearance of order', causing doubt regarding the existence of a structure of reality that can be related to man, is the presupposition of a general conception of human activity that no longer perceives in given states of affairs the binding character of the ancient and medieval cosmos, and consequently holds them to be, in principle, at man's disposal.
(*Legitimacy* 137)

The disappearance of order allowed for new concepts of "human freedom," as purported by Campanella at the end of his *Città del sole*, wherein the Calabrian prophet, commenting on his own experiences on the Inquisitor's *veglia*, the torture chair, states:

Know this: that these people believe in the freedom of the will; and they say that if a man, after forty hours of torture, will not reveal what he has resolved to keep secret, then not even the stars working so far off can force him to do so. (*The City of the Sun* 126)⁶⁴

This same sentiment is seen in Bruno. The Nolan announces the arrival not only of the "new light" of a heliocentric universe, but also himself, the "new light" of human prophecy. Though the sun's light had always remained the same, its rays, at the time of Bruno, began to fill the dark and gloomy prison in which man had until then been held captive. That prison is no better exemplified than by Campanella's sonnet, "Al carcere," wherein the Calabrian, then incarcerated in Rome in the same prisons as Bruno, pens the following "imprisoned" verse:

As every heavy thing moves to the center
From the circumference, and also as
in the mouth of the monster that then devours it
the weasel fearfully and jokingly chases;
so also every lover of great science
that audaciously passes from the stagnant lagoon
to the sea of truth, with which it falls in love,
in our home eventually the plants stop growing.
To others the name of the cave of Polyphemus,
to others the Palace of Atlantis, to others the labyrinth
Of Crete, and others the depths of Hell
(because here favor has no worth, no knowledge, no pity),
I know to tell you; of the rest, I fear all,
That it is a sacred prison-castle of a secret tyranny.⁶⁵ (*La Città del Sole e Poesie* 177)

⁶⁴ "Questo si sappi, che essi tengon la libertà dell'arbitrio. E dicono che, se in quarant'ore di tormento un uomo non si lascia dire quel che si risolve tacere, manco le stelle, che inchianano con modi lontani, ponno sforzare."

⁶⁵ "Come va al centro ogni cosa pesante / Dalla circonferenza, e come ancora / in bocca al mostro che poi la devora, / donnola incorre timente e scherzante; / così di gran scienza ognuno / amante, che audace passa dalla morta gora / al mar del vero, di cui s'innamora, / nel nostro ospizio alfin ferma le piante. /

One might argue that Campanella never quite escaped the prison of his own world-view, which is evinced in the friar's late and hesitant acceptance of Copernicanism.⁶⁶ Converse to Campanella, Giordano Bruno, one of the earliest thinkers to embrace the doctrine of a sun-centered universe, claims to have escaped from the murky cell of the previous order. At the beginning of *De l'infinito, universo, e mondi* Bruno alludes to a universal exodus from the constraints of exhausted dogma:

Escaped from the narrow murky prison,
Where for so many years error held me straightly,
Here I leave the chain that bound me
And the shadow of my fiercely malicious foe
Who can force me no longer to the gloomy dusk of night.
For he who hath overcome the great Python
With whose blood he hath dyed the waters of the sea
Hath put to flight the Fury that pursued me.
To thee I turn, I soar, O my sustaining Voice;
I render thanks to thee, my Sun, my divine Light,
For thou hast summoned me from that horrible torture,
Thou hast led me to a goodlier tabernacle;
Thou hast brought healing to my bruised heart. (Singer 248)⁶⁷

Such a prison break arose because the modern age came to be at that point that an entirely modern concept of infinity, which, changing the parameters not only of the universe, but also of God, reconstituted the notion that history ultimately seeks its own fulfillment.

Contrary to this notion, Blumenberg argues that "[i]f eschatology or messianism were

Ch'altri l'appella antro di Polifemo, / Palazzo altri d'Atlante, e chi di Creta / Il laberinto, e chi l'Inferno
estremo / (ché qui non val favor, saper, né pièta), / io t'io so dir; del resto, tutto tremo, / ch'è ròcca sacra a
tirannia segreta."

⁶⁶ Campanella presents a geocentric view of the universe in *Physiologiae compendium* (c.1613) and not until 1616 does he publish his weak defense of Galileo and heliocentrism, *Apologia pro Galileo*.

⁶⁷ "Uscito de priggione angusta e nera, / ove tant'anni error stretto m'avinse, / qua lascio la catena,
che mi cinse / la man di mia nemica invid'e fera. / Presentarmi a la notte fosca sera / oltre non mi potrà:
perché chi vinse / il gran Piton, e del suo sangue tinse / l'acqui del mar, ha spinta mia Megera. / A te mi
volgo e assorgo, alma mia voce; / ti ringrazio, mio sol, mia diva luce; / ti consacro il mio cor, eccelsa mano:
/ che m'avocaste da quel graffio atroce, / ch'a miglior stanze a me ti festi duce, / ch'il cor attrito mi rendeste
sano" (DFI 321).

really the substantial point of departure of the modern historical consciousness, then that consciousness would be permanently and inescapably defined by teleological conceptions, by ideas of ends" (*Legitimacy* 35). Instead, since the modern age is not preoccupied with the idea of its own end, it is the very death of the notion of an end that constitutes the birth of the modern age. It is entirely dependant upon man's reconstruction of the notions handed down to him by his predecessors that differentiates the two epochs, Medieval and Modern, the age of the finite and the age of the infinite. Blumenberg claims in *The Legitimacy of the Modern Age* that "In history the price we pay for our great critical freedom in regard to the answers is the non-negotiability of the questions" and reiterates with a quote by Beckett in *Work on Myth*, "'All life long the same question, the same answers!'" (69; 59). As such, the drastic up-ending of a mode of interpretation, such as that which ushered in a new concept of God with the modern age, permanently altered man as he knew himself and the universe. In essence, the modern age developed, as Blumenberg states, its own "self-consciousness" (*Copernican* 381). In order to marshal in this great epochal shift man had to provide his greatest expression of "self-assertion," which is the rejection of doctrine through a form of hyper-assertion. Human self-assertion, which puts forth new propositions in order to guarantee security and life, stands counter to "theological absolutism," which stands as the belief that there is an ultimate answer to a question.

I.IV: THE NEW LIGHT: GIORDANO BRUNO AS METAPHOR OF THE MODERN AGE

The question: How does Giordano Bruno specifically fit into Blumenberg's argument?

The answer: Bruno, self-proclaimed human portent of infinitism, is of great importance to Hans Blumenberg because the Nolan's life, thought, death, and each of their subsequent interpretations stand as examples of the problem that man discovered at the heart of the Christian theological system. Blumenberg explains:

Bruno's assertion of the infinitude of the world and of the number of worlds was a challenge aimed at this center of the system of Christian dogma: According to Bruno's great premise, no individual contingent fact, no person, no saving event, not even an individual world could claim to represent, to contain, to exhaust the power and the will, the fullness and the prodigal self-expenditure of the divinity. (*Copernican* 373)

If infinitism is the result of heliocentricity and the rebuke of anthropocentrism, then it should follow that Copernicus sits on the modern side of the epochal threshold. Why then is it that when Copernicus provided evidence for heliocentricity, we do not soar into the modern age but with Giordano Bruno we do? As is well known, Rheticus, fearing the consequences of publishing Copernicus's theory, prefaced the Polish astronomer's work with a disclaimer, positing that the theory constituted no more than a hypothetical curiosity. This was not Copernicus's belief—though the fear might have been shared to some degree. Since Copernicus's work stood as a mathematical elucidation and not an ethical interpretation of the moral repercussions of such a cosmic overhaul, the astronomer's work did not cripple Christianity's geocentrically organized dogma thereby constituting an epochal overhaul. In fact, it was not until 1616, nearly three quarters of a century after its publication, that *De revolutionibus orbium coelestium* was placed on the

Index. Might Bruno's trial and death, starting some twenty-four years earlier, have evinced a darker and more worrisome concern for the Church?

[...] [Copernicus] appears to Bruno as the still groping beginner who had not yet recognized the emerging process of a great clarification, but instead, as the last in a long series of astronomical laborers, had only surveyed the basis for a bold extrapolation without daring to make the leap into speculative totality. [...] He must, it is true, put trust in the specialists' observations, but not in their interpretation. They are only the translators of a text, not its expositors – only the messengers, not the strategists. (*Copernican* 360)

It is Bruno half a century after Copernicus who was to assume the role of bringing a "new light" to the Western world, and, as he pompously pens in his *Cena de le ceneri*, he alone, unlike Copernicus, grasped the moral and spiritual implications of such a revolution. He did this through paradox and fancy rhetoric.⁶⁸

Giordano Bruno was an expert in the art of 'fleeing forward': He took what filled his contemporaries with uneasiness or alarm – namely, the expansion of the cosmic housing to an unimaginable magnitude – and drove it one step further, into the pure negation of conceivability. (*Copernican* 356)

Bruno cues the shift because he is the first post-Copernican supporter ruthlessly and mercilessly to change the seemingly unchangeable: the Christian God. Geocentricity and anthropocentrism held that God was made in man's image—one could cite many examples of this (Augustine, Aquinas, Dante). If we alter the substantive nature of the universe, however, we subsequently alter the immaterial nature of God. Contrary to the Medieval God that was revealed unto and reflected in man, Bruno's God was the only one to know Himself. Man must therefore come to know Him no longer from the vantage of the center of His project, but rather as one living thing within an entire universe of things.

⁶⁸ For more on this see *The Genesis of the Copernican World*, p. 361.

God is everywhere and in everything and no creature, of this world or of another, is more privileged in His eyes.

The modern age might best be defined as the massive scission that took place when man came to realize that he needed to reinvent his own God. That is, man needed to redefine the greatest myth of them all: the myth of totality. How frightening this must have been to those of the era—man playing God's role upon God! But this is Bruno's exact sympathy, which was shared by many other "heretical" thinkers of the early modern age. In fact, the often maligned and ubiquitous metaphor of the "Universe as Book" is significant because therein we find the replacement of The Book of God with The Book of Nature—that is, the reoccupation of the position held by The Book of God. The *logos* as represented by the Christian Pantokrator no longer served its revelatory intent, supplanted conversely by a new *logos*, that of nature, wherein God wrote his finest verse. This is no better exemplified than in Tommaso Campanella's sonnet, "Modo di filosofare": The world is the book where the Eternal Wisdom wrote his own concepts, [...] (*La Città del Sole e Poesie* 66)⁶⁹ Campanella once stated that he learned more from studying an ant than from any book he had ever read—the ant is a metaphoric representation of the new *logos* of the natural world, distinct from the *logos* of the Christian tradition. Galileo reiterated Campanella's position, stating that he read from the book of nature, as did countless other "magicians," "scientists," and "astronomers"—Kepler, Patrizi, Newton, Brahe, Harvey. As such, all the mechanical advancements of

⁶⁹ The whole sonnet follows: "Il mondo è il libro dove il Senno Eterno / scrisse i proprii concetti, e vivo tempio / dove, pingendo i gesti e 'l proprio esempio, / di statue vive ornò l'imo e 'l superno; / perch'ogni spirito qui l'arte e 'l governo / leggere e contemplar, per non farsi empio, / debba, e dir possa: — Io l'universo adempio, / Dio contemplando a tutte cose interno. — / Ma noi, strette alme a' libri e tempîi morti, / Copiati dal vivo con più errori, / Gli anteponghiamo a magistero tale. / O pene, del fallir fatene accorti, / Liti, ignoranze, fatiche e dolori: / Deh, torniamo, per Dio, all'originale!"

the seventeenth century—most simply the telescope—appear the tools used not to conquer the universe, not to reaffirm the *logos* as pronounced by the Christian tradition, but rather used to interpret the new-found code encrypted in the heavens. In this light Bruno's complex system of mnemonics propounded in numerous treatises, including *De umbris idearum*, *Sigillus sigillorum*, and *Cantus circaeus*, may be seen as a new interpretive system designed to unlock a new level of significance in the natural world—the magus (in effect, the mystic semiotician) would, through a series of images and words, ensnare inside his circular, interpretive net a new brand of signification born out of a new *logos* of reality. Such radical notions were dangerous at the time. In order to protect themselves, the heretics would emphatically espouse belief in (a) God, evidently revealed in their prose (e.g. "[...] dove il Senno Eterno / scrisse i proprii concetti [...]"), and manipulate the term as a means to gain ground in a world governed by Christian dogmatists. Not all had perceived a changed God, so it was safe—to some degree—to accept God as an abstract concept, overtly praising His dominion. The dogmatists thought that putting forth heretical views bespoke atheism—presenting oneself as a theist, therefore, secured one's safety in the turbulent times of the Counter-Reformation. The heretics had come to perceive a shift in the *logos*—the new God—but they knew that expounding such views would certainly lead to an *encore* in Campo de' Fiori. To the modern age's great advantage, many of history's most resolute minds sought cover under the blanket of convoluted rhetoric, mercurial terminology, and crafty circumlocution.⁷⁰

⁷⁰ For a discussion on the shape of language in the early modern period, see A. Saiber's recent contribution, *Giordano Bruno and the Geometry of Language*.

But it was not just rhetoric. One finds in their words the first inklings of a tragic separation. For many who were not fully convinced of the necessity of science to replace the *logos* of Christianity, the birth of the modern age signified the separation of science and religion.⁷¹ Was this necessary? Or rather, did this separation actually happen? Might science not be religion? Is science not myth? What we do know, however, is that the initial effects of the shock—man's new-found knowledge of the universe, and the calamity that was the destruction of his previous anthropocentric vision of God—have yet to be reconciled. Albert Einstein sympathized with this very notion when he said that one day, hopefully sooner than later, a "cosmic religious feeling"—a brand of "scientific mysticism" that he took from Leibniz, and, one could argue, also from Bruno—, which would wed scientific thought with religious thought, would be born unto man.⁷² As Blumenberg has presented the nature and rise of the modern age, science appears not a secularized version of the Christian religion, but instead a new vision of nature that has not yet come to grips with the notion that it must have a new God. The hope is that science and religion shall some day come face to face with the very dilemma they, in seeking maturation, have desperately avoided: what is it that holds the universe together, why is it here, and how is man to understand himself in relation to it? This might stand as the only truly significant "post-modern" experience: not the contemporary explanation of the displacement of signifiers and its ensuing chaos, exemplified by Jacques Derrida in books and David Lynch in films, but rather the recompartmentalization of the Renaissance's subcategories of knowledge—mutually aspirant toward a universalized

⁷¹ D. Lindberg and R. Numbers explore this tumultuous relationship in their article, "Beyond War and Peace: A Reappraisal of the Encounter between Christianity and Science."

⁷² See Einstein's article in the *New York Times Magazine*, November 9, 1930, pp 1-4.

encyclopedia of knowledge—into a new aeon where science and religion are fully united. How else does one supersede infinity? How else does one surpass the modern age if it is true that epochal shifts require reconstitution of an entire *mythos* of the human condition? "Post-modernity," as such, resembles a new *genre* more than a reconstitution of myth.

Blumenberg interprets the Christian God—that inexpressible breath of air: "_____"—as a mutable projection of man's fears and born out of the death instinct.⁷³ God did not die—only a specific vision of God, the Christian God as described by man, died. While Nietzsche may have uttered the phrase "God is dead" in his mythologized tablets comprising *Thus Spoke Zarathustra* in Rapallo, Italy, in 1883, it appears this death took place even earlier: at the onset of the modern age. Polish critic Charles Glicksberg, who died in 1998 after a near century on earth, exposed most articulately this sentiment in his volatile article, "Science and the Literary Mind" (1950). We might say that Glicksberg sits neatly at the end of Löwith's "secular dream of progress."

God is no longer in his heaven. All is wrong with the world. We no longer need theological hypotheses in our thinking in order to account for the world we live in. Energy is our God, and Einstein is its articulate prophet. The anthropocentric illusion, though it still lingers regressively in some literary minds, has been abandoned for good. (352)

However, even Glicksberg does not waver from using the terms "prophet" and "God." Moreover, he recognizes that residues of the "anthropocentric illusion" still exist in the minds of some, especially literary. What is it, then, that these "literary minds" hold on to? What is it about the universe that causes Glicksberg, a literary critic with deep faith in science, to have to invoke the name "God," or the mythologizing factor, for matters of simplification, in this passage? I believe it is because, as Blumenberg would argue and is

⁷³ See *Work on Myth*, pp. 59-111, esp. 90-91.

exemplified in Glicksberg and prominent figures like Bruno and Nietzsche, there is a very human need to ground ourselves in a principle of mythologization—we must live, and myth helps us do just that. Science is not the *anti-myth*, thus making religion the *almighty-myth*. They are both one in the same: myths. Truth, however, is another question; a mistress who will, perhaps, always wear a veil.

I.V: A BLUMENBERGIAN APPROACH: FROM HISTORICISM TO METAPHOROLOGY

This thesis explores Bruno's role in Blumenberg's theory of the modern age. In order to do this I compare two methodological approaches: traditional historicism (the predominant methodology used in the humanities) and metaphorology (Blumenberg's method). First, I provide an answer to the following question: What does traditional historicism's identification of how and how not Bruno contributed to the modern age imply about history and the nature of influence? Second, based upon this answer, I detail Blumenberg's alternative approach: metaphorology. In order to proceed along these lines, I explain metaphorology, which allows the reader an understanding of how the approach works and how I use it in this dissertation.

Regarding the first point, when looking back at a specific point in time, the historian has the privilege of "knowing" what was at one point the "unknowable" future. To him, the past is static, interpretable, singular, and immutable. To know the past, therefore, he must set himself to the task of reconstructing it. He does this by coming to grips with a particular moment's historical, social, and philosophical context, amongst other qualities. He compiles dates and facts. In the web of history he draws links and similarities. An historian's utopia would therefore be time travel. If he were able to return to a previous time—for example, Bruno's days in London—he would be able to *know* history in its reality. History books would cease to exist.

Unfortunately, however, time travel is not possible. To reconcile this problem, the historian has developed various means by which it is possible for him to reconstruct to the best of his ability a previous time. This is possible because the past, perceived as

static, arrives to modern man much like a ruin. Ideally from it he is able to restore the past to its original form. The most common tools the historian chooses in the effort to enact this reconstruction are words. Words are to ancient ideas what ruins are to ancient buildings. Through reading, writing and speaking about the past the historian comes to know it better; nearly, he hopes, to the utopic point of time travel. Following this line of thinking, the greatest of historians, therefore, must be the masters of words—polyglots, linguists and philologists. The fruits of their ingenious labors stand today as some of the finest intellectual achievements, from Burckhardt's late nineteenth-century *The Civilization of the Renaissance in Italy* to Tracy Cooper's 2007 Renaissance Society of America's book prize winner, *Palladio's Venice*. In each of these works the authors have attempted to resurrect the past through careful analysis of the words and other forms of images/signs from a temporally foreign era. Frances Yates utilized this method—i.e., what I shall title, traditional historicism, also known as historical positivism *à la* Comte—in her outstanding works on Renaissance literature and thought. In *Giordano Bruno and the Hermetic Tradition* the Dame argued for a revaluation of Bruno's contribution to modern science and thought by means of his often misunderstood Hermetic foundation. In order to do this, Frances Yates reconstructed the passage of the Hermetic works in Italy and Europe, which were originally translated at the Academy in Medicean Florence. Yates traced Bruno's involvement in this process of historical development by synthesizing her numerous readings of authors involved directly or tangentially with the Hermetic tradition. In a similar vein, Saverio Ricci, Michele Ciliberto, and countless other Bruno scholars have followed traditional historicism in compiling scholarly articles or monographs that address Brunonian *fortuna*. Should I

employ this historical vantage in this dissertation I would likely attain my goal through successful identification and analysis of citations or mentions of Bruno in seventeenth-century works. No matter the results, this approach assumes that there is in fact a *true fortuna*, and my research will either be validated by fact, or accepted based upon its strong evidence of being close to fact. There is, however, great risk in such a mode of research. Placing faith in words presents a whole gamut of methodological and theoretical problems. Philologists and linguists, from Ferdinand de Saussure to Noam Chomsky, have long pointed to the complexity and diversity of language. This, however, is not the sole problem, and certainly not the most important. I believe that the commonly accepted means by which one reconstructs history through words imposes, though unintentionally, an historical bias that perceives the evolution of ideas, societies and peoples as static structural ruins. That is, diachronic history, which starts at one point and ends in another, presupposes that time has a direction and that all change adheres to this *forward* movement. In order to understand historical change, I would need only differentiate, determine and detail the succession of past events. It would logically follow, therefore, that the static future is also discernable and sequential. That is, the past, like the future, will follow a paradigm of change.

While traditional historicism is an altogether fruitful process—methodically dissecting Bruno in order to decipher his importance in history—I wish to advocate another approach to traditional historicism. Before I explain, I wish to make clear that my position is not judgmental. There is no "answer." Traditional historicism has garnered great respect and recognition by some of the world's sharpest minds as the best means of understanding the past. I do, however, acknowledge what seems a massive

historical quandary that traditional historicism presents. I believe it a necessity that I address this historical-philosophical dilemma, particularly in relation to Bruno studies. For me to assume the role of historical pacifist would do Bruno's philosophical triumphs a disservice.

Metaphorology aspires to solve this historical quandary. Metaphorology is a branch of research that has been around since the latter years of the twentieth century. This, however, does not mean that it has amassed a great following. Mention of the word "metaphorology" in a literary theory class might even draw blank faces. My goal is therefore twofold: 1) I hope this thesis will engender discussion about metaphorology; and 2) I wish to advance an unconventional mode of understanding Bruno's role in the modern age.

I make this decision because in contemporary criticism one can feel awash in the disparaging shores of the continual reaffirmation of epochal shifts: post-modernism, post-post-modernism, post-colonialism, post-human, etc. The discussion is so entirely dependent on the fact that ends have in fact taken place, and that one is able to determine instances of "epoch making," that it has forgotten the basis on which it understands epochal change. It is impossible, I uphold, to speak of reception, or *fortuna*, in any traditional sense because this presumes that whoever it is that is "received," or subject to "fortune," possesses or transcends the very ideas they have promoted. If we were to identify an individual as the sole promulgator of an idea, appropriating its value wholly, then it follows that that person is determinable and transient, and that his or her ideas are fixed in space and time. If this were in fact possible, I believe one would be able to "extract" a concept from another historical figure, granted due recognition on the form of

authority. But human beings are *not* static, determinable, or definite things. This idea has been derived from a long-standing misconception about history now deeply interred with the authority of the Bible—that is, at one point in history, a Voice spoke, and its significance has thence been identified as a singular, unwavering, and verifiable authority—the *auctor par excellence*. It upholds *origin*.⁷⁴ It appears that a re-evaluation of history tells us quite a different story. Instead of it being possible to understand an idea *in the exact same manner* as another, it is only possible to compile a re-evaluation, or better, a re-constitution of what appears a static, unalterable idea. Blumenberg would likely argue that we must believe in the individual appropriation of terms. It is impossible—and I mean that in the full sense of the word—to reconstruct the parameters of one's perception of an idea. It is possible, however, to establish the reasons for which that idea might be important to another human being, relating it to similar life-drives that decide how important an idea might be to another individual. We need to recreate the questions that recur in like human beings, and thereby extract premises around which we might compile a list of recurring human (p)reoccupations. We must detail the unwritten voices, the echoes and murmurs interspersed in textual interstices, all which connect with a grander set of human problems. Ideas are not collective, nor are they mutual. There is no Lovejoyian "history of an idea" in the strict sense of the notion. Conversely, there are biological and psychological conditions that drive individuals toward certain types of solutions to problems. The "history of ideas," therefore, becomes a "history of human problems" as they saw their own future. One recognizes the history of those problems through its material and immaterial traces, such as music, painting, poetry, and prose.

⁷⁴ For a discussion on the idea of origins see M. Foucault, "Nietzsche, Genealogy, History," in *The Foucault Reader*, esp. pp. 78-79

These mediums of representation are best read as metaphors. That is, they constitute the basis around which others reflect, engage, question, reformulate, and create new, wholly independent solutions to problems in man-made history.

I.VI: BLUMENBERGIAN METAPHOROLOGY

What is metaphorology? Proposed by the twentieth-century German philosopher, Hans Blumenberg, metaphorology is an examination of ideas as they are exposed through the mother of all tropes: metaphor.⁷⁵ Metaphorology avoids what has now become the often and unfortunately unsuccessful attempt of searching for the citing or naming of Bruno in seventeenth-century works. Through metaphors one is able to engage the perceptions and attitudes of a different epoch. Metaphors provide us insight into how people perceived problems, which thereby grants insight into why particular solutions have been proposed. The history of metaphors is the history of the future, the history of the unnamed. Metaphors transcend the opacity of history.⁷⁶

But how do metaphors transcend the opacity of history? What exactly is Blumenberg's concept of metaphor? Is it different from other thinkers' notions of metaphor? Why should one study ideas, people, thoughts and texts (to name just a few of countless possible things) as metaphors and not as static objects of study? What is it that metaphors do that facts do not? First, it is important to note that when I speak of metaphor I do not mean solely the conventional notion of metaphor as the employment of a rhetorical trope in a text. This, however, is an acceptable example, yet I wish to probe the matter more deeply. Rhetoric has only a minor role in the comprehensiveness of metaphorology. By metaphor, rather, I mean the process by which all living things come

⁷⁵ Blumenberg's philosophy follows a remarkable trajectory and maturation beginning in *The Legitimacy of the Modern Age*, passing to *The Genesis of the Copernican Revolution*, and concluding with *Work on Myth*. His thoughts, specifically on "metaphorology," are carefully detailed in the recent translation of *Shipwreck with Spectator*, which includes an essay, *Prospect for a Theory of Nonconceptuality*.

⁷⁶ Umberto Eco occupied himself with questions of similar ilk. See "Metaphor, Dictionary, and Encyclopedia."

to know and address the problems of the world around them. Blumenberg describes this world in the elegant and laconic work, *Shipwreck with Spectator*. Therein the German philosopher analyzes the "Shipwreck" as a metaphor for existence—for him, it calls to mind the notion of expanse and misdirection, the troubled seas, and the inevitable fate of man embarking on the voyage of life. In the work Blumenberg invokes the language of Edmund Husserl, aligning metaphorology with phenomenology. Blumenberg does this because he believes that metaphors reveal a human subject's connection with the Husserlian *life-world* that surrounds him—that is, as I shall briefly describe, a human subject's relation to the totality of experience.⁷⁷

Metaphors are the keys to the understanding of concepts and problems. It therefore follows that metaphorology is the study of metaphors in the hope of coming to know how man perceived, at any given time in history, both his present and his future. Metaphorology is the history of concepts as they saw themselves: looking toward the future, toward the unknown. Traditional historicism, conversely, is the history of concepts in their culmination: the history of completion, or the history of the static past. Blumenberg writes:

In the service of the history of concepts, metaphorology has categorized and described the difficulties that appear in the field leading up to concept formation, around the hard core of clear and distinct determination, and even in places distinctly remote from it. (*Prospect* 93)

How do metaphors provide insight into the "difficulties that appear in the field leading up to concept formation"? What privileged position does metaphor have?

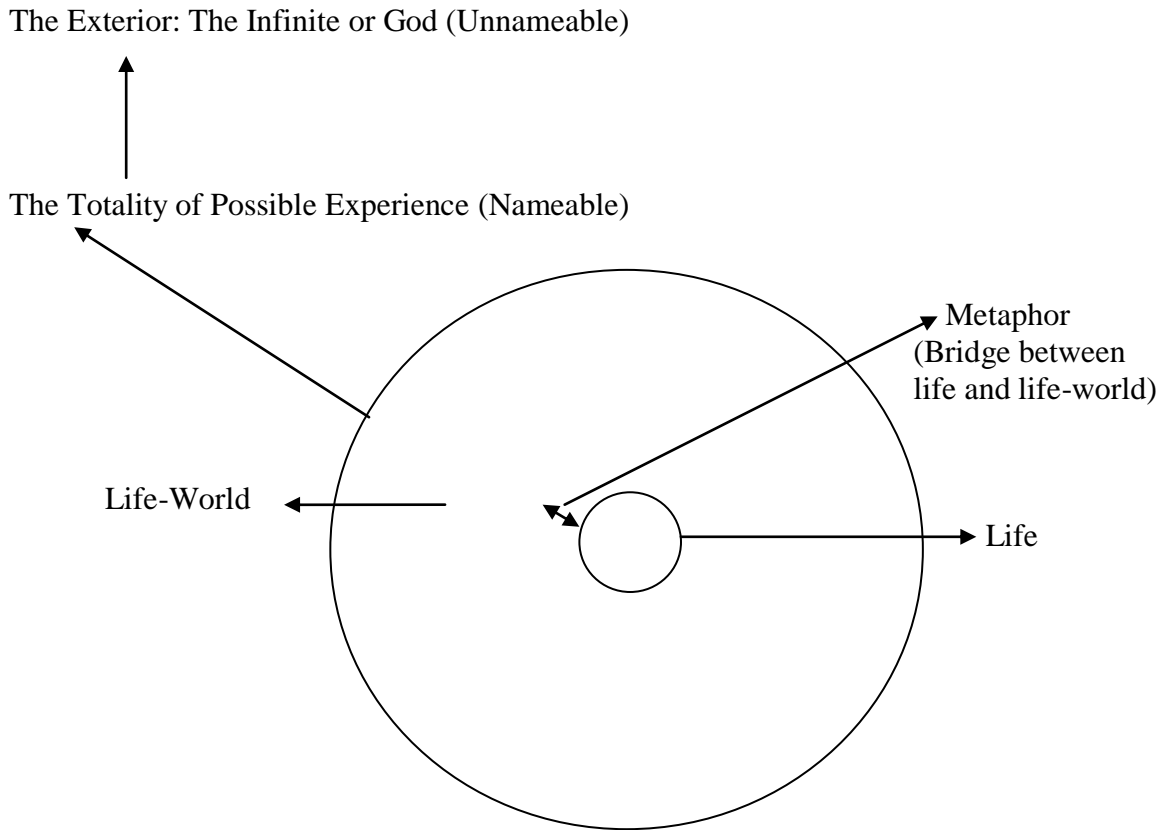
⁷⁷ For general, yet informative, information on Edmund Husserl see <http://plato.stanford.edu/entries/husserl/> (15 October 2007).

Let us begin at the origin of metaphor as a cognitive process. Metaphor begins at the outset of life. Once a life is conceived and engages the *life-world*, it naturally aspires to understand the mysteries of existence. Existence calls for the metaphorologization of the everyday in relation to the unknown and unnamed totality. By this I mean that at the advent of life a life engages what is an unknown land of wonder and mystery. A life does not know the world in which it is becoming a part—even its body is foreign. This is because like the environment his own body—his genetic composition—is *external* to him. To invoke a metaphor here for clarity, a life must adhere to the "biophysiological prison" of its existence. For example, the restraints of sight do not allow a human to see atoms, so he must come to know them in different ways, whether by means of visual aid or speculation derived from similarities. Knowledge, therefore, is always bound inside the restrictions of what is "knowable," or "nameable." Life begins, as psychoanalytic critic Julia Kristeva has argued, in the world of the semiotic—driven only by the drives and their states in an ever-constant flux.⁷⁸ Once the semiotic meets the external world of the symbolic, however, a miraculous event takes place. That is, a life that possesses the outstanding gifts of sight, touch, smell, etc, engages the world of the symbolic, thereby initiating a process of self-definition and understanding. Even though a life attempts what appears the effort to "survive," the notion of "survival," however, is only secondary to the initial recognition a life makes: coming to know its own mortality and thereby *inaugurating* the impulse to survive. Survival is the Blumenbergian *reoccupation of the position*; the proposed solution to the problem of the recognition of one's own mortality. A life is not born with the will to survive, it learns it.

⁷⁸ See *Revolution in Poetic Language*, pp. 21-106.

The world is unknown to a new life. In coming to know the world, therefore, a life seeks out similarities and differences in it, such as the relation between light and heat, darkness and cold. It begins the process of naming the unnamed; assigning significance to the unknown, whether through visual recognition or linguistic naming. The process by which it comes to know the "foreign" may be described as the metaphorologization of the *life-world*. Metaphor is a cognitive state, not merely a rhetorical trope.

How does a life metaphorologize the *life-world*? What is the *life-world*? To answer this question I have provided an image below in which I detail the process of metaphorologization. In the image I have depicted two circles, one larger and one smaller. The larger circle represents the totality of the potential experiences a living being can have. No being shall ever come to know this totality fully, as it would require knowledge of everything within one's full range of experience. To be clear, however, this totality does *not* represent the totality of the universe, which is best rendered by the metaphor "God." It represents, instead, all that can be perceived by the human senses; all that is, for example, visible, tactile, or sonic: stars, plants, other humans, rainbows, clouds, etc. The inner circle, however, represents a life situated in the unknown land that is the surrounding totality of possible experience. This totality (the outer circle) is that which is nameable. Beyond the totality is the ineffable, the non-conceptual, or the unnameable.



Man is unable to grasp the infinite as it would require him to surpass his conceptual restrictions, thereby moving *past* the totality of possible experience. This is the dream of magicians. Like the great Roman magician, the Marquis of Palombara, all magicians aspire to pass through the metaphoric "Magic Door of Palombara," upon which is written the conceptual palindrome, "Si sedes non iS," (If you sit, you do not enter / If you enter, you do not sit) in the effort to approach, or at best become, God. Magicians hope to surpass man by becoming deities themselves. But this, we have unfortunately learned, is likely not possible unless we change ourselves through genetic engineering.

The life and the totality of possible experience are conjoined (i.e., the totality *fills* the circle surrounding the life). Since the life must come to know the world in which it finds itself, and not vice-versa, the means by which this is achieved is through the

recognition of similarities and differences in nature, or metaphors. This process of coming to know something foreign by means of drawing links between objects (such as light with heat, or darkness with cold) is what is called the process of metaphorologization. That is, a life comes to know the totality by means of developing metaphoric relationships between objects in the world. Metaphor, therefore, is the base conceptual state upon which all thinking is born. The world of metaphors is not all together different from Brunonian combinatorics. Bruno *combines* the shadows of ideas, which allows, he believes, a form of intellectual transcendence. Speaking to this, Blumenberg calls "metaphors" "an authentic way of grasping connections" (*Prospect* 81). The Nolan philosopher was *avant-garde*.

Hans Blumenberg argues that man-made history in all of its manifestations (through word and/or object), is constituted by and reveals the presence of metaphor, the conceptual state at the root of thought. Any relic of man-made history—books, paintings, mechanical inventions, music, governments—inherently and necessarily reveals the presence of the metaphors that participated in the production of its very own self. The relic becomes the metaphor of the process of metaphorologization itself. Studying it, therefore, grants insight into pre-conceptual states, or, better put, states of thinking before "concept formation."

According to Blumenberg, it is impossible to eliminate metaphor from man-made history. Returning to Bruno's art of memory, Blumenberg would argue that the Nolan's sophisticated combinatorics exemplifies this process. That is because objects are recorded in the mind, which then, in turn, combines them and produces "new" thought. The hope is that with greater command of the totality of possible experience, which

results in the collection of more "data" in the combinatoric "net," man will be able to perform greater tasks.

One of the greatest achievements of this "data collectionism" in man-made history was the birth of language. In Blumenbergian metaphorology, languages are not the means by which man comes to know the totality, but rather the combinations of what has already been named. Words are limited in as much as they must always refer to the world of the "named," even though they address the presence of the unnamed. Words fill in that delicate gap between known and unknown, material and immaterial. Everything that is composed of words invokes the base conceptual principle of metaphor because words are relics in the world that prompted their birth. Blumenberg starts the second chapter of his *Work on Myth* with the apt title "The Name Breaks into the Chaos of the Unnamed." That is, the *Chaos of the Unnamed* is that which is foreign, or exterior, to man. As a consequence of the junction of a name and the unnamed, the word established the first instance of an attempt to organize *chaos*. Man, however, is rarely aware of this conceptual state on a daily basis. The reason for this, perhaps, is that awareness serves little, if anything, in the great quest for survival.

In sum, metaphors address problems. They grant insight into how a problem, such as, "what is nature?", was or is perceived. When a metaphor is invoked, such as the famous one of the Scientific Revolution, "the book of nature," it reveals the problem it is attempting to solve. In regard to the metaphor of the "book of nature," Blumenberg writes, "[It] is not merely a subject for topos researchers to collect citations on. It is also an orientation for inquiring back from the actual status of the theoretical attitude toward the world to the giving of meaning, in the life-world, that underlines it" (*Prospect* 86).

To unlock this metaphoric riddle, therefore, a metaphorologist (s/he who studies the metaphors of the past in order to understand the etiology of history) must ask himself: Why is nature best read like a book? What is it about a book that allows for greater understanding and what does this metaphor tell us about the rise of the modern age, the period in which this particular metaphor was often evoked?

For purposes of clarity, I explore another example. Since time immemorial, man has attempted to address the problem of time. He asks, "what is time? Why does it both destroy and create? How do things and beings exist in time? How does it move, or does it move at all? How does time relate to space?" Blumenberg meditates on the subject:

To define time as what one measures with a clock seems sound and is a highly pragmatic way of avoiding disputes. But is this what we have learned since we began to ask what time is?

The assertion that time is not a discursive concept serves the apotropaic gesture that allows Kant to make time, by way of Newton's absolute time, into the a priori form of inner sense. But when Kant introduces temporal determination into his argument in the "Refutation of Idealism" in the second edition of the *Critique of Pure Reason*, it becomes clear that for him, too, the metaphors of space is fundamental to the intuition of time and cannot be eliminated from it. This may have to do with facts concerning the brain, in which the accomplishments of spatial representation are genetically older than those of temporal representation.

In that case, is the idea of the *fluxus temporis*, the stream of time, also still a necessary metaphors? Is the sharing of the absolute metaphor of the stream—between consciousness on one hand, and the constitution of time, on the other—the connecting thread on whose strength phenomenology declares time to be the original structure of consciousness? (*Prospect* 87)

To some people time is a prison, to others it is a canvas, or a stream, to some it is a clock, and to others it is finite. Metaphor addresses the problem of time: its ambiguity, indistinguishability, and its being unnamed. Time is mysterious, therefore prompting the use of metaphoric language. Metaphoric language, which aspires to address the feeling, experience, and phenomenology of time, looks at the problem: Following Blumenberg's

logic, one that a person hopes to solve. Poetic reason, which often attempts to solve the problem of time, aspires to sign the unnamed because it seeks to grasp the non-conceptual and the ineffable. Humans exalt poetic language because it attempts to name the ineffable. Conversely, scientific language not only attempts, but often succeeds in naming the effable. Therefore, if a scientific experiment does not successfully assign new names to the unnamed, then it is considered a failure. If poetic language were to have this same quality-standard as scientific language, then poets like Blake and Byron would have never penned a word. Scientific language is involved in the process of naming that which *can* be named, whereas poetic language aspires to surpass conceptual limits. For example, when I compare Einstein's Theory of General Relativity with Dante's *Divina Commedia*, I find that although both attempt to name what has not yet been named, only the poet Dante dares to claim that he has experienced the *oltretomba*, the afterlife. Dante was a creator of verse, whereas Einstein read the verse of the greatest of poets: God. Einstein had to believe in "God," for without him he would have no referent, no scale, and no concept. God adds the static to time and space.

Thus far science is the best mythmaker. Science aims to ground its findings in invariable language. As Blumenberg argues, the myths that best *kill* survive; that is, they successfully destroy other myths by a means of *reoccupation*. Science successfully *killed* the mystic, Hermetic, and Renaissance world-view. History is a series of murders. The dawn of modern science drastically altered the parameters in which any future stories of nature are to be told. Science as a *mythos* constituted an instance of epochal innovation because it has such a refined form of language; its methods are invariable and its results, ideally, empirically unquestionable. Science depends upon the nature of recurrence and

similarity. Man is supposedly part of a "species" and the universe is (though changing) assumed to "stay the same."

Why does scientific language avoid theories of non-conceptuality? Is this the greatest flaw of the modern age? That is, many believe that truth is not only what science tells us, but also the means by which science arrives at that truth. Why believe in angels, science asks. Why believe in Jesus Christ, science ponders. I argue, however, that it is not so much that these specific questions need to be asked, as much as it is that the basis on which these and other non-conceptual questions are formed, for which these two are metaphors, must not be extinguished from the modern mind. The modern age's greatest error is its predominant dismissal of the ineffable as unreal. As Blumenberg states, "the class of the ineffable [...] is not empty" (89). The box is still here, it is just that man cannot see what is inside by means of the scientific paradigm. The aspiration to identify the ineffable is not a dead dream. Rather, it is homeless in a world bereft of wonder.

Blumenberg explains:

The homelessness of metaphor in a world determined by disciplined experience can be seen in the uneasiness encountered by everything that does not meet the standard of a language that tends toward objective univocity. Unless it fits into the opposing tendency, as "aesthetic." This attribute provides the ultimate, and therefore completely unhampering, license for multiple meaning. (*Prospect* 92-93)

The modern mind has become "atheist" because it believes the scientific method, not only its discoveries, is truth. If understood as a metaphor that reveals the nature of the problem of the universe, atheism appears a rather weak and terribly sad *reoccupation of the position* once filled by God. How many tears have been spent by readers of Sartre and Camus on a reoccupation that cannot be validated? Why is it that Camus writes that "There is but one truly serious philosophical problem, and that is suicide" (*Myth of*

Sisyphus 5)? Why has modern science dismissed philosophy? How would modern science explain what Blumenberg describes as a "laughing meadow"? What to make of this "ineffable" experience? Science would never dare address a "laughing meadow," but does this mean it does not exist? What problem does a "laughing meadow" present? I close with Blumenberg's reflections on the meadow:

Metaphor captures what is not present in the qualities of a meadow when viewed objectively but is also not the subjective and phantastic addition made by an observer who, only for himself, could find the contours of a human face in the surface of the meadow (the game played by observers of the strange natural formations in the limestone caves). It accomplishes this by assigning the meadow to the inventory of a human life-world in which not only words and signs but also things themselves have "meanings," the anthropogenetic prototype of which may be the human face with its incomparable situational meaning. The metaphor was provided by Montaigne: "the world's face" (*le visage du monde*). (*Prospect* 84)

BRUNONIAN METAPHORS OF THE MODERN AGE

Bruno never spoke of a "laughing meadow," though he evoked so many metaphors in his works that if one accepts Blumenberg's theory that metaphors reveal the nature of the problems that they attempt to address, then it is true that Bruno understood that he lived during a period of great tribulation and crisis. The sheer abundance of metaphors signifies the vast number of problems of the age.

I have provided an explication of metaphorology, and have justified my acceptance of Blumenberg's argument for the legitimacy of the modern age. In due course I now provide an analysis of a few metaphors Bruno evoked in his works, all of which I believe bespeak the concerns and philosophical sentiment of the era in which the Nolan philosopher lived. First, I call to the reader's mind Blumenberg's argument for the

legitimization of the modern age and the reasons for epochal shift. Rupture, or epochal shift, takes place when stories of pure innovation dismantle a previously accepted metaphorologization of things. In the ebb and flow of history epochal creation is best understood as that which takes places when a massive replacement of one dominant form of discourse and universal perception is trumped by another, altering irrevocably, yet temporarily, the lens through which the universe is viewed. I have chosen a select number of Brunonian metaphors that I believe exemplify this process of epoch making. In the following pages I present each under its own subheading and explore possible, certainly not exhaustive, interpretations.

Bruno's Life as a Metaphor of Epochal Tension

Bruno's life itself is an enlightening metaphor for the entire period of early modern epoch making. His final confrontation with his enemies in Venice and Rome stands as a decisive event in the history and birth of the modern age. The rash sentiment and utter distaste for his critics is expressed vehemently by Bruno in the *incipit* of *La cena de le ceneri*. Therein he inaugurates the *Ash Wednesday Supper* with a tailed-sonnet that bespeaks the intellectual temperament of Bruno and the remarkable disdain he had for his accusers. Although Bruno never had the chance to recite this sonnet at his trial, with ease one imagines its verses curdled in his blood as his death sentence was read.

To the Malcontent

If by a cynical tooth you are pierced,
Curse yourself, O barbarous dog;
Who vainly flaunt at me your cudgel and sword,
Beware, lest you incense me.

Because you wrongly attack me to my face,

I slash your hide and rip you up;
And if, perchance, my body falls to earth
Your infamy shall be inscribed in marble.

Go not naked to steal honey from the bee;
Nor bite what might be stone or bread;
Nor go unshod when sowing thorns.

Do not despise, O fly, the spider's web;
O mouse, pursue not frogs;
Flee foxes, O spawn of fowl.

And believe in the Gospel
Which fervently admonishes that
Those who sow the seeds of error
Reap from this, our field, Remorse. (Gosselin & Lerner 65)⁷⁹

The poem is a warning. Its vehemence and disdain for the "barbarous dog" reveals not only Bruno's sentiments toward those who have not accepted the altered universe, but also the incredible moral, theological and philosophical tensions of the era. In this poem I read Bruno as a metaphor of the modern age because his life marks the dangerous implications of a restructured heavens, which were, by default, aimed at the heart of dominant Christian dogma. Bruno was concerned with truth, but it was the destruction, or purgation, of dogma that was of greater importance to him. Bruno perceived no harmony between the cosmology of finitude and the cosmology of infinitude. The heavenly structure is important, therefore, only in its relevance to man, not its actual physicality. Morality, ethics and the freedom of thought are bound up in the old system and, therefore, according to Bruno, the old system must be expelled in order to allow for

⁷⁹ "AL MAL CONTENTO / Se dal cinico dente sei trafitto, / lamentati di te barbaro perro: / ch'in van mi mostri il tuo baston e ferro, / se non ti guardi da farmi despetto. / Per che col torto mi venisti a dritto, / però tua pelle straccio e ti dissero: / e s'indi accade ch'il mio corpo atterro, / tuo vituperio è nel diamante scritto. / Non andar nudo a tòrre a l'api il mèle. / Non morder se non sai s'è pietra o pane. / Non gir discalzo a seminar le spine. / Non spreggiar, mosca, d'aragne le tele. / Se sorce sei, non seguitar le rane; / fuggi le volpi, o sangue di galline. / E credi a l'Evangelo, che dice di buon zelo: / dal nostro campo miete penitenza, / chi vi gittò d'errori la semenza" (*DFI* 7).

a new sort of "soaring" aimed at the revision of the heavens as reflected in man: the heavens as a metaphor for the state of the soul, the state of morality.

Bruno and the Copernican Revolution: The Metaphor of the New Light of the Reconfigured Universe

Had Copernicus not demonstrated by means of mathematics the theory of heliocentricity, Giordano Bruno would likely resemble Tommaso Campanella, a failed prophet of world reform. For Bruno, however, Copernicus validated the necessity of reform and justified the methods by which he planned to achieve that reform. Bruno is thus a successful prophet of reform. It was not so much, however, the mathematical proof that was of importance to Bruno, but rather the philosophical and moral implications of Copernicanism that were of his concern. Bruno read the Copernican Revolution as a metaphor destined to change the parameters not only of the universe, but also of man and God's role in it. Bruno called this revolution the rising of the "new light," a metaphor that has assumed a life of its own in contemporary times. Medievalists often take offense to it, and often rightly so, as it implies that that which preceded the modern age was "dark," or bereft of value. The use of it by Bruno, however, was not meant to disparage the great instances of insight and innovation of the Middle Ages, for the Nolan often turned to Aquinas and Lull. Rather, Bruno recognized the supremacy and importance of the rise of a new era for man that coexisted with the reformed heavens. Blumenberg explains Bruno's use of the metaphor:

Giordano Bruno was the first person to attach to the event of the Copernican reform the metaphor, which was used so much in the subsequent centuries, of the dawning of a new light. Of course, Copernicus had been only the first light of this dawn, the bright daylight of which had only been broken by means of him, the Nolan. Admittedly, this day is new only in comparison to the darkness of the past night of the

Middle Ages, because it is the Sun of antiquity and of its "old, true philosophy" that now returns. Under the regime of this cyclical periodicity of history the absence of light becomes just as 'natural' an event as its return. It remains obscure how this is compatible with the simile (modeled on Lucretius) of the liberation of the human spirit from the prison walls of the finite universe, which Bruno propounds at the beginning of his Latin didactic poem, *De immenso et innumerabilibus* [*On the Immeasurable and the Uncountable*], as well as in the *Ash Wednesday Supper*. How is his enthusiasm about the power of reason compatible with the resigned form of historical consciousness that is inevitably contained in a cyclical picture, which always commands us to think that reason has already once, or more frequently, given up its own dominion? Thus in the language of a renewal of antiquity a claim is formulated that implies the irrevocability of what is now to be accomplished and that in that respect is not compatible with granting that all of this was already here before and nevertheless disappeared. How could the appearance of Copernicus have meant a definitive beginning of reason if the Pythagoreans and Aristarchus had already possessed his insight, with its prerequisites, and had nevertheless remained an episode? (*Copernican* 361-62)

The metaphor of the "new light" reveals what the German critic describes as the modern age's "self-consciousness." At the end of the passage, Blumenberg asks an important question that I addressed earlier: Why does reason begin definitively with Copernicus and not with the Pythagoreans who possessed similar insight into the cosmological makeup of the heavens? Unlike Christian cosmology, Pythagorean heliocentrism did not constitute a veritable rupture in long-standing myth. The Pythagorean idea did not aim itself at the heart of a dominant system of thought, thereby threatening that system altogether.

Although Copernicus resurrected and proved the Pythagorean hypothesis, it is only after Bruno's detailed metaphysical and ethical interpretations that the modern age sees the rise of the metaphoric new light. This is because mere explanation of the state of things does not alter the state of things: i.e., saying that the sun is the center does not change the fact that the sun was always the center. Instead, the importance resides in how the idea itself might constitute a rupture in dogma. Bruno recognized this in the first dialogue of his

defense of Copernican cosmology, *La cena de le ceneri*: "[...] the Nolan replied that in judging and determining he saw through neither the eyes of Copernicus nor those of Ptolemy, but through his own eyes" (Gosselin & Lerner 85).⁸⁰ Even though Bruno praises Copernicus's intellectual labors, his intention is only to further exalt his own historical significance. Bruno reveals his own "self-consciousness," which bespeaks the sentiment of the entire era aware of the necessity of reform.

In order to describe this "self-consciousness," I cite a passage in which the Nolan provides a lengthy description of Copernicus in *La cena de le ceneri*. Following this description and by means of the interlocutor Teofilo, Bruno introduces himself by evoking the metaphor of the sunrise. The Nolan equates himself with the "rising of the sun" and his predecessor, Copernicus, with the "dawn." Moreover, Bruno makes use of numerous other metaphors in the passage, granting insight into the Nolan's perception of antiquity, pedants, dogmatists, and cosmologists. For purposes of clarity I have italicized the most overt metaphors:

Smi. Please tell me, what opinion have you of Copernicus?

Teo. He was a man of deep, developed, diligent and mature genius; a man not second to any astronomer before him except in order of succession and time; a man who, in regard to innate intellect, was greatly superior to Ptolemy, Hipparchus, Eudoxus and all others who followed in their footsteps. This estate he attained by freeing himself from a number of false presuppositions of the common and vulgar philosophy, which I will not go so far as to term *blindness*. Yet, Copernicus did not go so much further [...] because, being more a student of mathematics than of nature, he could not *plumb and probe into matters to the extent that he could completely uproot unsuitable and empty principles* and, by resolving perfectly all the difficulties in the way, *free both himself and others from numerous empty enquiries* and fix their attention on *constant and sure things*.

⁸⁰ "[...] rispose il Nolano, che lui non vedea per gli occhi di Copernico, né di Ptolomeo; ma per i proprii" (*DFI* 23).

In spite of this, who will ever be able to praise sufficiently the greatness of this German who, having little regard for the *stupid mob*, *stood so firmly against the torrent of beliefs* and, although almost destitute of vital reasons, *took up again those despised and rusty fragments* that he was able to get from *the hands of antiquity*, *refurbished them*, and *assembled and fastened them together again with his mathematical more than natural reasoning*. [...] So this German, even though he did not have sufficient means to be able to *defeat completely, conquer, and suppress falsehood beyond all resistance*, nevertheless stood firm in determining in his mind and avowing openly that it must in the end be necessarily concluded that this globe moves with respect to the universe, rather than it be possible for the totality of innumerable bodies, of which many are known [to be] more splendid and greater [than the earth], to look to the earth as the center and basis of their circles and influences (in spite of nature and reason which suggest the contrary, with most perceptible motions). Who, then, will be so rude and discourteous toward the labors of this man as to forget how much he accomplished, and not to consider that *he was ordained by the gods to be the dawn which must precede the rising of the sun of the ancient and true philosophy, for so many centuries entombed in the dark caverns of blind, spiteful, arrogant, and envious ignorance?* (Gosselin & Lerner 86-87)⁸¹

Bruno's use of metaphor is extensive. The reader belabors himself inside the Nolan's maze of rhetoric. As a matter of contrast, I provide the passage in which Bruno presents

⁸¹ "SMITHO Di grazia fatemi intendere che opinione avete del Copernico?
 "TEOFILO Lui avea un grave, elaborato, sollecito, et maturo ingegno: uomo che non è inferiore a nessuno astronomo che sii stato avanti lui, se non per luogo di successione e tempo. Uomo che quanto al giudizio naturale è stato molto superiore a Tolomeo, Ipparco, Eudoxo, et tutti gli altri ch'han caminato appo i vestigii di questi: al che è divenuto per essersi liberato da alcuni presuppositi falsi de la comune et volgar filosofia, non voglio dir cecità. Ma però non se n'è molto allontanato: per che lui più studioso de la matematica che de la natura, non ha possuto profundar, et penetrar sin tanto che potesse a fatto toglier via le radici de inconvenienti e vani principii, onde perfettamente sciogliesse tutte le contrarie difficoltà, e venesse a liberar e sé, et altri da tante vane inquisizioni, e fermar la contemplazione ne le cose costante et certe. Con tutto ciò chi potrà a pieno lodar la magnanimità di questo germano, il quale avendo poco riguardo a la stolta moltitudine, è stato sì saldo contra il torrente de la contraria fede? e benché quasi inerme di vive raggioni, ripigliando quelli abietti, et rugginosi fragmenti ch'ha possuto aver per le mani da la antichità; le ha ripoliti, accozzati, e risaldati in tanto con quel suo più matematico che natural discorso [...]. Cossì questo alemano benché non abbi avuti sufficienti modi per i quali, oltre il resistere, potesse a bastanza vincere, debellare, e supprimere la falsità; ha pure fissato il piede in determinare ne l'animo suo, et apertissimamente confessare ch'al fine si debba conchiudere necessariamente che più tosto questo globo si muova a l'aspetto de l'universo: che sii possibile che la generalità di tanti corpi innumerevoli, de quali molti son conosciuti più magnifici, et più grandi: abbia al dispetto della natura, e raggioni, che con sensibilissimi moti cridano il contrario; conoscere questo per mezzo, et base de suoi giri, et influssi. Chi dunque sarà sì villano et discortese verso il studio di quest'uomo, ch'avendo posto in oblio quel tanto che ha fatto con esser ordinato da gli dèi come una aurora, che dovea precedere l'uscita di questo sole de l'antiqua vera filosofia, per tanti secoli sepolta nelle tenebrose caverne de la cieca, maligna, proterva, et invida ignoranza [...]" (DFI 24-25).

himself (though Smitho did not request any description from Bruno). The most curious difference between Bruno's description of Copernicus and that of himself is although he occasionally utilizes metaphor in order to describe Copernicus's significance in history, metaphor is the only means by which he describes himself. I believe the abundant and inflated metaphoric language of Bruno's self-description reveals his awareness of the complexity of the nature of the problem set before him: Now that the universe has been altered, what is man to do? What to make of the inevitable metaphysical and ethical consequences of the Copernican Revolution? I again italicize all the instances of metaphoric language for purposes of clarity:

And now, what shall I say of the Nolan? Perhaps it is not appropriate for me to praise him, since he is as close to me as I am to myself. [But] certainly, no reasonable man will blame me for praising him, since it is not only fitting but sometimes also necessary, as the lucid and learned Tansillo said so well:

Even though, for a man who longs for regard and
honor,
Speaking much of himself is not seemly,
Since the tongue of one whose heart fears and loves
Does not merit faith in its words,
Sometimes, nevertheless, it seems fitting
That another person preach his fame
And speak in his favor: so that
He gets the profit without blame. (Gosselin & Lerner 87)⁸²

It seems appropriate that after citing Tansillo, thereby establishing the importance of humility, Bruno would choose this humble approach. Apparently, however, Bruno chose Tansillo's verse only for the sake of irony. In sharp contrast to the previous passage

⁸² "Or che dirrò io del Nolano? Forse per essermi tanto prossimo quanto io medesimo a me stesso, non mi converrà lodarlo? Certamente uomo ragionevole non sarà che mi riprenda in ciò: atteso che questo talvolta non solamente conviene, ma è anco necessario, come bene espresse quel terso e colto Tansillo:

"Bench'ad un uom, che preggio et onor brama, / di se stesso parlar molto sconvegna, / per che la lingua, ov'il cor teme et ama, / non è nel suo parlar di fede degna; / l'esser altrui precon de la sua fama / pur qualche volta par che si convegna, / quando vien a parlar per un di dui: / per fuggir biasmo, o per giovar altrui" (*DFI* 25-26).

Bruno presents himself solely through metaphor as the greatest prophet of all times. The conceit and lack of humility is everpresent:

[...] If the ancient Tiphys is praised for having invented the first ship and crossed the sea with the Argonauts [...]; if, in our own times, Columbus is glorified as the one of whom it was foretold long ago [...] [,] how shall we honor *this man [the Nolan] who has found the way to ascend to the sky, compass the circumference of the stars, and leave at his back the convex surface of the firmament?* [...] *The Nolan [...] has freed the human mind and the knowledge which were shut up in the strait prison of the turbulent air. [...] Now behold, the man [the Nolan] who has surmounted the air, penetrated the sky, wandered among the stars, passed beyond the borders of the world, [who has] effaced the imaginary walls of the first, eighth, ninth, tenth spheres, and the many more you could add according to the tattlings of empty mathematicians and the blind vision of vulgar philosophers. Thus, by the light of his senses and reason, he opened these cloisters of truth which it is possible for us to open with the key of most diligent inquiry; he laid bare covered and veiled nature, gave eyes to the moles and light to the blind, who could not fix their gaze and see their image reflected in the many mirrors which surround them on every side; he loosened the tongues of the dumb who could not and dare not express their entangled opinions, [and] he strengthened the lame who could not make that progress of the spirit which base and dissolute matter cannot make. He makes them no less present [on them] than if they were actual inhabitants of the sun, of the moon, and of the other known stars; he shows how similar or different, greater or lesser are those bodies which we see far away, in relation to the earth which is so close to us and to which we are joined; and he opens our eyes to see [truly] this deity, this our mother [the earth] who feeds and nourishes us on her back after having conceived us in her womb to which she always receives us again, and he [leads us] not to think that beyond her there is a material universe without souls, and life and even excrement among its corporeal substances.* (Gosselin & Lerner 88-90)⁸³

⁸³ "che se vien lodato lo antico Tifi per avere ritrovata la prima nave e co gli Argonauti trapassato il mare [...]; se a' nostri tempi vien magnificato il Colombo, per esser colui, de chi tanto tempo prima fu pronosticato [...] [,] che de' farsi di questo che ha ritrovato il modo di montare il cielo, discorrere la circonferenza de le stelle, lasciarsi a le spalle la convessa superficie del firmamento? [...] Il Nolano [...] ha disciolto l'animo umano e la cognizione che era rinchiusa ne l'artissimo carcere de l'aria turbulenta [...]. [...] Or ecco quello ch'ha varcato l'aria, penetrato il cielo, discorse le stelle, trapassati gli margini del mondo, fatte svanir le fantastiche muraglia de le prime, ottave, none, decime, et altre che vi s'avesser potute aggiungere sfere per relazione de vani matematici e cieco veder di filosofi volgari. Cossi al cospetto d'ogni senso e ragione, co la chiave di solertissima inquisizione aperti que' chiostri de la verità che da noi aprir si posseano, nudata la ricoperta e velata natura: ha donati gli occhi a le talpe, illuminati i ciechi che non possean fissar gli ochi e mirar l'imagin sua in tanti spechi che da ogni lato gli s'opponeno. Sciolta la lingua a muti, che non sapeano e non ardivano esplicar gl'intricati sentimenti; risaldati i zoppi che non valean far quel progresso col spirito, che non può far l'ignobile e dissolubile composto: le rende non men presenti, che

Bruno's description does not cease here; in fact, it continues for numerous pages. In this self-praising and ironic passage Bruno exalts his position in history to the exact place that Blumenberg has duly granted him: the prophet not only of infinity, but also a man who has changed the moral and spiritual parameters of the universe. Bruno reconfigured the entire course of human history by granting man a new role in nature, even to the point of alienating man from the earth on which he finds himself.

Before the Dawn of the New Light: The Brunonian Metaphor of Blindness

In Bruno's *De gli eroici furori* (1585), an important late-Renaissance anti-petrarchan dialogue written just a few years after Bruno's departure from Italy, the Nolan advances a theory of spiritual and philosophical ascension by means of love, *coincidentia oppositorum* and Copernicanism.⁸⁴ In this work Bruno provides a glossed poetic parody of Petrarch's *Canzoniere*.⁸⁵ That is, the Petrarch-persona is the failed lover who, through love of poetry (Lauro), and woman (Laura), attempts to reach a spiritual, Dantean-like poetic culmination after a long yearning. The Petrarch-persona, however, only manages to haphazardly compile *fragmenta* of himself, which are dispersed in almost a chaotic fashion over the course of the directionless poetic meditation. Whereas the *Canzoniere* lacks direction, or spiritual ascension (Does it even possess a beginning, middle or end?),

si fussero proprii abitatori del sole, de la luna, et altri nomati astri. Dimostra quanto siino simili o dissimili, maggiori o peggiori, que' corpi che veggiamo lontano, a quello che n'è appresso et a cui siamo uniti; e n'apre gli occhii ad veder questo nume, questa nostra madre, che nel suo dorso ne alimenta e ne nutrisce, dopo averne prodotti dal suo grembo al qual di nuovo sempre ne riaccoglie; e non pensar oltre, lei essere un corpo senza alma e vita, et anche feccia tra le sustanze corporali" (*DFI* 27-29).

⁸⁴ For a detailed analysis of *De gli eroici furori*, see J. C. Nelson's monograph, *Renaissance Theory of Love: The Context of Giordano Bruno's Eroici Furori*. An interesting article would examine Bruno's *De gli eroici furori* and Dante's *Vita Nuova*.

⁸⁵ On Bruno's Petrarchism see Y. Hersant's recent article, "Giordano Bruno, Pétrarque et le Pétrarquisme," esp. pp. 188-89.

Bruno's *De gli eroici furori* ascends toward a distinct and identifiable divine understanding. The dialogue, I believe, is carefully constructed around the principles of contraction and ascension.⁸⁶ The reader begins his ascent up the medieval ladder, and by the end of the poetic journey reaches a higher state of "modern" thinking. Arielle Saiber, in her recent monograph *Giordano Bruno and the Geometry of Language*, explores the usage of various tropes (oxymoron, syneciosis, syllepsis, and epadanos, to name a few) in Bruno's *De gli eroici furori* that allow for this modern form of ascension in the new coordinates of the universe. As we know, the *Furori* charts the voyage of a heroic soul toward Divine love. Saiber bases her reading of this text on the philosophy of *coincidentia oppositorum*, markedly evident as a substratum of Bruno's comprehensive philosophy. The tropes at the heart of Bruno's text "syntactically simulate the semantic meaning of 'co-incidence'" (91). That is, Bruno's hero lives in a world of contraries, and attempts to understand the Divine by exploring the paradox of two opposites coinciding. The hero orients himself in his journey through the use of angular rhetoric that allows a form of spiritual and philosophical ascension—almost like a form of metaphysical rock climbing. This is achieved because "Bruno's rhetorical tropes challenge the reader to think spatially, graphically, and figuratively" (97). As Saiber has noted, Bruno's use of rhetoric allows for a new form of ascension in a re-coordinated universe. Bruno believes that *Nolana filosofia* provides his readers with the guidelines for spiritual understanding and fulfillment. The "God" whom Bruno references in this poetic dialogue is not the medieval "God" of Petrarch, but rather the "God" of the infinite universe. The medieval ladder of ascension—which Petrarch self-admittedly failed to climb, unlike his successful

⁸⁶ Leo Catana carefully studies this noetic ascent in his monograph on the topic, *The Concept of Contraction in Giordano Bruno's Philosophy*.

ascent of Ventoux, the metaphoric mountain of Humanism—is not the ladder that Bruno scales. Cognizant of this, Bruno details, by means of parody, the "new" form of ascension of the modern age. It is only in this way that Bruno claims to be "heroic."

In order to contrast Bruno's successful form of poetic and noetic ascension, the Nolan evokes the metaphor of failed ascension: Blindness. According to Bruno, those who do not see the urgent and pressing need for cosmological, metaphysical and ethical reform do so not because their gaze was set elsewhere, but because they were "blind" to the importance, necessity and inevitability of change. Bruno writes in the explanatory epistle of the *Spaccio de la bestia trionfante*:

He is blind who does not see the sun, foolish who does not recognize it, ungrateful who is not thankful unto it, since so great is the light, so great the good, so great the benefit, through which it glows, through which it excels, through which it serves, the teacher of the senses, the father of the substances, the author of life. (Imerti 69)⁸⁷

In this passage, which begins with the metaphor of blindness, Bruno presents numerous other metaphoric interpretations of the "new light." Before I explore the metaphor of blindness in greater detail in the subsequent paragraph, I identify some of these other significant metaphors Bruno assigns to the "new light," or the *problem* of cosmology: 1) Light is Good; 2) Light is Great; 3) Light is Benefit; 4) Light is Teacher; 5) Light is Father; and 6) Light is Author. Implicitly and conversely, Bruno claims that since *he* sees the sun, he is therefore wise, grateful and thankful; he benefits greatly from the light, his senses have been taught, and he has come to know the father of substance and the

⁸⁷ "Cieco chi non vede il sole, stolto chi nol conosce, ingrato chi nol ringrazia; se tanto è il lume, tanto il bene, tanto il beneficio: per cui risplende, per cui eccelle, per cui giova; maestro de sensi, padre di sustanze, autor di vita" (*DFI* 459).

author of life. The blind, however, suffer these ills of mind and spirit. The blind are unable to ascend toward God because they do not see the dawning of the new light.

When Bruno evokes the metaphor of blindness, however, he does not limit himself to solely those who are unable to see by means of their eyes. Instead, Bruno categorizes nine forms of blindness, which he represents with nine poetic voices. Each of the nine voices recites a single sonnet of lamentation in the second part of the fourth dialogue of *De gli eroici furori*. After each blind man has sung his poetic song, Bruno proceeds to gloss each poem, articulating the significance of each variety of blindness.⁸⁸ In the first sonnet Bruno illustrates blindness as a state of nature. The second signifies blindness as a result of jealousy; the third and fourth, similar to one another, represent the effects of misguided metaphysics and the adherence to the false principles of the masses. The fifth state of blindness is derived from the disproportion between the limits of human cognition and that which is knowable; which Bruno claims can only be known through figures and similitude. The sixth poetic voice represents imbecility; the seventh cannot see truth because he is blinded by love; the eighth is derived from a corruption of object and intellect, which is often the result of the object—in its majesty—tainting the viewers' perception of it; and lastly, the ninth poetic voice is blind because of a lack of confidence. Bruno asserts that the metaphor of blindness, divided into these nine categories, illustrates the reasons why many men are unable to accept or understand the importance of universal reform. Bruno defends that these states of blindness, apart from the first, are able to be overcome because they are not states of physical debilitation. This suggestion

⁸⁸ For an excellent and recent study on poetic glossing see S. Roush's *Hermes' Lyre: Italian Poetic Self-Commentary from Dante to Tommaso Campanella*, esp. pp. 119-33 in which the author examines Bruno's *De gli eroici furori*.

is important because it underlines Bruno's belief that man can overpower his limitations, ultimately accepting Brunonian Copernicanism as the one and true conquerer of the Triumphant Beast. Bruno also speaks of blindness as that which may be overcome in his *Cena de le ceneri*, which is the first overt published defense of Copernican cosmology in Europe.⁸⁹ Blumenberg meditates on the significance of Bruno's employment of this metaphor:

In the *Cena*, at any rate, Bruno has no alternative, in the face of his opponent's incomprehension—even though he compares this incomprehension to his own pre-Copernican juvenile foolishness—except finally to pray to God that if He does not want to make man capable of seeing, He should at least enable him to believe that he is blind. Here we meet the fundamental problem of all of those who see themselves as confronting deep eclipses and delusion systems of mankind: How should people who are deluded in that way ever become aware that something rational has dawned on or been offered to them? What else is left but to give oneself the role, and finally the attitude, of the bringer of salvation? But the bringer of salvation himself guarantees nothing unless the cyclical process can be replaced by a linear one in which the "point of no return" could perhaps exist. (*Copernican* 362)

Bruno dismantled the "delusion system" of anthropocentrism and assumed the role of the "bringer of salvation" to the blind. Even the Catholic Church, which claimed and still claims to hold the *Triregnum* to the heavens, has had to accept and eventually adhere to the implications of the anthropocentric "delusion system." The apparent vicissitude and mutability of Catholicism, therefore, supports the Blumenbergian notion of *reoccupation of positions*—unless the dogmatists wished to remain blind, they had to accept the change in the physical dimensions of the universe. Read as a metaphor, the Catholic Church is a proposed solution to the problem of the complications rising from moral and cultural

⁸⁹ For a more detailed discussion on the defenders of Copernicus's theory see S. Dassatti's monograph, *Mystics, Magi, and Mathematicians: The First Believers in Heliocentrism during the Early Modern Era*. For information as it pertains to southern Italian defenders of heliocentrism see U. Baldini's informative article, "La conoscenza dell'astronomia copernicana nell'Italia meridionale anteriormente al *Sidereus nuncius*," esp. pp. 153-61, in which are discussed Bruno, Campanella and Stigliola.

diversity. The solution of the "Church" eliminates this diversity. To the Church's fortune, however, Bruno's readings from the "book of nature" inscribed in the verse of the heavens did not dismiss centuries of occupied positions.

The End of the Renaissance and the Birth of the Modern Age: The Metaphor of the Ship and the Turbulent Seas

How does Bruno reveal, by means of metaphor, the philosophical sentiment of the end of one epoch and the beginning of another? To answer this question I wish to differentiate between Bruno and another Italian thinker, Galileo Galilei. I do this because there is little, if anything, in Galileo that calls to mind the end of the Renaissance, whereas in Bruno there are ample examples. Many argue that reading Galileo's works is very much like reading a contemporary writer. To explain how they differ, and how Galileo does not usher in the modern age, but rather exemplifies the fruits of the era's labor, I make use of the metaphor of the ship and the turbulent seas. I believe that if Bruno's thought were to be represented as a ship, it would be found sailing on turbulent seas. Conversely, if Galileo's thought were a ship the seas on which it sailed would be placid. Although Galileo is not responsible for the frontispiece of his *Dialogi dei due massimi sistemi del universo*, the metaphor of the ship makes a perhaps unintentional, yet nonetheless illuminating, appearance. If one compares Galileo's ship with the image of the ship found in Bruno's *La cena de le ceneri*—which was wrought, like all of Bruno's textual images and talismans, of Bruno's own hand—one notices distinct differences (Fig. 5 shows Bruno's ship, fig. 6 Galileo's). In the image below strong winds propel the ship forward. The sails are full of violent winds while waves crash angrily against the sides of the vessel. On the upper left of the engraving one notices the presence of great danger;

the crooked, sharp edges of the cliffs are an ominous reminder that although the ship is guided by an astute philosophical mariner, Giordano Bruno, the future of the voyage is unstable and marked by peril.

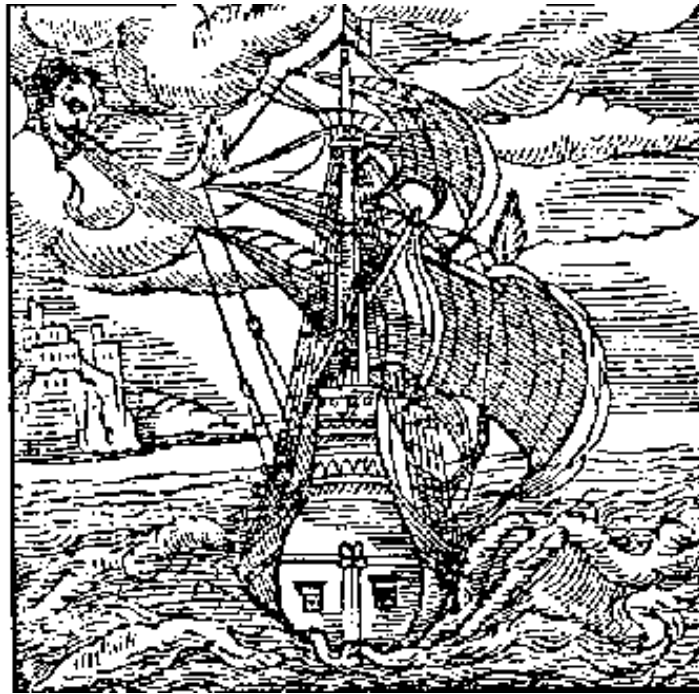


Fig. 5:
http://www.libromania.it/testi/la_cena_delle_ceneri/figura6.gif
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In the passage that follows Bruno describes the metaphor of the ship at sea during a terrible storm. After a verbose soliloquy Bruno acknowledges the work's dedicatee, Michel de Castelnau, whom Bruno greatly admired, as the cause for Bruno's having arrived safely in port after having "fled a great and dangerous storm." Bruno "consecrates" the ship's "anchor," the "battered sails," and his "goods" dear to him and "to future generations most precious" in the name of Castelnau. Bruno thanks the French Ambassador to England for his graciousness, and, most important, for his having saved Bruno's divine doctrines from having found a home at the bottom of the sea.

I, then, whom no one has ever succeeded in accusing of ingratitude or taxing with discourtesy, I, against whom no one may rightly complain, I, hated by fools, slighted by the contemptible, profaned by knaves, vituperated by rogues, and persecuted by brutish spirits, I who am loved by the wise, admired by the learned, glorified by the great, cherished by the mighty and cherished by the gods, I who have already gained such indulgence from you as to be received, nourished, defended, freed, placed in surety, sheltered at port, as of one who, thanks to you, has fled a great and dangerous storm, it is to you that I consecrate this anchor, these shrouds, these battered sails, these goods, to me most dear, and to future generations most precious, so that, thanks to your beneficence, they may not be submerged by the iniquitous and tumultuous Ocean which is my foe. (De Lucca 4)⁹⁰

Whereas Bruno has managed to sail the rough seas of the era, and even anchor his vessel in the port away from the storm, the Nolan has not learned how to tame the violent seas. Galileo, however, has successfully escaped the rough waves of the turbulent era and found placid waters. For example, the ship on Galileo's frontispiece sails on calm seas, which suggests that Galileo's thought has departed from the tumultuous, churning waters of the Counter-reformation. See fig. 6 below:

⁹⁰ "Io dunque, qual nessun giamai poté accusar per ingrato, nullo vituperò per discortese, e di cui non è chi giustamente lamentar si possa; io odiato da stolti, dispreggiato da vili, biasimato da ignobili, vituperato da furfanti, e perseguitato da genii bestiali; io amato da savii, ammirato da dotti, magnificato da grandi, stimato da potenti, e favorito da gli dèi; io per tale tanto favore da voi già ricettato, nodrito, difeso, liberato, ritentuto in salvo, mantenuto in porto; come scampato per voi da perigliosa e gran tempesta: a voi consacro questa àncora, queste sarte, queste fiaccate vele, e queste a me più care et al mondo future più preziose merci, a fine che per vostro favore non si sommergano dall'iniquo, turbulento e mio nemico Oceano" (*DFI* 165).



Fig. 6:

<http://tbn0.google.com/images?q=tbn:2mS6Krcdj9pbiM:http://cronologia.leonardo.it/mo>
ndo42g.jpg
7/10/2007

Unlike Bruno's, Galileo's ship's sails are not filled with the might of unforgiving winds.

This metaphor, I argue, reflects Galileo's own calm of mind. As is known, since the times of Aristotle, the ship has been home to the "thought experiment." In this light, it is thus exemplary of the state of Galilean and thereby modern thought itself. Despite the

fact that Bruno's ship remains vertical, had the same amount of variables—harsh waves, winds, and dangerous rocks—been found in Galileo's system of thought, the father of modern science's newly formed notion of "experiment" would have surely been contaminated. Perhaps then, had the ball been dropped from the mast Aristotle would have remained correct?

Master Mud, Master Sludge & Confused Seating at *The Ash Wednesday Supper*: Metaphors of Universal Chaos and Disorder

Bruno's vagabondage throughout much of Europe—before arriving in England where he penned his *La cena de le ceneri*—granted him understanding of the European antagonism toward Copernicus's theory.⁹¹ Bruno claimed to have encountered philosophical stubbornness at every turn of his travels. Moreover, wherever he ventured the Nolan claimed to have met a general and unwavering pedantic disdain for his unorthodox thinking. In the end, Bruno suffered as a result of his beliefs. In order to express this epochal sentiment, Bruno employed two specific metaphors in *La cena de le ceneri*. In this work—a symposium-like dialogue that takes place on Ash Wednesday in London, in which the interlocutors discuss the order of the universe (Ptolemaic or Copernican)—Bruno encounters two instances of trouble and confusion on his way to the celebratory supper. First, during his journey to the dinner host's home, he and his companions find themselves lost amongst dark and muddy pathways. Second, at the beginning of the supper, the guests are confused as to their place at the table. These two

⁹¹ Bruno's time in England has garnered great scholarly attention because of its intellectual fruitfulness. Amongst the numerous works on this period see in particular D. Massa, "Giordano Bruno's Ideas in Seventeenth-Century England"; H. Gatti, "Minimum and Maximum, Finite and Infinite Bruno and the Northumberland Circle"; A. D. Weiner, "Expelling the Beast: Bruno's Adventures in England"; M. Ciliberto, "Giordano Bruno 1582-83. Da Parigi a Oxford" & M. Ciliberto et al. *Giordano Bruno 1583-1585: The English Experience*; and E. McMullin, "Giordano Bruno at Oxford."

metaphors, which I label using Bruno's terminology, "Master Mud and Master Sludge" and "Confused Seating," reveal the complexity of the sentiment Bruno encountered during this evening of philosophical discussion, and, more widely, the general sentiment throughout Europe regarding the acceptance of Copernicus's theory. In Blumenbergian terms, these two metaphors unveil the nature of the problem that they attempted to address. The first, "Master Mud and Master Sludge," represents the problems of conversion from one universal view to another (Gosselin & Lerner 115).⁹² The second, "Confused Seating," represents the chaos man felt once he took a "seat" at the metaphoric "dinner of the universe". I begin with the first metaphor. Bruno writes:

There was a street which began as a mudhole around which, either by design or by chance, there was no detour. The Nolan, who had studied and lived at schools more than any of us, said: "I think this is a swinish passage; nevertheless, follow me." He had not finished these words when he suddenly fell so deeply into the mud that he could not pull his legs out; and, thus, helping each other, we passed through that stretch of road hoping that that purgatory would not last long. But through an iniquitous and harsh fate, he and we, we and he, found ourselves engulfed in a slimy patch which, as if it were the Orchard of Jealousy or the Garden of Delights, was bounded both hither and thither by high walls; and since there was no light at all to guide us, we could not distinguish the road already passed from the one we had yet to follow; we only hoped that each step would bring the end: ever sinking knee-deep into the liquidmire, we fell toward deep, dark Avernus.

No one could now advise the other; we did not know what to say, but in speechless silence some of us whistled with rage, some whispered, snorting through their lips, some, sighing, stopped for a while, some cursed under their breath and, since our eyes did not serve us, each one's feet guided the others'; each one of us, as if blind, was confused in guiding the others [...]. Thus it was with us; after having tried again and again and not having perceived any remedy to our misfortune, we despaired and, ceasing to rack our brains in vain, we resolved to go on wallowing in that deep sea of liquid mud which spread its slow-flowing stream from the bottom of the Thames to its banks. (Gosselin & Lerner 113-14)⁹³

⁹² "maestro Buazzo e maestro Pantano" (*DFI* 47).

Bruno's description of the difficulty the group faced during their voyage to the supper is akin to the hard intellectual voyage one faces before he or she accepts a new doctrine in the place of another. Bruno expresses the nature of the problem he attempts to solve: How to transfer from age-old dogma to new? Bruno represents this process of intellectual conversion through the metaphor of a journey through mud and sludge. As is clear in the passage, since Bruno's traveling companions has "no light" to guide them, they acted like blind pigs buried in mud. Since Bruno led the group on this dark and muddy path, I believe it is wrong to interpret it as representative of Ptolemaic cosmology. Rather, the voyage represents the place where Bruno and mankind are headed: the conversion to the new Brunonian-Copernican cosmology. The journey, as Bruno has represented it, is wrought with peril, but the feast at the journey's end justifies the journey's treacherous means.

Regarding the second metaphor, the real journey takes place at the supper. It is there where the members of the symposium debate the Nolan's reasons for which it is necessary that man culminate a complete intellectual conversion. Before inaugurating this journey through the conceptual framework of the Copernican theory, Bruno describes

⁹³ "Questo era un camino che cominciò da una buazza la quale né per ordinario, né per fortuna, avea divertiglio. Il Nolano il quale ha studiato et ha praticato ne le scuole più che noi, disse: <Mi par veder un porco passaggio, però seguitate a me>; et ecco non avea finito quel dire, che vien piantato lui in quella fanga di sorte che non possea ritrarne fuori le gambe; e cossì aggiutando l'un l'altro, vi dammo per mezzo, sperando che questo purgatorio durasse poco: ma ecco che per sorte iniqua e dura, lui e noi, noi e lui ne ritrovammo ingolfati dentro un limoso varco il qual come fusse l'orto de la gelosia, o il giardin de le delizie, era terminato quinci e quindi da buone muraglia; e perché non era luce alcuna che ne guidasse, non sapeamo far differenza dal camino ch'aveam fatto e quello che doveam fare, sperando ad ogni passo il fine: sempre spaccando il liquido limo, penetravamo sin alla misura delle ginocchia verso il profondo e tenebroso averno. Qua l'uno non possea dar consiglio a l'altro, non sapevam che dire, ma con un muto silenzio chi sibilava per rabbia, chi faceva un bisbiglio, chi sbruffava co le labbia, chi gittava un suspiro e si fermava un poco, chi sotto lingua bestemmiava; e per che gli occhi non ne serveano, i piedi faceano la scorta a i piedi, un cieco era confuso in far più guida a l'altro. [...] cossì noi dopo aver tentato e ritentato, e non vedendo rimedio al nostro male, desperati, senza più studiar e beccarsi il cervello in vano, risoluti ne andavamo a guazzo a guazzo per l'alto mar di quella liquida bua, che col suo lento flusso andava del profondo Tamesi a le sponde..." (*DFI* 45-46).

a curious scene that takes place at the supper's outset: Everyone is confused as to where they should sit at the table. Blumenberg advances a penetrating reading of the significance of an initial confusion regarding seating at the dinner table. Blumenberg writes:

When they finally sit down to their Ash Wednesday supper, an amusing incident interrupts the ceremony. A member of the Nolan's entourage, who is supposed to be given the last place at table, misunderstands the order of seating, takes the last place for the first and the best, refuses to accept it, and betakes himself, out of modesty, to what had been intended as the first place. The to and fro that now sets in is not without a concealed allusion to the Copernican situation. It should not be forgotten that the opposition to the new system was fought out less with biblical verses than with the coupling of cosmic topography and metaphysical ranking. (*Copernican* 369)

The scene from *La cena de le ceneri* on which Blumenberg bases this interpretation follows:

TEO. [...] This was the last mishap, for soon after, by the grace of St. Fortune, having traveled impassable paths, passed through doubtful detours, crossed swift rivers, left behind sandy shores, forced a passage through thick slimes, overcome turbid bogs, gaped at rocky lavas, followed filthy roads, knocked against rough stones, hit against perilous cliffs, we arrived alive, by the grace of Heaven, at the port, *id est*, at the portal, which was opened as soon as we touched it. When we went inside, we found downstairs a great variety of people and servants who, without stopping or bowing or showing the least sign of respect, showed their contempt by their attitude, and did us the favor of pointing out the door. We went in and found upstairs that they had given us up and sat down to table, after having waited a long time for us. We greeted each other again and again...

PRU. *Vicissim*.

TEO. ... with some small ceremony. (Among others, there was this amusing incident. One of us, who was given the lowest place, thinking that it was at the head of the table, wanted, in his modesty, to go and sit where the head was. Consequently, a little while was spent in contention between those who, according to etiquette, wanted him to sit in the lowest place and him who, in humility, wanted to sit in the highest.) [...]. (Gosselin & Lerner 126)⁹⁴

⁹⁴ "TEOFILO [...] Questa fu l'ultima borasca; per che poco oltre per la grazia di san Fortunnio, dopo aver discorsi sì mal triti sentieri, passati sì dubbiosi divertigli, varcati sì rapidi fiumi, traslasciati sì

Blumenberg's astute reading of Bruno's *Cena* is further supported by the fact that, as I have further noticed, seven people are seated around the metaphoric table. These seven people, therefore, metaphorically represent the then seven known planets. Furthermore, since they sit around a table, it might metaphorically represent the sun around which the planets revolve. As an aide to the reader, I have drawn the image below, fig. 7, based on Bruno's description:

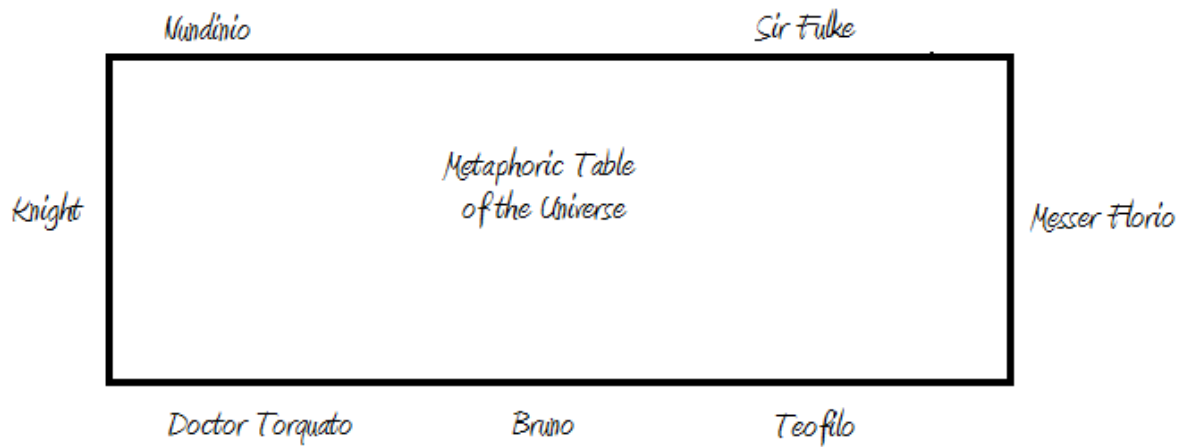


Fig. 7: Drawing of *The Ash Wednesday Supper* seating.⁹⁵

Blumenberg's argument, to which I have supplemented, is that the confusion regarding the order of seating metaphorically represents the very confusion regarding the order of

arenosi lidi, superati sì limosi fanghi, spaccati sì turbidi pantani, vestigate sì pietrose lave, trascorse sì lubriche strade, intoppato in sì ruvidi sassi, urtato in sì perigliosi scogli, gionsemo per grazia del cielo vivi al porto, *idest* a la porta: la quale subito toccata ne fu apperta. Entrammo, trovammo a basso de molti e diversi personaggi, diversi e molti servitori: i quali senza cessar, senza chinare la testa, e senza segno alcun di riverenza, mostrandone spreggiar co la sua gesta, ne ferno questo favore, de mostrarne la porta. Andiamo dentro, montamo su, troviamo che dopo averci molto aspettato, desperatamente s'erano posti a tavola a sedere. Dopo fatti i saluti et i resaluti... / PRUDENZIO *Vicissim.* / TEOFILO ...at alcuni altri piccoli ceremoni (tra quali vi fu questo da ridere, che ad un de nostri essendo presentato l'ultimo loco, e lui pensando che là fusse il capo, per umiltà voleva andar a sedere dove sedeva il primo; e qua si fu un picciol pezzo di tempo in contrasto tra quelli che per cortesia lo voleano far sedere ultimo, e colui che per umiltà voleva sedere il primo) [...]. (*DFI* 154-55).

⁹⁵ More apt for the metaphor, the table might be envisioned as being round or oval.

the universe. The confusion Bruno refers to is not solely antagonism—i.e., one group (Ptolemaic) *knows* its seating at the table and the other (Copernican) *knows* its seating, and therefore they dispute over proper places—, but it is rather the *not knowing*, the *misunderstanding* and *confusion* that is representative of the whole state of affairs that is of importance. Although Bruno does not hesitate to parody and show disdain for the ignorance of the pre-Copernicans, the Nolan's ultimate wish, which he calls the *Cena's* "*universale intentione*," is the Conversion of the World.

CHAPTER II.I: BRUNO'S INFLUENCE ON TWO SOUTHERN ITALIAN EXPONENTS OF THE MODERN AGE: NICOLA ANTONIO STIGLIOLA AND ANDREA FODIO GAMBARA

I have briefly presented a few highly focused metaphors that Bruno employed in his works that provide insight into the complexities of the times in which the philosopher lived. I now turn my attention to Bruno's influence in the seventeenth century. I do this because if one accepts that Bruno contributed to the birth of the modern age, then it must follow that Bruno's thought enjoyed a level of fortune in the century he inaugurated with his death. Whomever the Nolan influenced, however, is greatly debated and subject to vast methodological problems. Although I could have selected numerous thinkers, many of great renown, such as Campanella and Galileo, I have selected two lesser known thinkers neatly positioned at the crux of the modern age: Nicola Antonio Stigliola (1546-1623) and Andrea Fodio Gambara (c.1588-c.1660). I have chosen these two thinkers because they display, I believe, strong Brunonian inclinations in their works. Neither, however, cites Bruno.

I attempt to paint a picture of how Bruno and these two contemporaries contributed to the historical process of epoch making. I mean that the texts and figures in consideration will be analyzed through metaphors that resonate outward and bespeak greater concerns. I believe I will be able to demonstrate how Bruno was viewed, perceived, understood and feared by his contemporaries and those of the century he

inaugurated. My goal is not a restatement of historical and philological fact, but more of an engagement with the ideas and conceptions about the universe, science, and, more broadly, about epochal change. If we want to understand our history, it might be best, for example, to look upon the furthest reaches of our own self-image, our own self-projection: the cosmos. It is upon the heavens we impose our dreams and fears. It is there that man has inscribed the entire course of human events. Resting at the furthest extreme of our imagination, the cosmos is continuously revolutionized based upon our own self-knowledge—reading the heavens as a metaphor, therefore, might provide us with insight into our own man-made history.

Through this means of reconstructing the past, I hope to shed further light upon the "new light" of Europe (Bruno), upon two figures who have been relegated to the outer-margins of history, the "other" Nolan (Stigliola) and his Calabrian student, the "Encyclopedic Chameleon" (Fodio). The intention is two-fold: 1) to demonstrate Bruno's contribution to the modern age, dealing with concepts and Brunonian ideas as they manifest themselves in two forgotten, yet vastly important, figures; and 2) bring scholarly attention to Stigliola and Fodio, resurrecting them from their deep slumber in the abyss of contemporary scholarship.

BRIEF INTRODUCTION TO THE LIVES, TIMES, AND THOUGHT OF THE
"OTHER" NOLAN, NICOLA ANTONIO STIGLIOLA, & THE ENCYCLOPEDIC
CHAMELEON, ANDREA FODIO GAMBARA

Unlike Giordano Bruno, about whom much is known, Nicola Antonio Stigliola and Andrea Fodio Gambara require careful biographical attention. It is therefore important that I dedicate ample pages to explicating with detail the elements that fill the years of these two men's magnificent lives. Only then, I believe, shall I be able to further employ metaphorology and come to understand their engagements in the period that saw the rise of the modern age. I first provide brief biographies of Stigliola and Fodio that serve to orient the reader. Second, I present a timeline in which I weave these three men's lives together in an historiographical fashion. Although I make mention of numerous works written by these two authors in this biographical section, it is only in the subsequent chapter that I analyze them through the lens of metaphorology.

II.II: STIGLIOLA & FODIO GAMBARA

THE "OTHER" NOLAN: NICOLA ANTONIO STIGLIOLA

*Nicola Antonio Stigliola*⁹⁶ (1546-1623). Although from scholars in Italy Stigliola has garnered a good amount of attention, particularly in recent years, on this side of the Atlantic the philosopher's name is undeservedly obscure.⁹⁷ It appears that for most Stigliola has found his place, as Pietro Manzi writes, "submerged in the deep sea of oblivion" ("Un grande" 287).⁹⁸ To most scholars in North America, the name is nearly meaningless, though a few thorough-minded historians of Copernicanism and architecture have recognized his worthiness of at least a footnote. This thesis, to my

⁹⁶ For purposes of immediate clarification, Nicola Antonio Stigliola is his baptismal name. He is known, however, by a plethora of nominal variation, most commonly, Colantonio Stelliola. For further information on this question, see P. Manzi, "Un grande Nolano obliato," pp. 288-291.

⁹⁷ In the hope of inspiring and facilitating further research, I have compiled here the most essential bibliographic and scholarly information on Stigliola. See M. Rinaldi, *L'Audacia di Pythio. Filosofia, Scienza e Architettura in Colantonio Stigliola*; & "Enciclopedismo, alchimia e suggestioni campanelliane in un allievo di Colantonio Stigliola: Andrea Fodio Gambara, pp. 131-45; S. Ricci, "Nicola Antonio Stigliola Enciclopedista e Linceo con l'edizione del trattato *Delle apparenze celesti* a cura e con un saggio di Andrea Cuna" *Atti della Accademia Nazionale dei Lincei*; & "Due Filosofi del Regno: Giordano Bruno e Nicola Antonio Stigliola," *Napoli Viceregno Spagnolo: Una Capitale della Cultura alle Origini dell'Europa Moderna (sec. XVI-XVII)*; & "Filosofia e vita della città: il pitagorismo di Nicola Antonio Stigliola," pp. 99-114; & *La fortuna del pensiero di Bruno 1600-1700*, pp. 81-83; R. Gatto, *La Meccanica a Napoli ai Tempi di Galileo. In appendice De Gli Elementi Mechanici di Colantonio Stigliola riproduzione anastatica e le inedite Meccaniche mie di Davide Imperiali*; M. Marra, *Il Pulcinella filosofo chimico di Severino Scipione (1681). Uomini ed idee dell'alchimia a Napoli nel periodo del Viceregno, con una scelta di testi originali*, pp. 30-37 & 147-49; P. Manzi, *Annali della Stamperia Stigliola a Porta Reale in Napoli (1593-1606)*; & "Un grande nolano obliato: Nicola Antonio Stigliola"; & "Storia di una sconosciuta vicenda tipografico-editoriale nella Napoli della fine del Cinquecento. Torquato Tasso e Nicola Stigliola"; N. Badaloni, *Introduzione a G. B. Vico*, pp. 13-19; & "Il programma scientifico di un bruniano: Colantonio Stigliola," pp. 161-75; G. Gabrieli, "Intorno a Nicola Antonio Stelliola Filosofo e Linceo Napoletano. Notizie e documenti inediti," pp. 469-85; Luigi Amabile, *Il Santo Ufficio della Inquisizione in Napoli*, pp. 50-65; F. Fiorentino, "Nicolò Antonio Stelliola e Tommaso Cornelio," Bernardino Telesio, pp. 235-53 & 466-69; V. Spampinato, *Sulla soglia del Secento*, pp. 281-348; & *Quattro filosofi napoletani nel Carteggio di Galileo*, pp. 39-60; L. De Franco, "Nicola Antonio Stelliola, Gerolamo Mercuriale e Theodor Zwinger," pp. 131-36.

⁹⁸ "[...] sommerso nel profondo mare dell'oblio."

current knowledge, is the only English-language study to dedicate more than a fleeting reference to the all-but forgotten "other" philosopher from Nola. Bruno has so greatly appropriated the title, "The Nolan," that it is almost impossible to consider there was another great Nolan philosopher.

Who then was Nicola Antonio Stigliola? Let us begin at the end of the man's life, his epitaph:

TO THE MEMBER OF THE LYNCEAN ACADEMY
NICOLA ANTONIO STIGLIOLA
NOT ONLY A PHILOSOPHER, BUT DISTINGUISHED
IN ALL THE LIBERAL ARTS
IN ADDITION TO THE PHYSICAL SCIENCES, POLITICS, ETHICS
ARCHITECTURE, MILITARY ARTS, AND
ALL THAT PERTAINS TO THE PYTHAGOREAN SCIENCES
ENDED HIS CAREER AS THE SUPREME MATHEMATICIAN
IN THE CITY OF PARTHENOPE
AT THE AGE OF NEARLY EIGHTY YEARS
ON APRIL 11, 1623,
GIOVANNI DOMENICO, HIS SON AND SUCCESSOR
AS ARCHITECT OF THE SAME CITY
TO HIS DESERVING FATHER BOTH IN PRIVATE AND IN PUBLIC
PAID THE LAST HONORS AND LAID THIS STONE.
(Fiorentino 235)⁹⁹

Stigliola's epitaph, set in stone in the Neapolitan church where he was set to rest, speaks to the breadth of the man's interests—though Giovanni Domenico likely did not resist hyperbole. Stigliola was born in 1546, just two years before Giordano Bruno.¹⁰⁰ This

⁹⁹ "NICOLAO ANTONIO STELLIOLAE LYNCEO / VIRO NON UNIUSMODI PHILOSOPHO, ET IN OMNI / LIBERALI DISCIPLINA CLARISSIMO / PRAETER SCIENTIAS PHYSICAS, POLITICAM, ETHICEN, / ARCHITECTONICAM, MILITAREM, ATQUE ADEO OMNEM / PYTHAGORICUM SCIENTARUM ORBEM / COMPLEXO / URBIS PANTHENOPEAE MATHEMATICO SUMMO / FUNCTO UITA, IAM FERRE OCTUOGENARIO / MDCXXIII, MENS. APR. DIE XI. / IOANNES DOMINICUS FILIUS / IN ARCHITECTONICA EIUSDEM URBIS SUCCESSOR / PARENTI PRIVATEM ET PUBLICE MERITO / INFERIAS SOLVIT: TITULUM POSUIT."

¹⁰⁰ There had been much confusion as to Stigliola's date of birth, though it appears the issue has been resolved on the basis of evidence located in the "Registro dei fuochi" of Nola. As such, I take 1546 to be correct. See V. Spampinato's *Quattro filosofi napoletani nel Carteggio di Galileo*, p. 48; and P. Manzi's "Un grande nolano obliato," pp. 291-93.

date would be relatively insignificant were it not for the fact that Stigliola and Bruno were both born in the same small southern Italian village, Nola. No one can be certain whether Stigliola and Bruno ever met in Nola. It is, however, very likely because both were raised in the small Nolan territory of Monte Cicala.¹⁰¹ Regardless, the "other" Nolan's life and work deserve the attention of serious scholarship, particularly because his contribution to Neapolitan intellectual life was vastly important.

Stigliola as Medical Doctor

Stigliola began his studies of medicine under the tutelage of Orazio Severino and Bartolomeo Maranta at the prestigious medical university in Salerno. After completion of his degree in 1571, Stigliola took up office in Naples. There he published his first work, *Theriace et Mithridatia* (1577) [See appendix: Fig. 4].¹⁰² This work reveals the first inklings of what was to become a fully developed adversarial mind.

To begin, Bartolomeo Maranta along with the well-known botanist and medical doctor Ferrante Imperato published *Della Theriaca e del Mithridato* (1572).¹⁰³ As the full title suggests, the work purported the "true mode to compose the aforementioned antidotes," disputing alternative views of the use of theriac followed closely throughout Italy, most prominently in Padua, which was seat to Italy's finest sixteenth-century

¹⁰¹ On this point see P. Manzi, "Un grande nolano obliato," p. 288.

¹⁰² *Theriace et Mithridatia Nicolai Stelliolae Nolani Libellus, in quo harum antidotorum apparatus, atque usus monstratur Marantae, ac Patavani Collegii controversie perpenduntur. Praeterea de plurimis haud Satis cognitis medicamentis disseritur*, Neapoli, Apud Marinum de Alexandro in officina Aquilae, 1577. I have reproduced the work's Index in the appendix, fig. 5, for purposes of consultation.

¹⁰³ *Della Theriaca e del Mithridato libri due di BARTOLOMEO MARANTA, a. m. Ferrante Imperato. Ne quali s'insegna il vero modo di comporre i suddetti antidoti, et s'esaminano con diligenza tutti i medicamenti che v'entrano*. Appresso Marcantonio Olmo, In Vinegia, 1572.

medical university.¹⁰⁴ The publication of Maranta's text engendered a great deal of controversy.¹⁰⁵ This is because, as Maranta writes:

At the meeting of many obscure passages of Galen, I, by means of adding some words, proposed [changes] until clear: And I have even arduously stuck to Galen's intended meaning, deviating only by a few words: not because I have in my nature (as many have) the soul that is prepared to contradict our teachers: but in order to excite the most ingenious minds to new speculations, leaving alone always the freedom of judgement of each in approving them or letting them be. (Proem 3)¹⁰⁶

Maranta's tone was not at all polemical, although he did not hesitate to announce his intention to incite "new speculations." Four years after its publication and the subsequent translation of the work into Latin, three Paduan doctors, Giunio Paolo Crasso, Bernardino Trevisan and Marco Oddo, launched an invective against Maranta, *Meditationes doctissimae in Theriacum & Mithridaticam Antidotum*.¹⁰⁷ The Paduans found Maranta's choice of Italian over Latin overall reflective of the work's lack of erudition and seriousness.¹⁰⁸ Furthermore, the doctors deplored Maranta's speculative system, which

¹⁰⁴ "vero modo di comporre i sudetti antidoti"

¹⁰⁵ An excellent study of the Paduan affair is that of A. Cuna, "Editoria e testi *De Re Medica*. La controversia fra Nicola Antonio Stigliola e i *Medici Patavini*," part of the author's joint work with Saverio Ricci, published in the latter's "Nicola Antonio Stigliola. Enciclopedista e Linceo con l'edizione del trattato *Delle apparenze celesti*," pp. 61-79, esp. 66-79.

¹⁰⁶ "[A]ll'incontro molti luoghi di Galeno detti oscuramente, io con aggioitione di parole ho proposto finché chiari [...]: Et ho anco arditamente dalle determinazioni di Galeno in poche cose deviato: non perché io habbia di mia natura (come molti hanno) l'animo pronto al contradire a i nostri maestri: ma per eccitare i belli ingegni à nuove speculationi, lasciandosi sempre libero il giudicio di ciascuno in approvarle, o in lasciarle."

¹⁰⁷ *Meditationes doctissimae in Theriacum & Mithridaticam Antidotum a clarissimi Philosophis et Medicis IUNIO PAULO CRASSO, BERNARDINO TAURISANO, MARCO ODDO ex inclyto Patavinorum Medicorum Collegio ad id selectis accuratissime elucubratae, & ab eodem Collegio confirmate. Per quas verissima methodus conficiendarum Antidotorum perhibetur & multi Medicorum, & Pharmacopaeorum errores confutandur. Has cum omnium simplicium medicamentorum Antidotos perficientium examine, & electione MARCO ODDO ex tribus antedictis unus fideliter, & candide literas mandavit, & ad communem salutem mortalium in lucem protulit, Apud Paulum, & Antonium Meietos fratres Bibliop. Patav., Venetiis, 1576.*

intended, as they perceived, to replace a field already governed by Galenic specialists. Because many learned Paduan medical doctors had garnered both national and international fame, Oddo, Crasso and Trevisan's brief, yet highly contentious, invective had tarnished Maranta's career. Now thirty-one years old, Stigliola understood the harmful implications of the *Meditationes* on his mentor's medical career, and therefore chose to pen a risky counter-attack. As noted previously, in 1577 Stigliola published *Theriace et Mithridatia*, a work wherein the young medical doctor argued adamantly in favor of his teacher. It is unfortunate, however, that Stigliola abandoned the use of Italian, thereby surrendering at one level to the criticisms. Not long after the work's publication, Stigliola's career as a medical doctor ended prematurely. While the decision appears a personal choice, it is likely, however, that the curtains closed because Stigliola's controversial work won him nothing but ill reputation in the circles of Paduan medical learning. This, however, was to matter very little. Stigliola had already set his sights on greater projects.

Stigliola as Architect and Teacher

The 1580s remain a relative historical lacuna in the life of Stigliola. It is known, however, that during this decade Stigliola was entrusted by the Regno di Napoli, along with Mario Cartaro, as the city's topographer.¹⁰⁹ Stigliola had developed plans for a new port and city wall for Naples that unfortunately never saw the light of day.¹¹⁰ From

¹⁰⁸ The text may be consulted online: <http://gallica.bnf.fr/ark:/12148/bpt6k60261z>

¹⁰⁹ Cartaro and Stigliola together published eleven detailed maps of the southern Regno di Napoli, and one of all of Italy. These beautiful exemplars of early modern cartography are conserved in the Biblioteca Nazionale di Napoli: ms. x11 D 100 Cartaro, 1613. See appendix, fig. 6, for a sample.

¹¹⁰ On these projects see V. Spampinato, *Sulla soglia del Secento*, pp. 281-48; and Manzi, "Un grande nolano obliato," pp. 300-02. See also A. Payne, "Architectural Criticism, Science, and Visual

depositions given at trial in Naples in 1595—Stigliola then the suspect of heresy—we find that in the 1580s Stigliola occupied himself primarily with teaching, amassing at one point four hundred students.¹¹¹ Two of his students, in fact, established themselves in the fields of medicine and science: Marco Aurelio Severino and the Calabrian medical doctor, Andrea Fodio Gambara.

Stigliola as Printer

Opening press in late sixteenth-century Naples—or across much of Italy for that matter—was incredibly difficult because of reforms imposed at the Council of Trent. The need for reputable presses, however, had increased since the machine's inception. Shortly after the mass exodus of foreign printers from Naples, many Neapolitans then opened shop with relative ease, barring they demonstrated explicit and unwavering allegiance to Tridentine reforms.¹¹² Stigliola was amongst those. Although Stigliola's press was not in continuous operation from 1593 to 1606—its operations passed between Felice and Costantino Stigliola and Nicola himself—the press printed some of the more influential works of the period. Between 1593 and 1606 Stigliola's press at Porta Reale¹¹³ in Naples saw numerous works to light, eighty-two of which are known to exist today, others having been likely burned, lost or destroyed. A careful review of the texts printed by Stigliola reveal that his press merits renown as one of the greatest of his day in

Eloquence: Teofilo Gallaccini in Seventeenth-Century Siena," esp. p. 157 wherein the critic discusses Stigliola's connection with the Lynceans and his work as an architect in Naples.

¹¹¹ See L. Amabile, *Il Santo Ufficio*, p. 51.

¹¹² See P. Manzi, *Annali*, pp. ix-xv.

¹¹³ Porta Reale, or Porta Regale, was located beside what is known today as Piazza Dante.

Naples.¹¹⁴ To begin, Stigliola published two works by Torquato Tasso: *Discorsi del poema heroico* (1594) and *Dialogo dell'impresa* (1594), the former, unfortunately was riddled with editorial errors, which prompted its republication in Venice by Ciotti. Giambattista Della Porta, close friend to Stigliola, was one of the later authors to have his work published by Stigliola: *Claudii Ptolemæi magnæ constructionis liber primus cum Theonis Alexandrini commentariis* (1605). At the cusp of the new century, Stigliola printed his close friend Francesco Imperato's *Historia naturale* (1599). Imperato's work, often cited today for its outstanding emblems and prints, was likely Stigliola's finest creation. Stigliola also printed Giulio Cortese's *Oratione alle Potenze Italiane per lo soccorso della Lega Germana contro il Turco* (1594) and the contentious *Descrittione del Regno di Napoli* (1597), a work that reveals many of the Spanish and Italian cultural and political tensions of the era. Notable also is Francesco Verdugo's *Li commentari di Francesco Verdugo, Delle cose successe in Frisia* (1605), translated and published first in Italian from the Spanish, where it was then subsequently printed in Spanish and French. Stigliola printed his own *De gli elementi mechanici* (1597) immediately out of the prisons of the Holy Office in Rome.

The tremendous output at Porta Reale reveals not only Stigliola's involvement in the dissemination of ideas in late sixteenth and early seventeenth-century Naples, but also the possible connections he had with some of the leading poetic and philosophic minds of early modern Italy.

¹¹⁴ Historian Pietro Manzi's *Annali della Stamperia Stigliola a Porta Reale in Napoli (1593-1606)* provides the most complete picture of Stigliola's contribution to early modern print. On this point by the same author see, "Torquato Tasso e Nicola Stigliola," *Il Letterato*, 17 (1969). See also an addenda to Manzi's *Annali* by G. Fulco, "Documenti inediti e addenda per la stamperia Stigliola," *Studi in onore di P. Manzi*, Marignano, 1983, pp. 35-60.

Stigliola and the Inquisition

Stigliola's encounters with the Inquisition mirror those of his Nolan counterpart, Giordano Bruno, though certainly less severe. As evinced below, many of the accusations put forth at Stigliola's trial echo those of Bruno, some to the point of indistinguishability.

After a brief stay in the prisons in 1591¹¹⁵, on July 25, 1595 "the encyclopedist Colantonio Stigliola" appeared before the Inquisition¹¹⁶ "for irreligion," as accused by the Jesuit Claudio Migliaresi (Amabile, *Santo Ufficio*, Doc. 8, 51).¹¹⁷ Migliaresi claimed Stigliola sympathized with those from "beyond the mountains" of the "new religion," ate "meat on prohibited days," "kept a printing press in his home," and "lectured to many students" (Amabile, *Santo Ufficio*, Doc. 8, 51).¹¹⁸ Migliaresi explained that "in every house where Colantonio went and practiced he was held to be a heretic" (Amabile, *Santo Ufficio*, Doc. 8, 51).¹¹⁹ In due process, on July 26, 1595, Matteo di Capua, then young Prince of Conca, was subject to an interrogation. The Prince—benefactor and student of Stigliola—stated that his teacher questioned the value of the "Council of Trent," pledging

¹¹⁵ See P. Manzi, "Un grande nolano obliato," p. 298.

¹¹⁶ For more information on Inquisitions in Europe see E. Peters's *Inquisition*, esp. pp. 105-21 for information in the Roman and Italian Inquisitions, and pp. 243-46 for a discussion of Bruno and his martyrdom.

¹¹⁷ "l'enciclopedista Colantonio Stigliola"; "per irreligione"

¹¹⁸ "ultramontani," "nova religione," "carne neli giorni prohibiti," "teneva stampa in casa" and "legeva à molti scolari"

¹¹⁹ "in ogni casa dove andava seu practicava decto Colant. era tenuto per Heretico"

that Stigliola said that if he were to open his own council, "men would be able to speak their own minds" (Amabile, *Santo Ufficio*, Doc. 8, 52).¹²⁰ The Prince of Conca stated:

Moreover, I remember that one day inside the church [...] the said Colantonio told me what the Catholic Church believed regarding the holy sacrament of the Eucharist, which be the opinion that heretics uphold, for which I sought shelter because he demonstrated to know very well the opinions of the heretics, and many times he said propositions that offended me and seemed to me to be very heretical, which at the moment I am not able to remember, yet if I shall remember them I am ready to tell them, but as I said they always seemed to me very suspicious.¹²¹ (Amabile, *Santo Ufficio*, Doc. 8, 52)

On a later occasion Matteo di Capua revealed Stigliola's Copernicanism, "and so [Stigliola] printed a work [...], which has yet to see light, [in which he argued] that the Earth revolves itself and the Heavens are still" (Amabile, *Santo Ufficio*, Doc. 8, 59).¹²²

On August 14, 1595 the Inquisitors commenced interrogations of Scipio Spinello, who stated that Stigliola had once claimed that the works of Boccaccio, Machiavelli and other similar authors open the eyes. Spinello provided the following turbid remarks at trial:

And moreover he said that the Jesuit Fathers had operated in such a way that they removed and prohibited the [books of] Boccaccio, Machiavelli and other similar ones because those books open the peoples' eyes and they want that the masses remain stupified and derive all of their rules from them [the Jesuits]. (Amabile, *Santo Ufficio*, Doc. 8, 53)¹²³

¹²⁰ "concilio di trento," "li homini o homo potriano dire la intensione sua [...]."

¹²¹ "De più me ricordo che un giorno dentro la chiesa de s.to petro ad maiella detto colant.o me referì quello che tiene la s.ta fede captolica del sacramento dell'eucharistia, et quello poi che teneno li heretici, del che io me pigliai ombra perche esso mostrava sapere cossi bene le opinione delli heretici, et molte volte ha detto propositione le quali me offendevano et me parevano multe heretice le quali io al presente non me le posso racordare et si me le ricordaro sono prontissimo ad dirlo ma come io ho detto sempre me parevano suspecte."

¹²² "et cossi [Stigliola] n'habbia stampato (*sic*) una opera et fattone un trattato, ancor che non sia posto in luce, che la terra si mova et il cielo stia fermo."

¹²³ "Et de piu disse che li patri gesuiti haveano operato che se havessero levati et prohibiti li Boccacci Machiavelli et altri simili libri per che decti libri faceno aprire gli occhi ale gente et loro voleano che stassero storditi et pigliassero tucti le lege da loro [...]."

A mere ten days later, on August 24, 1595, Matteo di Capua provided nearly verbatim testimony as Spinello:

I remember more than I initially stated that some times the said Colantonio told me in my room amongst others that were able also to hear him that the Jesuit Fathers sought to prohibit many books [from being read], and cited in particular Boccaccio by means of The Decameron because that book revealed many of the fraudulent acts committed by the monks and priests [...]. (Amabile, *Santo Ufficio*, Doc. 8, 54).¹²⁴

A friend of Stigliola, Alexander Pera Canonicus, under oath at the Neapolitan tribunal, stated that his friend, the "other" Nolan, believed Moses a magician. This is an opinion that we know is shared by Bruno.¹²⁵

I remember that one time maybe two years ago I met the said Colantonio outside Porta Reale, and finding myself caught in conversation regarding the Histories of Moses and discussing the miracle that took place in the Red Sea the said Colantonio claimed to me that some Historians remarked that Moses was an astute astrologer, and that he knew the movements of the tides of that sea, which observing surely with all his powers, and responding to my question as to who this Doctor was of whom he spoke, he said to me that he was not able to remember [his name] but that he had read it in history books, to which I then responded the tidal change of that sea was certainly quick and not the result of this miracle, to which he replied to me that he was not the one who said it but rather he made reference only to the history books, and this is all I know. (Amabile, *Santo Ufficio*, Doc. 8, 64)¹²⁶

¹²⁴ "me ricordo de piu de quello che ho deposto che alcune volte detto Colant.o me ha detto in camera in presentia de altri che lo posseano sentire che li padri gesuini cercavano se proibesseno molti libri, et precise il boccaccio sopranominato il dicammarone perche detto libro scopreva alli homini molti fraude che fanno li monaci et li preiti [.]"

¹²⁵ For example see *OLC* III.5, pp. 515-16.

¹²⁶ "io me ricordo che una volta che havera da lui dui anni in circa m'incontrai con detto Colantonio fuor la porta reale, et essendoci incontrati insieme ad ragionare delle Istorie de Mose et signanter del miracolo operato nell'acque del mar rosso esso Colantonio me disse che alcuni Istoric dicevano che mose fu uno astrologo peritissimo, et che cognobbe l'accesso et recesso di quel mare, il quale osservando passo sicuramente con tutto l'essercito suo, et replicandoli io chi era questo Dottore che cio diceva, me disse ch'esso non se ricordava ma che l'haveva letto nelle istorie, et essendoli da me replicato, che naturalmente l'acesso et recesso de quel mare era prestissimo (?) et non atto ad fare questo miracolo, lui me rispose che questo non lo diceva lui ma lo referiva dalle Istorie, et questo è quanto io so."

Certainly it appears possible that the "Historian" cited above was Bruno. Alexander Pera Canonicus further testified that on one occasion near Porta Reale he heard Colantonio recite "Anime belle et de virtuti amiche terranno il mondo," which is to be identified as a maligned part of a verse of the CXXXVII of Petrarch's *Canzoniere* (Amabile, *Santo Ufficio*, Doc. 8, 64). As part of a triad against the Papal Curia in Avignon during the time of Clement VI, the sonnet is suggestive of Stigliola's own sentiments toward the governance of the Church.¹²⁷ In effect, the citation underlines Stigliola's reformist sensibility often referred to by his denouncers at the courts of the Inquisition in 1595.¹²⁸ Stigliola's wife was later put under oath, denying all suggestions that her husband shared the opinions of heretics. Like his Nolan counterparts, Pomponio Algerio and Giordano Bruno, Stigliola found himself in Rome defending his life against turbid accusations of heresy, yet only he would survive this grueling test. Curiously, Stigliola shared the very same prisons of the Inquisition as Giordano Bruno and Tommaso Campanella.¹²⁹ While

¹²⁷ Here follows Petrarch's sonnet: "L'avara Babilonia à colmo il sacco / d'ira di Dio e di vitij empij et rei / tanto che scoppia, ed à fatti suoi dèi, / non Giove et Palla, ma Venere et Bacco. / Aspectanto ragion mi struggo et fiacco; / ma pur novo soldan veggio per lei, / Io qual farà, non già quand'io vorrei, / sol una sede, et quella fia in Baldacco. / Gl'idoli suoi sarranno in terra sparsi, / et le torre superbe, al ciel nemiche, / e i suoi torrer di fôr come dentro arsi. / Anima belle, et di virtude amiche, / terranno il mondo; et poi vedrem lui farsi / aurëo tutto, et pien de l'opre antiche" (261).

¹²⁸ In what now stands as the most comprehensive study of Stigliola, *L'Audacia di Pythio: Filosofia, Scienza e Architettura in Colantonio Stigliola*, Massimo Rinaldi also finds this verse particularly enlightening. Within the space of one mere paragraph, Rinaldi manages to elucidate the following brilliant vision of Stigliola: "L'architettura, all'interno della filosofia stigiolana, era dunque destinata a caricarsi delle molteplici valenze che le aveva riconosciuto la grande trattatistica quattro-cinquecentesca: le ragioni prettamente tecniche potevano così saldarsi nuovamente alle ragioni sociali del costruire, e la «virtute» rappresentata in un celebre verso petrarchesco che Stigliola amava recitare poteva disporsi a rinnovare il «mondo» seguendone il tracciato. In essa il nolano doveva scorgere la via lungo la quale procedere per togliere i veli alle *dissimulazioni* e alle mistificazioni non ancora *oneste* su cui il secolo nascente andava fondando le coordinate di una nuova *arte del vivere*; non diversamente, «li Boccacci et Machiavelli» che Stigliola, processato per «irreligione» tra il 1595 e il 1596, veniva accusato di leggere invitavano gli uomini ad «aprire gli occhi» mentre avvertivano delle «fraudi» del potere. Il sogno *enciclopedico* del nolano, allora, portava in sé il sogno di una *città* rinnovata nelle sue strutture edilizie, mercantili e sociali che non è azzardato catalogare sotto le forme dell'*utopia*" (xiii-xiv).

Campanella recalls meeting Stigliola in the prisons, one may only suspect that Stigliola also encountered Bruno in those murky depths. After two dreadful years charges were eventually dropped, allowing Stigliola to return to life in Naples in 1597. While the Church absolved Stigliola of supposed crimes, ironically it was his release that gave birth to the heretic. As shall be seen, Stigliola's post-1597 espousal of Brunonian and heretical beliefs leads one to imagine—without the slightest bit of exaggeration—that Stigliola and Bruno had not only met in Rome, but also likely shared a cell. Perhaps Stigliola's time in Rome granted him the chance to listen to the words of Bruno and Campanella at length during those cold, hard years. Regardless, Stigliola's suffering in the cells of the Holy Office likely engendered the same sort of disdain for orthodoxy seen in both Campanella and Bruno, whether he conversed with the heretics at length or not.

Stigliola as Lyncean Philosopher and Copernican

Stigliola walked free from the prisons of the Holy Office in 1597 and returned to his career as a professor, printer and architect. Immediately after his release he published a work on mechanics that he had written previous to his imprisonment, *De gli elementi mechanici* (1597). His respect in the philosophic and scientific community is revealed through his membership in Federico Cesi's Accademia dei Lincei, which began in 1612. Giovanbattista Della Porta nominated Stigliola for membership, and quickly thereafter, the "other" Nolan even earned the respect of the Academy's greatest member, Galileo Galilei. Stigliola was first brought to Galileo's attention in a letter from Cesi wherein the Prince stated, "Nicolò Antonio Stelliola" was "philosopher, medical doctor, mathematician (and I believe a Copernican), of extraordinary letters, greek particularly"

¹²⁹ See L. Firpo, *Il processo di Giordano Bruno*, pp. 76, 231n & 236n.

(Galilei *Le Opere* XI 209).¹³⁰ News of Stigliola's Copernicanism seems to have reached the point of consensus. Campanella, in fact, cites "Colantonius Stelliola" in his *Apologia pro Galileo* as one of the leading minds in favor of Copernican cosmology.¹³¹

Membership in Cesi's academy proved fruitful for Stigliola, though his life would be cut short in 1623 slightly more than a decade after becoming a Lyncean. In a letter to Cesi written on April 10, 1615 Stigliola announced his intention to publish the *Encyclopedia pythagorea* [See appendix: Fig. 7]. Unfortunately, apart from the Index and dedicatory epistles, the only section to exist of this mammoth project is the *Delle apparenze celesti*. Four years after Stigliola's death, however, another of the philosopher's works, *Il telescopio over ispecillo celeste*, was published by the Academy.

¹³⁰ "filosofo, medico, matematico (et credo Coperniceo), di bellissime lettere, et greche specialmente."

¹³¹ See p. 102 (p. 40 in same volume's anastatic).

THE ENCYCLOPEDIC CHAMELEON: ANDREA FODIO GAMBARA

Andrea Fodio Gambara (c.1588-c.1660). Very little is known of Fodio's life, yet critic Massimo Rinaldi's calculations derived from Fodio's allusion to his own age in the author's publication of 1651 suggest that he was born in 1588.¹³² In 1678 Niccolò Toppi wrote that Fodio first saw light in Pizzo, Calabria and gained respect as a "celebrated medical doctor" (13).¹³³ Shortly after Nicola Antonio Stigliola died in 1623, Lynceans Fabio Colonna, Federico Cesi and Francesco Stelluti solicited the aid of two of Stigliola's students, Andrea Oddi and Fodio, in gathering their mentor's works together for print.¹³⁴ Through this contact, Fodio earned the respect of Colonna, a renowned botanist in Italy and Europe. In fact, Colonna recommended to Prince Cesi that the Calabrian medical doctor be made a Lyncean. In a letter to Cesi written June 9, 1623, Colonna stated that "Signor Fodio is a medical doctor, philosopher, astrologer and chemist, and is great in letters, I believe that it would not be a bad idea—on this occasion of having him collect together the writings of Stigliola, because he is well aware of the hand of Stigliola and very intelligent—to make him a Lyncean" (Qtd. in Rinaldi *L'Audacia di Pythio* 5n).¹³⁵ It

¹³² See "Enciclopedia, alchimia e suggestioni campanelliane in un allievo di Colantonio Stigliola: Andrea Fodio Gambara," p. 137. For further information, by the same author, see *L'Audacia di Pythio*, pp. 1-11; and M. Marra, *Il Pulcinella filosofo chimico di Severino Scipione (1681)*, pp. 34-37.

¹³³ "Medico celebre." Of interest and importance to note is Toppi's use of the past tense with regards to Fodio Gambara, thereby implying the Calabrian died previous to 1678, the date of Toppi's book's publication.

¹³⁴ To my knowledge current scholarship is only aware of four of Stigliola's students: Andrea Oddi, Andrea Fodio Gambara, Paolo Piromallo and Marco Aurelio Severino. I found no information on the lives of either Oddi or Piromallo.

¹³⁵ "Signor Fodio è medico, filosofo, astrologo et chimico et ha lettere buone, crederò che non farebbe male, con questa occasione di haver a porre insieme li scritti del Stigliola, che lui è pratico alla mano del Stigliola et è intelligentissimo, di farlo Linceo."

is uncertain whether this honor was ever bestowed upon Fodio.¹³⁶ In Zavarrone's *Bibliotheca Calabria sive Illustrium Virorum Calabriae qui Literis claruerunt Elenchus* (1753) one finds mention of the Calabrian's *Il Camaleonte antipodagrigo, discorso enciclopedico*, published in Naples by Ettore Cicconio in 1651 [See appendix: Fig. 8] (145). Fodio dedicated this work on gout to the then King of Spain, Philip IV, and to his friend Girolamo Berti; and had it further addressed to the Academy of Lynxes in Rome by his friend, Agostino Cenami. Later in the work the Calabrian doctor recognized his gratitude and indebtedness to Stigliola and Campanella. Regarding the former, Fodio does not hesitate in stating that Stigliola, "praised by all of Europe," was "my very dear friend" (CA 5).¹³⁷ Regarding the latter, he claims to have been a close friend to "The *sensatissimo* Philosopher [...] of extremely vast ingenuity, and very profound speculation Friar Tommaso Campanella of Stilo" (CA 44).¹³⁸ If this is in fact true, not an instance of the younger Calabrian's attempt to establish himself within certain circles of learning,

¹³⁶ Agostino Cenami addresses the Academy in his dedicatory preface to Fodio's *Camaleonte antipodagrigo*. The historical intention behind such a direct address is unclear, yet it further suggests, in my mind, a link between Fodio and the elite Academy. Cenami's passage follows in the original:

"A'SIGNORI / Dell'Academia de'Lincei di Roma / Iside, e Serapide appo gli Egittij eran segnati con la bocca ferrata, per dinotare, che non si douesse andar filosofando sù la lor genealogia; perche essendo stati huomini, e mortali si sarebbe appo le genti scemato il concetto d'essere annouerati fra gl'Id-dij. Tanto non auuenne al Signore Andrea Fodio Gambarà, che hauendo per 45 anni trauagliato / *Con quanto puo l'ingegno, e puo la mano* / per debellar le Podagre, dopo assicuratosi dell'efficacia del Medicamento, ne diè ragguaglio al Signor Girolamo Berti in Roma, dove essendo paruto concetto hiperbolico, si replicò col presente Discorso a bocca aperta, stimando a bastanza sodisfare altrui con vn semplice scritto, come chi poco apprezza le cose sue. Ma conferitolo meco come co suo partialissimo amico, lo stimai degno di perpetua luce, e se ben da lui co molta ripugnanza si negava, co forzosa, & amicheuole violenza persuasi, ch'io con sua buona gratia il tracopiassi per torchio sì per la gloria, & immortalità dell'Amico, come per lo publico beneficio, e per parermi pastura delicatissima de' fioriti Intelletti Academici, per la molte dottrine, & eruditioni, che in esso quasi in Cielo tempestato di Stelle si riguardano. Godanlo le SS.VV. come parto d'vn'ingegno degno cotesta Illustrissima Academia, e con esse il Mondo tutto con quello applauso, che se gli deuue, accioche prenda animo a publicar cose tanto più grandi, quanto più nuoue. E quì per fine riuierisco le SS.VV. Napoli / Delle SS.VV. / Affettionatiss. / Agostino Cenami"

¹³⁷ "ammirato da tutta Europa," "il mio amicissimo"

¹³⁸ "Il sensatissimo Filosofo [...] di vastissimo ingegno, e profondissima speculatione Fr. Tomaso Campanella da Stilo."

then it is with near certainty, due to Fodio's age, that their friendship began after Campanella's extensive years of detention. Regardless, Fodio displayed intellectual indebtedness to Campanella in his work, *Il Camaleonte antipodagrico*.¹³⁹ The Calabrian medical doctor's treatise on gout is lined with strands of Neoplatonism and Hermeticism, purporting alchemical and philosophical remedies for physiological and spiritual imbalances. The frontispiece reveals sympathies for the occult sciences. A motto reads: "I transform the Sun in myself and take from it virtue. I transform myself into Man and I render virtue" [See appendix: Fig. 9] (CA Frontispiece).¹⁴⁰ Fodio's title recalls that of his teacher, hinting at a new categorical and encyclopedic sensibility built inside the framework of a Hermetic mind in the early to mid-seventeenth century. Moreover, along with citing ample classical sources such as Virgil, Galen, and Hippocrates, and early modern influences such as his mentor Stigliola and friend Campanella, Fodio also cites Lull, Hermes Trismegistus, Ficino and Cardano. In *Il Camaleonte antipodagrico*, Fodio's only work known to have survived the ages, the author noted another work of his own hand, *Encyclopedic Triumph regarding the Labyrinth of Uncertainties* (CA 99).¹⁴¹ Unfortunately, no sign of it remains today, though Domenico Taccone-Gallucci in 1881 maintained that Fodio was "author of various works edited in Naples in 1665" (Taccone-Gallucci 156).¹⁴² Where these works have gone—if in fact they ever existed—is a

¹³⁹ See pp 44-45.

¹⁴⁰ "Il Sole in me trasformo e virtù prendo. Nell'huomo mi trasformo e virtù rendo."

¹⁴¹ "*Triumphus Encyclopedicus de Labyrintho Hasitationum*"; Fodio also mentions, though loosely, another work: *Centuria Antipodagricarum Observationum* (CA 13). I believe, however, that this is the title of a work he had planned to write, yet never did, and of which his *Camaleonte antipodagrico* would have been a part.

mystery. In the end, therefore, little has come to us of Fodio's life, although his thoughts are made beautifully apparent in his one surviving work.

¹⁴² "autore di varie opere edite in Napoli nel 1665." Taccone-Gallucci unfortunately did not identify how he came to this information. I am therefore suspicious of its validity.

TIMELINE: (1545-1664) THE INTERTWINED LIVES OF GIORDANO BRUNO, NICOLA ANTONIO STIGLIOLA & ANDREA FODIO GAMBARA

1545-54

1546: Nicola Antonio Stigliola born in Nola, in the territory of Monte Cicala, where a small number of families lived.

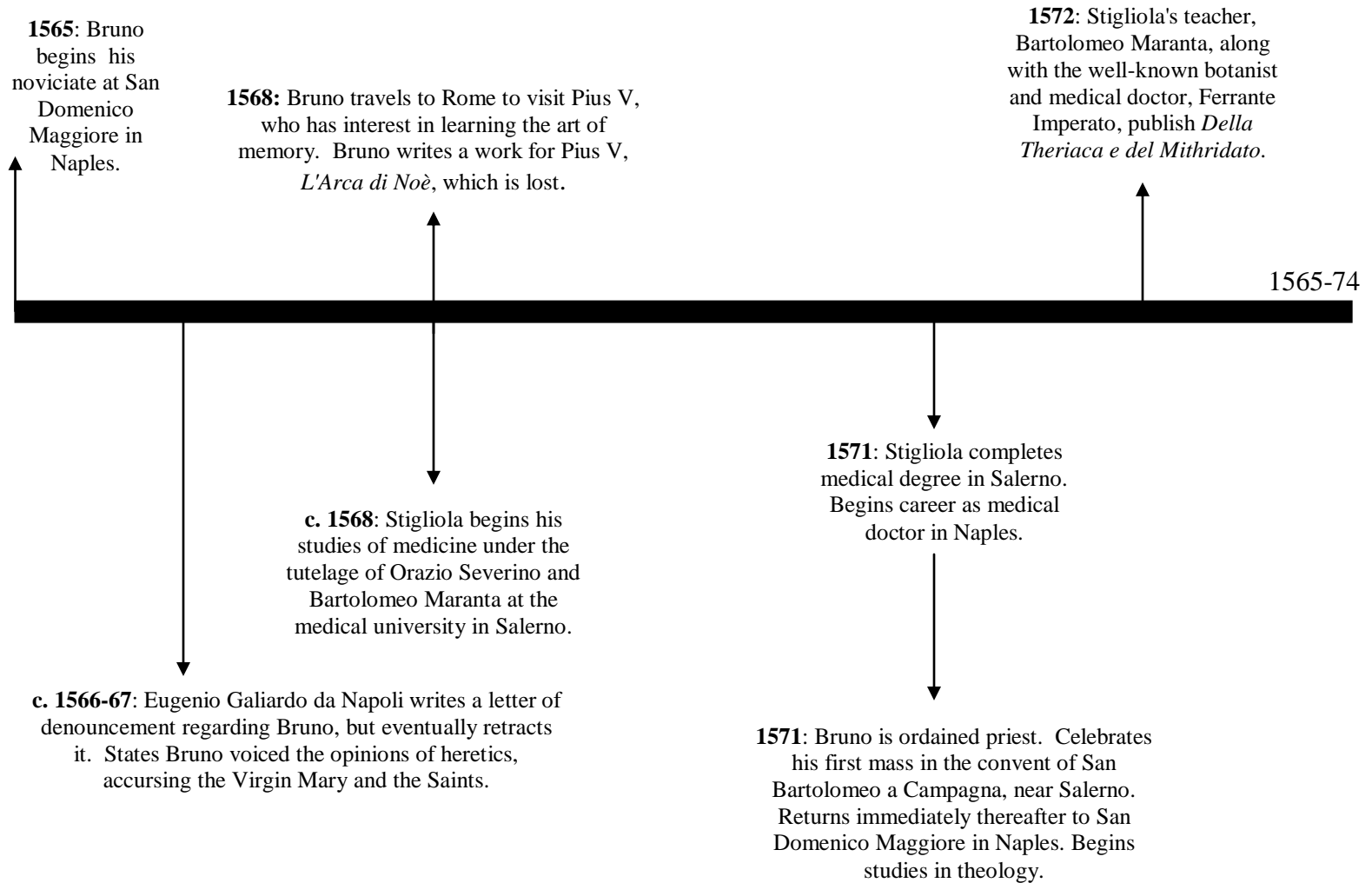
1548: Filippo (later Giordano) Bruno born in Nola, in the territory of Monte Cicala.

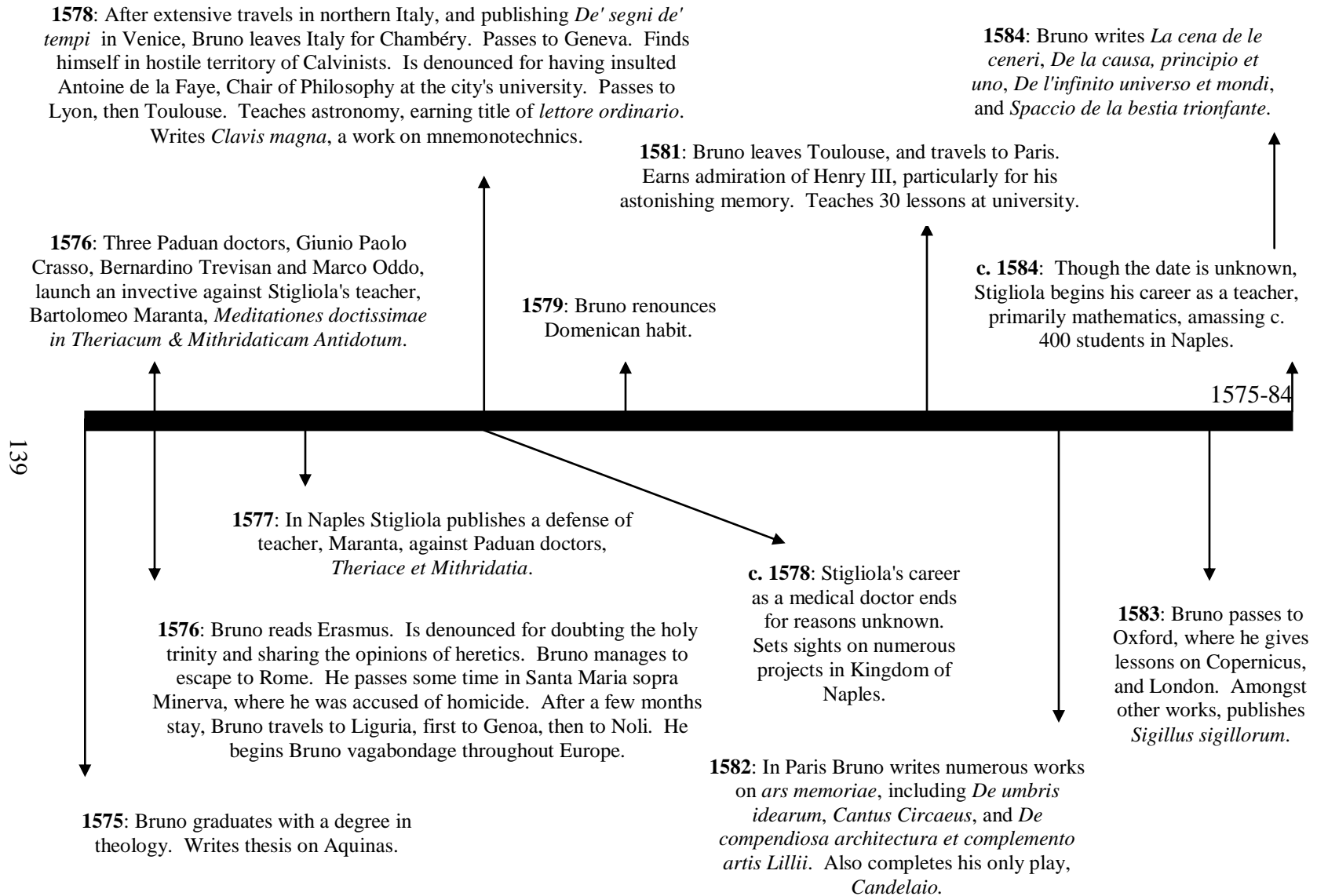
c. 1554: Bruno and Stigliola likely meet in Monte Cicala, a village home to only a few families, in Nola, and share years of their youth playing in the shadow of Vesuvius.

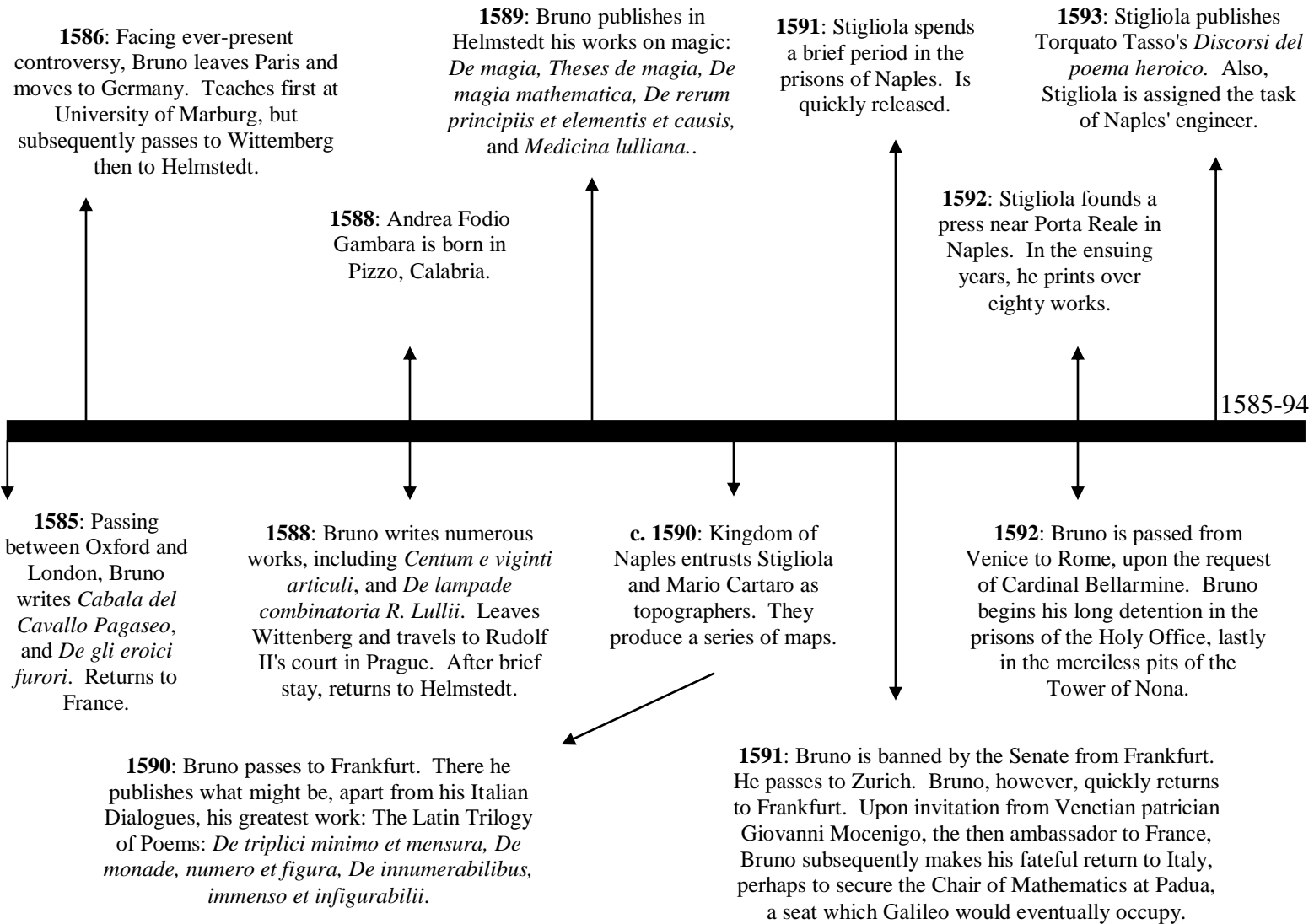
1555-64

1562: Bruno begins his studies in Naples under Giovan Vincenzo Colle.

c.1563: Bruno reads work of Pietro Ravennate. Begins interest in *ars memoriae*.







1595: Stigliola is denounced as a suspect of heresy to the Inquisition. Passes to the prisons of Rome where he remains for two years. During this period of detention it is with relative certainty that he meets Bruno and Campanella in those dreadful pits.

1597: Stigliola, upon release from the prisons in Rome, publishes his work *De gli elementi meccanici*. It is believed this work was completed previous to his detention.

1600: Ordered by Clement VIII, Bruno is burned at the stake in Campo de' Fiori in Rome as an obstinate and impenitent heretic.

1595-1604

1597: Stigliola is released from prisons and his trial ceased. Returns to career as teacher, mathematician, printer, writer, topographer and architect. Publishes Ferrante Imperato's *Historia naturale*, which has been theorized as having been penned actually by Stigliola himself.

1597: Under trial, Bruno is asked to reprove his views on the plurality of worlds.

1613: Since 1593, as Naples' engineer, Stigliola completed three major projects, none of which, however, saw the light of day. First, Stigliola developed a new waterway that would clean up the city's stagnant waters; second, he planned a new Neapolitan city wall; and third, he envisioned a reconstructed city port.

1605-1614

1612: As new member of the Academy of Lynxes, Stigliola writes letter to Galileo Galilei announcing his interest in "celestial architecture." Under recommendation of Della Porta, Stigliola is elected member of Prince Cesi's Academy of Lynxes.

1616: Stigliola publishes the first two books of *Il telescopio over ispecillo celeste*. The work was to comprise six books, of which only four were completed and published posthumously by the Academy of Lynxes in 1627.

1623: Stigliola dies and is sepulchered in Naples.

1615-24

1616: Stigliola announces his intent to establish an astronomical observatory in Naples, which would "correct the celestial canons." This observatory was never constructed.

1623: Members of the Academy of Lynxes solicit Stigliola's students, including Andrea Fodio Gambara, for help in acquiring Stigliola's works in order to publish them. Fodio Gambara is recommended, as a result of this contact, by Colonna to be inducted as a member of the Academy. This was an honor never bestowed upon the Calabrian medical doctor.

1615: Stigliola announces in a letter to Cesi of the Academy of Lynxes his intent to compose the *Encyclopedia pythagorea*, a work that would deal with all facets of human knowledge: physics, math, science, geology, law, military arts, architecture, metaphysics, etc. Only one chapter, *Delle apparenze celesti*, the Index, and dedicatory epistles exist today.

1625-34



1627: The Academy of Lynxes publishes Stigliola's *Il telescopio over ispecillo celeste*.

1651: Andrea Fodio Gambara publishes *Il Camaleonte antipodagrico, discorso enciclopedico* in Naples. The medical treatise on gout is dedicated to the King of Spain, Philip IV. In this work, Fodio Gambara makes reference to another work of his own hand, which is now lost: *Triumphus Encyclopedicus de Labyrintho Hasitationum*.

[Note chronological change]

1635-54



The date of Fodio Gambara's death is unknown, but it likely took place before the 1670s.

CHAPTER III: TOWARD A METAPHOROLOGY OF BRUNO, STIGLIOLA & FODIO GAMBARA: THE EVOLUTION OF AN EPOCH

In this chapter, which is divided into numerous subsections, I study Bruno's legacy as it emerges in the works and lives of two southern Italian philosophers: 1) the "other" Nolan, Nicola Antonio Stigliola; and 2) his student, the "encyclopedic chameleon," Andrea Fodio Gambara. This work stands as a contribution to early modern studies into the history of philosophy, science and literature. Moreover, it is to my knowledge the only English-language contribution to the field of Stigliola, Fodio Gambara and Bruno studies.

As Fiorentino, Badaloni and Ricci have all pointed out, it is generally accepted that Giordano Bruno influenced Stigliola.¹⁴³ To my knowledge, however, no one has suggested Bruno's influence upon Stigliola's student, Fodio, yet there is evidence to suggest that whether cognizant or not the young Fodio sympathized, engaged and subsumed Bruno's philosophy at numerous levels, including those filtered down to him through his mentor, Stigliola. Again, neither of these authors once mentioned Bruno in their works. I am primarily interested in understanding how this triumvirate dealt with

¹⁴³ Amongst their many works in particular see F. Fiorentino, "Nicolò Antonio Stigliola e Tommaso Cornelio" in *Bernardino Telesio*, pp. 235-53 & 466-69; N. Badaloni, *Introduzione a G. B. Vico*, pp. 13-19; & "Il programma scientifico di un bruniano: Colantonio Stigliola," pp. 161-75; and for a general overview, see S. Ricci, "Due Filosofi del Regno: Giordano Bruno e Nicola Antonio Stigliola."

the ethical and metaphysical implications of a heliocentric universe. I therefore begin the discussion with this decisive rupture.

Heliocentricity gave impetus to the vast religious, philosophical and political reform that defined the sixteenth and seventeenth centuries. This is because, I argue, the Copernican universal transformation served as a metaphor that prompted man's changed perceptions of nature, himself and God. How do Bruno, Stigliola and Fodio therefore orient themselves in this new universe?

Nicola Antonio Stigliola is one of the most significant Copernican and Brunonian thinkers in early seventeenth-century Italy. After Stigliola's inaugural work, *Theriace et Mithridatia* (1577), and *De gli elementi mechanici* (1597), both his *Delle apparenze celesti*, part of the incomplete *Encyclopedia pythagorea* (1616), and *Telescopio over ispecillo celeste* (posth. 1627) reveal sympathies for Bruno's philosophy. Stigliola's student from Calabria, Andrea Fodio Gambara, carried on his mentor's legacy in his work on gout, *Il Camaleonte antipodagrigo, discorso enciclopedico* (1651). Fodio's encyclopedic treatise purports Hermetic, alchemical and philosophical remedies for physiological and spiritual imbalances. Bruno's great philosophical legacy is at the profound base of the works of these two seminal, yet understudied, thinkers.

For purposes of immediate clarity, I proceed according to the brief description provided in the three paragraphs that follow. I do not introduce Stigliola and Fodio until I have provided a metaphorological interpretation of Bruno's comprehensive philosophy, which I then link with Stigliola and Fodio. I introduce the specific ways Stigliola and Fodio addressed the implications of Bruno's *solutions to problems*, or *reoccupations of positions*, evinced through distinct metaphors in these two lesser known thinkers' works.

POINT 1) Alas, the story of Bruno's philosophy begins with Copernicus! Bruno's reading of Copernicus necessitated moral upheaval and reform, which the Nolan defines as *mutar stato*. Bruno believed that man needed to escape from the metaphoric prisons of the moribund system of morality assigned to the geo- and anthropocentric view of the universe. In order to bring about this escape, Bruno proposes that man purge his soul and the universe, which would thereby eliminate the residual effects of long-standing custom. This act of liberation from the weight of dogma granted man a new function in the infinite universe. Bruno thus offered man an alternative role in the new "moral topography" (*topografia morale*) of Copernicanism: man is to act as the Architect of the Universe, or type of magician who manipulates and controls nature in order to meet his needs. This is achieved first by tapping the universal mind (*mens universalis*), ensnaring knowledge inside the grips (*imagines agentes*) of a newly minted system of mnemonics (*ars memoriae*). Second, by commanding the composition of those very ideas and things through magic (*magia naturalis*), man was therefore empowered with the virtues needed to carry out *mutar stato*.

POINT 2) This brief synthesis of Bruno's metaphoric reading of Copernicanism is a valid argument for why he was sentenced to death. Although Bruno saw just short of forty-eight full days in the seventeenth century, his influence upon the century is ever-present. This is no more evident than in the works and life of Stigliola. In line with Bruno's declaration of the Architect of the Universe, who carried out *mutar stato*, the "other" Nolan, Stigliola, assumed the role of "Celestial Architect," whose task it was to read, design and define the heavens by tapping the fount of Mother Encyclopedia, much as Bruno tapped the fount of the *mens universalis*. In Stigliola's seventeenth-century

encyclopediae works one finds neither citation nor mention of authorial or classical figures, which therefore echoes Bruno's own freedom from authority exhibited solely in his memory treatises. As such, the "other" unabashed Copernican's life-projects bespeak the role Bruno espoused for the future man; i.e., since man must come to *reknow* nature's "moral topography" within the expanded and evermore complex universe, predecessors serve little if anything unless they have been reconstituted to serve reformed needs. In due course, Stigliola completed Bruno's dream of *mutar stato*, which the "other" Nolan labeled *mutazione nello stato delle sussistenze*.

POINT 3) Bruno's influence extended through and beyond Stigliola. The Nolan tangentially influenced Stigliola's student, the Calabrian medical doctor Andrea Fodio Gambara. Fodio claimed he wrote his treatise on gout, *Il Camaleonte antipodagrigo, discorso enciclopedico*, as an intended part of his then passed mentor's incomplete *Encyclopedia pythagorea*. That is, by assuming Stigliola's encyclopedic duty directly, Fodio subsequently inherited Bruno's proclamation for man's new role in nature. The encyclopedia, therefore, is a continued Blumenbergian *reoccupation of the position*, which stood as an enactment of Stigliolan *mutazione nello stato* and Brunonian *mutar stato*. The youngest of the triumvirate, however, displayed a glimmer of ingenious intuition in his *Il Camaleonte antipodagrigo*. That is, Fodio alluded to the great flaw in the mammoth Brunonian-Stigliolan project. Though both Bruno and Stigliola aspired to master the code inscribed upon the infinite heavens, Fodio suggested that its very infinitude exposed the project's futility. Who could possibly transcribe Mother Encyclopedia in her entirety? According to Fodio, the encyclopedic project resembled a circular "Labyrinth" (*Labirinto*) from which man was never to escape. It is perhaps

ironic, therefore, that Fodio invokes the word *Triumphus* when speaking of Encyclopedism. Like Bruno, whose dream for *mutar stato* would have culminated in the "expulsion" of the "triumphant beast," Fodio's encyclopedia "triumphed" over the "Labyrinth of Uncertainties." Bruno's revolutionary ideas also entered the specialized field of medicine. By way of Stigliola I believe that Fodio assumed a Brunonian vision toward medicine and healing in his *Camaleonte antipodagrigo*. Fodio and Bruno's contributions to medical learning, however, are historically insignificant when compared to the advancements made by thinkers such as Redi, Hooke or Harvey, yet I argue that when read as metaphors of the very reformist vision that prompted the shift to the modern age, they reveal the traumatic scission between esoterism and empiricism, animism and materialism.¹⁴⁴

METAPHORS OF THE MODERN AGE: FROM FINITE COPERNICANISM TO THE INFINITE LABYRINTH OF UNCERTAINTIES

Bruno's entire philosophic contribution, I argue, relies on a single metaphor. According to Bruno, Copernicanism served as a metaphor for necessary and impending moral revisionism. Man's acceptance of Copernicus's mathematical explanation for heliocentrism resulted in the death of the dominant opinion that the sun and stars circled around a stationary Earth. This statement is certainly obvious, but less so is how this mathematical verification provoked massive ruptures in dogma, ethics, science, man, God, nature, physics, metaphysics, and various other branches of knowledge and belief. This uncertainty, however, merely reaffirms the idea that the "Riddle of the Universe," as Oliver Reiser labeled it, will always remain unsolved (93). Although scientists today

¹⁴⁴ For an overview of important contributions in Renaissance and seventeenth-century medicine, see F. H. Garrison's *An Introduction to the History of Medicine*, pp. 193-309.

dedicate their attention to different aspects of the riddle, it is by and large accepted that the events that took place in the sixteenth and seventeenth centuries constituted a veritable transformation in the moral fabric of mankind—from the finite to the infinite, from darkness to light, from the *logos* of God to the *logos* of Nature. In order to gain access to the over-arching and universalizing principles of this transformation, one might consider reading the textual and historical metaphors of Copernicanism.

Although it was Copernicus who gave motor to the Revolution with the publication of *De revolutionibus orbium coelestium* (1543), it was Giordano Bruno who in the face of death boldly proclaimed the repercussions of this transformed universe. If one were to have to choose the Nolan philosopher's greatest contribution to thought, it would almost certainly be his position as the earliest thinker to grasp what Thomas Kuhn labeled "the significance of the Revolution's plurality" (*The Copernican Revolution* viii). That is, unlike Copernicus, Bruno stridently dealt with the controversial metaphysical and ethical implications of the changed perception of the physical constitution of the universe. While Bruno is well known for having postulated innumerable worlds and having removed the outer-edges of the universe, it is his perspicacious and shrewd solution to the humanly unanswerable "riddle of the universe" that deserves greatest historical attention. This is revealed in a paradoxical line found in the Nolan's *De la causa, principio et uno* (1584), wherein the philosopher states that following the tenets of Copernicanism it is therefore true that the "the universe is all center, and all circumference" (*DFI* 172).¹⁴⁵ This claim crippled anthropocentrism. That is, this paradoxical notion implied that man no longer occupied the *privileged* center of God's universe. To most, the destruction of the anthropocentric model threatened the very

¹⁴⁵ "l'universo è tutto centro, e tutto circonferenza."

fabric in which a complex thread of belief had been sewn. In a world without a unique and privileged center, where then are Good, Bad and Evil? Copernicus's denying Earth sole propriety of the center of the universe implied in Bruno's mind the necessity of *mutar stato*. The philosopher writes, "If we want to *mutar stato*, we must change customs" (*DFI* 509).¹⁴⁶ *Mutar stato* is to be understood as the enactment of moral upheaval and reform. Thus, Bruno's comprehensive philosophical system—indebted most directly to Copernicus—enacts this reformist sensibility. Before *mutar stato* is to take place, man must first escape the "prison" of the previous order, which is done through a purgation of custom and morality. *Mutar stato* will enable a new order in the reCOORDINATED universe.

Contrary to the great majority, Copernicanism did not inflict Bruno with any metaphysical malaise. In a universe where the moral compass no longer pointed up the ladder toward God, to Bruno Copernicanism signaled a form of spiritual and metaphysical liberation—the tenets of Ptolemy and Aristotle, therefore, the archaic and stagnant prisons of a bygone era. This sentiment, expressed through the metaphor of the prison, is ever-present in Bruno's writings. The prison metaphor underlines one of early modern Europe's most ironic twists. While the Church sentenced almost two hundred to death and barred even more in cells, it was a number of weaknesses in its own interpretation of the heavens that sparked an intellectual and spiritual mass exodus from its prisons. At the outset of *De l'infinito, universo e mondi* (1584), Bruno alludes to this exodus from the constraints of exhausted dogma:

Escaped from the narrow murky prison,

¹⁴⁶ "Se vogliamo mutar stato, cangiamo costumi."

Where for so many years error held me straightly,
 Here I leave the chain that bound me
 And the shadow of my fiercely malicious foe
 Who can force me no longer to the gloomy dusk of night.
 For he who hath overcome the great Python
 With whose blood he hath dyed the waters of the sea
 Hath put to flight the Fury that pursued me.
 To thee I turn, I soar, O my sustaining Voice;
 I render thanks to thee, my Sun, my divine Light,
 For thou hast summoned me from that horrible torture,
 Thou hast led me to a goodlier tabernacle;
 Thou hast brought healing to my bruised heart. (Singer 248)¹⁴⁷

It is the previous order—"the narrow murky prison"—from which Bruno has claimed to have escaped. The metaphor of the prison appears in the writings of other thinkers at the cusp of the seventeenth century, most notably in Tommaso Campanella's *Poesie filosofiche*. Bruno, however, believed himself to be the *first* man to have escaped from the prisons of the previous order. To a degree this is true, for it is historically certain that Bruno wrote his poem previous to Campanella's, and Bruno, unlike Campanella, was a devout Copernican at the time of the work's writing. Not only was he the first to escape, but the Nolan also claims that he was chosen by the highest of powers: the *mens sacra*. In *De immenso et innumerabilibus* (1591), one of Bruno's works written in Frankfurt, Bruno explains:

The sacred mind orders me to carry out a great, difficult and extraordinary task, while from a dark abyss it seeks to lift up the captive souls with mystical harmonies toward the beauty of the sparkling worlds [...]. (*OLC* II.2.1 *De immenso* 206)¹⁴⁸

¹⁴⁷ "Uscito de priggione angusta e nera, / ove tant'anni error stretto m'avinse, / qua lascio la catena, che mi cinse / la man di mia nemica invid'e fera. / Presentarmi a la notte fosca sera / oltre non mi potrà: perché chi vinse / il gran Piton, e del suo sangue tinse / l'acqui del mar, ha spinta mia Megera. / A te mi volgo e assorgo, alma mia voce; / ti ringrazio, mio sol, mia diva luce; / ti consacro il mio cor, eccelsa mano: / che m'avocaste da quel graffio atroce, / ch'a miglior stanze a me ti festi duce, / ch'il cor attrito mi rendeste sano" (*DFI* 321).

¹⁴⁸ "Mens me sacra jubet, coeca dum tendit abyssus / Captivos animos sacris numeris in amoenum / Abducere aspectum circum sublime micantum."

Bruno's duty, therefore, is to lead the "captive souls" out of the abyss of moral decrepitude toward spiritual and metaphysical liberation. Bruno repeats this bold declaration throughout his works, but most evidently in *De l'infinito, universo e mondi*. Therein Bruno nominates himself the human portent of infinitism whose duty on Earth is to act as the "new light who after a long night rises at the horizon and hemisphere of our cognition, and slowly approaches the meridian of our intelligence" (*DFI* 423).¹⁴⁹ Bruno not only plans to usher his fellow man out of the prison of the previous order, but also shine "new light," or knowledge, upon him. In sum, Bruno's evocation of the metaphor of the prison underlines the ubiquitous tensions that were mounting in an era on the verge of moral upheaval and reform.

Assigned to such a task, how then does Bruno propose that the other "captive souls" escape from this prison? The Nolan's most profound meditation on this topic is his *Spaccio de la bestia trionfante* (1584). In this work Bruno brings about the first inklings of the effectuation of the philosophical concept of *mutar stato*. At its core and in relation to Bruno's other work, the *Spaccio de la bestia trionfante* is to be read as a treatise on the ethical reconstitution of the heavens and the dismantlement of the "triumphant beast" of custom. This *Expulsion of the Triumphant Beast*, as the title translates, is achieved by purging the soul of its errant ways:

Then is expelled the triumphant beast, that is, the vices which predominate and are wont to tread upon the divine side; the mind is repurged of errors and becomes adorned with virtues, because of love of beauty, which is seen in goodness and natural justice, and because of desire for pleasure, consequent from her fruits, and because of hatred and fear of the contrary deformity and displeasure. (Imerti 80)¹⁵⁰

¹⁴⁹ "uomo eteroclitico," "nuovo lume che dopo lunga notte spunta all'orizzonte et emisfero della nostra cognizione, et a poco s'avicina al meridiano della nostra intelligenza."

This act of purgation, akin to iconoclasm, extricates the soul from its errant moral order. In order to free one's self, Bruno argues that it is first necessary to eradicate the soul of the statues, constellations, divinities, images, and histories there inscribed, which are themselves metaphorically mirrored in the heavens of a geocentric perception of the universe. He writes:

Come now, come now, oh gods! Let there be expelled from the heaven these ghosts, statues, figures, images, portraits, recitations, and histories of our avarice, lusts, thefts, disdains, spites, and shames. May there pass, may there pass this black and gloomy night of our errors; for the dawn of the new day of Justice invites us. (Imerti 115) ¹⁵¹

Mutar stato, which brings about the metaphoric "new day of Justice," is possible because the transformation of the heavens, as Bruno states, takes place first intellectually inside of man and second externally. As such, the heavens are accessible because they are within us:

And let us prepare ourselves, in such a manner, for the sun that is about to rise, so that it will not disclose how impure we are. We must cleanse and make ourselves beautiful; it will be necessary that not only we but also our rooms and our roofs be spotless and clean. We must purify ourselves internally and externally. Let us prepare ourselves, I say, first in the heaven which intellectually is within us, and then in this sensible one which corporeally presents itself before our eyes. (Imerti 115) ¹⁵²

¹⁵⁰ "All'ora si dà spaccio a la bestia trionfante, cioè a gli vizii che predominano, e sogliono conculcar la parte divina; si ripurga l'animo da errori, e viene a farsi ornato de virtudi: e per amor della bellezza che si vede nella bontà e giustizia naturale, e per desio de la voluttà conseguente da frutti di quella, e per odio e téma de la contraria difformitade e dispiacere" (*DFI* 470).

¹⁵¹ "Su su (o Dei) tolgansi dal cielo queste larve, statue, figure, imagini, ritratti, processi et istorie de nostre avarizie, libidini, furti, sdegni, dispetti, et onde: che passe, che passe questa notte atra e fosca di nostri errori, perché la vaga aurora del novo giorno della giustizia ne invita" (*DFI* 508).

¹⁵² "e disponiamoci di maniera tale al sole ch'è per uscire, che non ne discuopra cossì come siamo immondi. Bisogna mondare e renderci belli non solamente noi: ma anco le nostre stanze e gli nostri tetti fia mestiero che sieno puliti e netti; doviamo interiore et esteriormente ripurgarci. Disponiamoci (dico) prima nel cielo che intelletualmente è dentro di noi, e poi in questo sensibile che corporalmente si presenta a gli occhi" (*DFI* 508).

Eradicating oneself of the falsities ascribed to the heavens, as Bruno maintains, is an act of both internal/intellectual purgation and external/corporal purgation. Once this task of purgation is complete, man may then reassign the heavens new gods, images and icons, all of which befit the criteria of a newly established moral code adherent to the infinitude of the Copernican view of the universe. In the *Spaccio de la bestia trionfante* Bruno calls this attribution of a new morality to the heavens, "the universal architecture," which "will be completely achieved," by means of his comprehensive philosophy.¹⁵³

How will Bruno's notion of "universal architecture" allow man to achieve a fulfilled *mutar stato*?¹⁵⁴ What role then does man assume in the universe? The answer to these questions is initially found in Bruno's early defense of Copernican cosmology, *La cena de le ceneri* (1584). On the frontispiece the Nolan philosopher attributes to the work what he terms a "*universale intenzione*" (DFI 5). In my reading, this is the redefinition of the moral topography of the universe. In the proem of the dialogue Bruno states that "we shall draw appropriate topographies of a geographical, ratiocinative and moral order, and then make speculations of a metaphysical, mathematical and natural order."¹⁵⁵ That is, Bruno brings to the work's metaphoric table diverse topographical readings of the universe. Bruno's concept of "universal architecture," therefore, is best

¹⁵³ "l'universal architettura," "verrà pienamente compita" (DFI 465).

¹⁵⁴ In the *Sidereus nuncius* (1610) Galileo enacts a brand of Brunonian "universal architecture". In the prefatory epistle to Cosimo II, Galileo announces that not only has he identified, with the help of the telescope, many new stars and celestial bodies, but he has also taken the liberty to identify and ascribe propriety of four of Jupiter's moons to the venerable Tuscan Medicean family. Galileo, therefore, appears to have taken a first step toward actualized "universal architecture." I propose that an interesting paper would examine the similarities between Galileo's terse work and Bruno's *Spaccio de la bestia trionfante*.

¹⁵⁵ "si tirano a proposito topografie, altre geografice, altre raziocinali, altre morali; speculazioni ancora, altre metafisiche, altre matematiche, altre naturali" (DFI 10).

understood as the process of detailing and outlining the contours and undulations of what Bruno labels the universe's "moral topography":

[...] moral topography, so that it seems that, looking here and there at everything with Lynceus' eyes, and not stopping too much along his walk, he contemplates the great structures [of the universe] while, at the same time, he stumbles over every bit of stone, every pebble. In doing this, he acts just like a painter for whom it is not enough simply to portray a story, but then, in order to fill up the canvas and to bring his picture into conformity with nature through his art, he also paints stones, mountains, trees, fountains, rivers, and hills; here he shows a royal palace, there a forest, here a stretch of sky, and inn that corner the half disk of the rising sun, and one by one a bird, a pig, a deer, and ass, a horse. (Gosselin & Lerner 69)¹⁵⁶

Bruno is effectively calling for man to assume the role of what I will here call, utilizing Bruno's own language, the Architect of the Universe. That is, it is the Architect's role to act as a Painter and see through the razor-sharp eyes of Lynceus, moving beyond mere contemplation of the "great structures" toward an identification and assignment of a new celestial moral topography to the heavens: i.e., "universal architecture."¹⁵⁷ To do this man would need to learn how to actualize his new role in nature. Accordingly, Bruno presents structural guidelines for "universal architecture." To begin, the Architect of the Universe is to act much like a magus. In order to carry out acts of divination, Bruno asks that man conform himself "with nature through his art," which is the adherence to

¹⁵⁶ "[...] topografia morale: dove par che con gli occhi di Linceo quinci e quindi guardando (non troppo fermandosi) cosa per cosa, mentre fa il suo cammino, oltre che contempla le gran machine, mi par che non sia minuzzaria, né petruccia, né sassetto, che non vi vada ad intoppare. Et in ciò fa giusto come un pittore; al qual non basta far il semplice ritratto de l'istoria: ma anco, per empir il quadro, e conformarsi con l'arte a la natura, vi depinge de le pietre, di monti, de gli arbori, di founti, di fiumi, di colline; e vi fa veder qua un regio palaggio, ivi una selva, là un straccio di cielo, in quel canto un mezzo sol che nasce, e da passo in passo un ucello, un porco, un cervio, un asino, un cavallo" (*DFI* 11).

¹⁵⁷ It is ironic and perhaps not incidental that Cesi's Academy of Lynxes, or Lyncean Academy, carries this very name.

nature's rules and principles.¹⁵⁸ Bruno richly describes this process in numerous works, most specifically, however, in his memory treatises and works on magic. This process is achieved: 1) by observing nature's laws, thereby identifying principles and axioms; and 2) using this knowledge acquired through observation of nature in an effort to attain *mutar stato*, moral upheaval and reform. In Bruno's *De principiis rerum et elementis et cavis* (1590), one of the author's most succinct, yet illuminating, treatises on magic, the philosopher provides an example of this process. The magus must first identify seven qualities of light:

Light is (1) spiritual substance, (2) insensible itself, (3) it makes itself visible, however, through humid substance, (4) it communicates and extends itself all over, (5) is latent in dry nature, (6) explicates and makes itself sensible in a humid substratum, (7) vehicle of species or rather of images, is equally vehicle of the active qualities, in which is placed a principle capable of being altered or mutated profoundly. (*OLC* III.5 512-13)¹⁵⁹

Bruno argues that since God in *Genesis* first created light and then all other things in the universe, so must man first come to know the principles of light in order to carry out marvelous acts of divination:

The same way in which God, according to Moses, in whose words is most certainly hidden a profound and great mystery, created light and after light created all other things that come after the spirit and water, or the abyss and the heavens, no differently one who proposes to do marvelous works in nature will have to contemplate the virtues of light and observe them all almost as if they were the model to which to conform one's own action and following will thus have to manifest them in the external world and

¹⁵⁸ Bruno explores these themes, hermetic in nature, in *De la causa, principio et uno* (1584), *Cantus Circaeus ad memoriae praxim ordinatus* (1582), and *Explicatio triginta sigillorum et Sigilli sigillorum* (1583).

¹⁵⁹ "Lux est (1) substantia spiritualis, (2) insensibilis per se, (3) sensibilis vero per substantiam humidam, (4) totam se communicans et diffundens, (5) in natura sicca latens, (6) in humido explicabilis et sensibilis, (7) vehiculum specierum seu imaginum, item qualitatem activarum, in quibus est principium alterativum et immutativum."

produce its operations. Magicians, or incantators, observe this principle strictly. (*OLC* III.5 515-16)¹⁶⁰

In this passage Bruno suggests that man in the infinite universe not only seek to uncover the occult in nature, but also categorize and systemize his knowledge of things in order to transform both the substantive and ethereal in nature.

This same sort of systemization and categorization Bruno demonstrates in his treatises on the art of memory. In these works, such as *De umbris idearum* (1582) and *Cantus circaeus* (1582), Bruno propounds a complex system of mnemonics through which man taps the *mens universalis*, thereby ensnaring within the circular wheels of his imagination the omnipresent categories of natural things. Bruno's circular memory wheels gave impetus to the seventeenth-century's omni-present Encyclopedism. That is, the *enkyklios* (coronal) *paideia* (education) that is the encyclopedia mirrors the very circular wheels that facilitate memory and other powerful faculties of the mind. Like Mother Encyclopedia, coronal fount from which innumerable seventeenth-century encyclopedists claimed to have imbibed, Bruno's *ars memoriae* tapped the newly revealed script written in the book of nature, allowing not only the human mind ascension toward divine and universal knowledge, but also the possession of that very knowledge. Bruno's philosophy thus stands at the fore of modern Encyclopedism, a current that finds definite home in Nicola Antonio Stigliola.

From Giordano Bruno to Nicola Antonio Stigliola: Similar Problems, Similar Metaphors,
Different Reoccupations of Positions

¹⁶⁰ "Ut Deus non sine magno latente arcano, quo dicitur a Moise produxisse lucem omnia quae sunt post spiritum et aquam, seu abyssum atque caelum, ita et omnis qui mirabilia in natura vult perficere, virtutes lucis ut pro modulo contemplabitur et observabit, ita et opera sua in apertum producit. Observant hoc maxime magi, unde incantantes."

Bruno's announcement of man's new role as Architect of the Universe destined to ascribe the infinite heavens a new moral topography reverberated across seventeenth-century Italy and Europe. No one thinker, however, appears to have more clearly inherited this Brunonian legacy than his Nolan compatriot, contemporary, and well known Copernican, Nicola Antonio Stigliola.¹⁶¹ One is inclined to believe that while it is apparent that Stigliola read Bruno's works, it is also likely that the two met—apart from their youthful days in Nola—on numerous occasions in Naples before Bruno's hasty departure for Rome from San Domenico Maggiore in 1576. Moreover, one presumes the two Nolans shared long-hours in the cells of the Holy Office in Rome between the years 1595-97. Apart from these speculations, historians have found textual evidence of Bruno's influence on Stigliola. One of Italy's finest intellectual historians, Saverio Ricci, points to what he claims are obvious traces of Bruno's thought in Stigliola's work. Ricci notes echoes of Bruno's *De la causa, principio et uno* and *Dell'infinito, universo et mondi* in Stigliola, stating that the end result is a "derivation completed by means of a rewriting in systematic terms—and on an encyclopedic platform—obviously extraneous to Bruno's approach" (Ricci, 1996: 54; 1990: 81).¹⁶² How does one, however, define Stigliola's thought if aspects of it are derived from Bruno, yet it utilized an approach entirely extraneous to Bruno? In the abstract written by an unknown source presenting Ricci's study, it is stated that "[a] friend to both Bruno and Campanella, an intent, inquisitive inquirer of nature and the universe, Stigliola compounded the systems of the two major

¹⁶¹ It is interesting to note that Tommaso Cornelio in his *Progymnasmata physica*, Venetiis, Typis Haeredum Fran. Baba, 1663, has "Brunus" and "Stelliola," along with an unidentified "Trusianus," as the work's three interlocutors. The link between the two Nolans, therefore, appears to have been well known in seventeenth-century Italy. See appendix: Fig. 2.

¹⁶² "derivazione compiuta attraverso una riscrittura in termini sistematici – e su uno sfondo enciclopedico – ovviamente estraneo all'approccio di Bruno."

metaphysical thinkers in a syncretic way, though with a few blemishes and some hesitation" (Ricci, 1996: 7). Nicola Badaloni also presents, though without direct intentions, Stigliola as a syncretistic thinker. Badaloni describes Stigliola as a "delicate historical node at this moment of crisis and passage" (*Vico* 13).¹⁶³ Badaloni opens his study, *Introduzione a G. B. Vico*, with a discussion of the rise of a new science in Naples. He marks a shift from the "unifying tendency" of the late sixteenth century to an early seventeenth-century interest that "intends to programmatically avoid a mental conscience" (*Vico* 13).¹⁶⁴ No surprise that Badaloni chose Bruno as his model of late sixteenth-century thought, and cued a neat shift into the seventeenth century by introducing the thought of Stigliola, particularly his philosophical system as propounded in the treatise, *Delle apparenze celesti* (1616).

In all of Stigliola's post-prison writings—not including *De gli elementi mechanici*, which he wrote before his incarceration and published shortly after his release—are found palpable textual and conceptual traces of Bruno. Although in his works the "other" Nolan does not refer to his compatriot, Stigliola built his comprehensive philosophy utilizing Bruno's philosophical vocabulary. For example, Stigliola speaks of "the unity of the first being," "The substances in an infinite number," the "infinite plurality," "the images and the shadows," "the minimum," "the infinity of appearances," "diurnal revolution," "the immense," "the universal reason of the effects," and "the vital principle" (*DC* 90; 90; 90; 93; 92; 94; 100; 100; 114; 104). Although Stigliola borrowed a great deal from Bruno, I do not wish to undermine Stigliola's originality and brilliance. I

¹⁶³ "delicato nodo storico di questo momento di crisi e di passaggio"

¹⁶⁴ "tendenza unificante," "intende evitare programmaticamente una coscienza mentale"

instead wish to discuss in the subsequent pages Stigliola's own ideas, use, and interpretation of key advancements in the sciences, many of which played integral roles in the advancement of the modern age. As I hope to show, Stigliola often dwarfs Bruno's genius.

Nicola Antonio Stigliola inherited Bruno's legacy in the following ways: 1) Not only did Stigliola believe Copernicus's theory, but he also accepted the implications of it as announced in Bruno's works, such as infinity, monadism, and earthly diurnal rotation; 2) The "other" Nolan argued in his works (those written after his time spent in the prisons with Bruno) that there was a necessity to understand and enact what he labeled *mutatione nello stato*, an apparent response to Bruno's call to *mutar stato*; 3) As a *reoccupation of the position* held by Bruno's *ars memoriae*, Stigliola resurrected the ancient Mother Encyclopedia as a means to reorganize knowledge systems and restructure the heavens; and 4) Stigliola thought of himself as a "celestial architect," set out to "correct the celestial canons." To close, unlike Bruno, Stigliola is not a Janus figure. He is, instead, a metaphor of the modern age.

Implications of the Copernican Metaphor of the Universe: Brunonian *Mutar stato* & Stigliolan *Mutatione nello stato*

Brunonian *mutar stato* was not at all alien to Stigliola. Tommaso Campanella confessed to the judges in 1599 that after conferring with "diverse Astrologers," including "Nicola Antonio Stigliola, great mathematician," he came to the realization that "there needed to be *mutatione di stato*" (Amabile *Fra' Tommaso Campanella* 28).¹⁶⁵ Like his misfortunate compatriot, Giordano Bruno, Stigliola appears—at least in

¹⁶⁵ "diversi Astrologi," "Colantonio Stilliola, gran mathematico," "ci doveva essere *mutatione di stato*." My emphasis.

Campanella's mind—one of the dream's most ardent supporters and certainly one of its most infectious promulgators.¹⁶⁶ As such, Bruno's metaphoric reading of the reconstituted heavens, which prompted the necessity for *mutar stato*, finds home and enjoys vibrant success in the figure of Stigliola. Not only does the Lyncean Nolan often use the very term throughout his works, but more important his life and works are a metaphoric enactment of this reformist sensibility. Stigliola is Bruno's greatest disciple.

What exactly is *mutar stato*? As I explained previously with regard to Giordano Bruno, *mutar stato* is to be understood as moral upheaval and reform. I provided this succinct definition for purposes of clarity, yet I now wish to probe the matter more deeply. John Headley has interpreted Campanella's use of the term *mutazione di stato* as a form of "transformation."¹⁶⁷ According to Headley, Campanella sought to transform the then state of things, resulting in an empire-like Christianization of the world. In this light, Campanella's noun *mutazione* signifies "transformation."¹⁶⁸ Bruno uses the same concept in his *Spaccio de la bestia trionfante*. Bruno's verb *mutar*, therefore, signifies "to transform." Conversely, if rendered in literal English, *mutazione* would mean mutation. This, however, errantly calls to the modern reader's mind the idea of genetic mutation and the chaos of life—Bruno had a distinct purpose and goal, and nowhere would his *mutar stato* be accidental. Within the term *mutazione*, however, lies the notion of mutability.

¹⁶⁶ In *Compendio di filosofia della natura (Physiologiae compendium)*, an encyclopedic work, published likely around 1613, as Amabile, Ernst, Firpo and Ponzio agree, Campanella appears to have meditated deeply on the significance of *mutazione di stato*. Chapter XIV is a 14 point explanation of *De mutatione eiusque speciebus*. For example, for point 3 Campanella writes, "Mutatio de non ente simpliciter ad ens dicitur creatio; de ente ad nihilum dicitur annihilatio." Following this line of thinking, he who effectuates *mutazione di stato* is akin to God, the ultimate Creator. See pp. 72-76.

¹⁶⁷ See *Tommaso Campanella and the Transformation of the World*.

¹⁶⁸ In my count, Bruno uses the noun *mutazione* 44 times and its abbreviated form, *mutazion*, 9 in his Italian works. In his Latin works the noun *mutazione* appears 17 times. The plural forms, *mutationi* and *mutazioni*, appear 11 times in the *opera omnia*.

That is, the possibility of one to enact and perform acts of *mutazione* upon other things. Things, therefore, are mutable. The object *stato* of the verb *mutar*, which Bruno employs in his *Spaccio de la bestia trionfante*, is significant because it calls to mind the condition or position of a *static* thing. That is, *stato* is the way a thing is found to be—unchanged. *Stato* is bereft of movement or change, whereas *mutar* signals the enactment of alteration or change upon a static thing.

In this light, Bruno's philosophical purpose—derived from Copernicus—was to effectuate a complete *mutar stato*. That is, Bruno sought to transform the world as it related to man, first by expelling old customs and the errant ways of man, and second by ushering in a new set of ethics that would guide man in the infinite universe. Apart from Bruno's metaphysics and mnemonics, *mutar stato* is, I believe, the most religiously/spiritually significant aspect of the Nolan's entire philosophical system.¹⁶⁹ *Mutar stato* aimed to reorder morality. Using Blumenbergian terminology, *mutar stato* was a proposed method that was to have led to the eventual *reoccupation of the position* of the all-encompassing myth that was dominant Hebrew-Christian eschatology.

Anyone who encountered Bruno, as Stigliola with near certainty did, with great probability would have discussed *mutar stato*, either siding with the Nolan or taking a stand against him. In his Nolan counterpart, Stigliola, with whom he passed two years in Rome, Bruno found an intellectual sympathizer. Unlike Bruno who merely called for the arrival of *mutar stato*, which might very well be understood as the philosophical bedrock

¹⁶⁹ A. Koyré argues the same for Galileo. In his article "Galileo and Plato" he states that the "name of Galileo Galilei is indissolubly linked with the scientific revolution of the sixteenth century, one of the profoundest, if not the most profound, revolution of human thought since the invention of the Cosmos by Greek thought: a revolution which implies a radical intellectual 'mutation,' of which modern physical science is at once the expression and the fruit" (400).

upon which rose the modern age, the Index of Stigliola's *Encyclopedia pythagorea* and the work's only surviving chapter, *Delle apparenze celesti*, effectuate a proper Stigliolan form of universal *mutatione*. As I mentioned just a few paragraphs above, Stigliola appears to have been one of the concept's most fearless promulgators. At the outset of *Delle apparenze celesti* Stigliola details the intention of the work. In short, Stigliola aspires to a "knowledge of the structure of the world," which would not have been necessary had he accepted the tenets of Ptolemy and Aristotle. It is, however, only in later passages and in the comprehensiveness of the encyclopedic project that Stigliola's readers come to understand how the Nolan Lyncean brings about *mutar stato*. That is, as I will show, Stigliola's life and works are not only enactments of a Brunonian reformist sensibility, but also newly proposed solutions to problems. To begin his work, Stigliola writes:

Proposition of the Work

Chapter I.

In the following work on celestial appearances, according to observations taken by our senses, we explore the argument of things [...] placed in evidence; and that which in appearances happens by the sensed form on its own; and that which happens through the observer; and that which comes forth by the means for whom is made the communication of the two competing virtues in the observed image and how for some reason it can comprehend if the apparent movement is produced either because of the movement of the form or because of the movement of the viewer. Which part of the speculation being generally of great benefit in the knowledge of things placed far away and in the argumentation regarding their positions and distances in respect to the viewer, and amongst itself, it alone is of great necessity in the knowledge of the structure of the world. It is to this that the following study is dedicated. (DC 89)¹⁷⁰

¹⁷⁰ "Propositione dell'opera. / Capo I. / Cerchiamo nella speculatione presente dell'apparenze celesti come per osservationi apprese da nostri sensi si habbia argomento dell'esser sussistente delle cose poste in rimosso; e quel che nell'apparenze avvenga dagl'accidenti proprii della forma sensibile appresa; e quel che avvenga dagl'accidenti proprii del sensitivo apprendente; e quel che avvenga del mezzo per chi si fa la comunicanza delle due virtù concorrenti nell'immagine appresa e come per certa ragione possa

As a Copernican, Stigliola is concerned with coming to *reknow* the appearances of occurrences in nature, particularly celestial ones, leading to "knowledge of the structure of the world." This is because the coordinates of the previous universal-view no longer served to explain celestial phenomena. After having explained the intent of his work—which, being very short, I believe does not do justice to the breadth of the work's full intention—, Stigliola discusses the "Apparent *mutationi* in the celestial zone." Stigliola's abundant use of the word *mutatione* in both noun and verb forms emphasizes not only the term's importance in Stigliola's philosophical vocabulary, but also grants insight into its significance. Stigliola evokes the term with great frequency because he is particularly intrigued about how *mutationi* take place in the celestial zone. Stigliola believes that if he is able to understand the divine process of celestial transformation he will then be able to emulate and apply this formula upon himself and the world around him. Stigliola's work, therefore, is an exploration into the natural principles of *mutationi*. To clarify, I have provided the following example. In Chapter 2, which, like all others, is incredibly succinct and dense, Stigliola repeats the term in the effort to explain its significance:

Apparent *mutationi* in the celestial zone

Chapter II.

Being such in the proposed subject, it is worthwhile first to make a distinct observation about how the celestial appearances bring about *mutatione* and how they do not bring about *mutatione*; and which of the apparent *mutationi* arise in a short period of time: I mean in the quantity of hours and days; and which arise in a greater period of time, one or more years; including those which arise in the period of centuries. It is therefore

discernersi se'l movimento apparente sia del transferimento della forma o sia dal transferimento del visivo. Qual parte di speculatione essendo generalmente di molto beneficio nell'intelligenza delle cose poste in rimosso e nell'argumentatione delle loro positioni e distanze in rispetto del visivo, e tra di sé, ha singolarmente molta necessità nella coscienza della struttura mondana: al che noi indirizziamo la proposta investigatione."

worthwhile in regard to what has been said to consider if the appearances *si mutino* in respect to our earth or if they *mutino* in respect to the sublime external universality, being that we find other celestial positions to be stable and not *mutate* in the ambient external universality, and *mutate* in respect to the earthy location, and others not *mutate* in respect to the earthy location and *mutate* in the ambient external universality. (DC 89)¹⁷¹

In all of the above uses of *mutatione* Stigliola focuses on the *how* of these apparent celestial transformations. Stigliola's point of departure is one of understanding the motives and reasons by which transformations take place in the universe, which, he later argues, explain the transformations that take place at the very local level, such as terrestrial winds, tides and rains. To contrast the local, Stigliola's "sublime external universality," similar to Bruno's all-encompassing *Uno*, and Copernicus's "beautiful" universe, stands as the all-encompassing referent. Stigliola's distinction between the multiplicity of things and the "sublime external universality" is not at all unlike Bruno's paradoxical distinction between Monadism and Infinitism.

Stigliola's interest in learning how *mutationi* take place in nature has the purpose of providing knowledge of how he, in similar fashion to the Brunonian magus, might carry out *mutationi*. Like Bruno's magus who studies the occult laws of nature in order to execute miraculous acts, Stigliola studies the principles of natural *mutationi* in the hope of learning how to imitate those very processes. In order to come to understand apparent transformations in nature, Stigliola is faced with a very Brunonian question: How does

¹⁷¹ "*Mutationi* apparenti nella circostanza celeste / Capo II. / Stando perciò nel soggetto proposto, è spedito primo di far distinta osservanza in che l'apparenze celesti facciano *mutatione* et in che non facciano *mutatione*; e quali delle *mutationi* apparenti avvengano in breve intervallo di tempo: dico nelle quantità horarie e diurne; e quali avvengano nell'intervallo maggiore di uno o più anni; e quello che nell'intervallo lungo de' secoli. Sovviene a quel che si è detto di far consideratione se l'apparenze *si mutino* in rispetti dell'habitation nostra terrena o se *mutino* in rispetto dell'università esterna sublime, sendo che altre positioni celesti ritroviamo esser stabili e non *mutate* nell'università esterna ambiente, e *mutate* in rispetto dell'habitatione terrena, et altre non *mutate* in rispetto dell'habitation terrena e *mutate* nell'università esterna ambiente." My emphasis.

the *Uno*—singular, immutable and sovereign—generate a plurality of substances? In other terms, how is a multiplicity the product of an indivisible singularity? As the passage below shows, Stigliola's dense and nearly incomprehensible language (two sentences that amount to over 225 words!) all but hides the Lyncean philosopher's Brunonian intellectual foundation. Therein are found key Brunonian concepts (nature, art & *mutazione nello stato*) that describe how it is possible to first understand and second act out transformations in nature. Stigliola writes:

On the generated and the unchanged of the unity-being and of the generation of the plurality of substance

Chapter V

And proceeding in agreement and dependence from one type to another it is worthwhile to consider that since the one being of things in itself, indifferent and free from the external happenings of the corporality, time and place, and by consequence unable to be understood by the senses, while the aforementioned essence is applied to the corporality, time and place, that in the substance a plurality of subjects arises to the sense understandings; from which comes the principle of the substance that in respect to the being is like the receptive wax and [the] clay of the multiplicity of impressions of the type, and that those impressions take themselves differently by figuration resulting from the external [measures] of art and by figuration resulting from the internal nature—of which the two effects will show the distinct reasons to themselves in the sequence. And if to the possibility of the application is granted the possibility of the separation and to the increment and the decrement the possibility is equal to the one as to the other of the opposite conditions, we have consequently the perpetual *mutazione nello stato* of all the substances and diverse others with birth and growth; remaining the immutability in the single unity of the essence, I say that the being of the unaltered circle in its own unity in the operations of nature and of art in different times and places takes the variety of substances and the differences in the extension of how much, remaining in all the singular substances indifferently the essence of the circle and in the essence of the circle indifferently contained the multitude of the substances. (DC 91)¹⁷²

¹⁷² "Dell'ingenito et immutato dell'unità essente e della generatione della pluralità sussistente. / Capo V. / E procedendo nella concordanza e dipendenza d'un geno dall'altro sovviene da considerarsi che stando l'essenza delle cose una in se stessa, indifferente e libera dagli accadenti esterni della corporeità tempo e luogo e per conseguenza inapprendibile al senso, mentre detta essenza venga applicata a corporeità

Stigliola believes that the "perpetual *mutatione nello stato* of all the substances" is a quality of the single unity in which are found the innumerable objects in nature. The immutable unity is not threatened by the perpetual transformation of objects in nature. Since God—eternal and infinite—set all *mutationi* in action, they will never cease nor disappear. This perpetuality of *mutationi* is a concept that first appears in Bruno's *De l'infinito, universo e mondi*. In this work Bruno does away with any fear of the possible annihilation of matter, which presumably would result from perpetual transformations. Later one finds that Newton and Lavoisier spent nearly endless hours of life speculating about the conservation and continuous mutation of energy and matter. In the passage that follows Bruno addresses this issue:

These are the doubts and motives whose solution involveth only so much doctrine as will suffice to lay bare the intimate and radical errors of the current philosophy, and the weight and force of our own. Here is the reason wherefore we must not fear that any object may disappear, or any particle veritably melt away or dissolve in space or suffer dismemberment by annihilation. Here is the reason of the constant change [i.e., *mutazion vicissitudinale del tutto*] of all things, so that there existeth no evil beyond escape, nor good which is unattainable, since throughout infinite space and throughout endless change [i.e., *la perpetua mutazione*] all substance remaineth one and the same. (Singer 243).¹⁷³

tempo e luogo, che nella sussistenza pigli pluralità soggetta diversamente all'apprensioni sensibili; dal che ne viene il principio di sussistenza che in rispetto dell'essente è come la cera e l'argilla ricettrici delle molteplici impressioni del typo, e che dette impressioni si pigliano diversamente per figurazione avvegnente dall'esterno dell'arte e per figurazione avvegnente dall'interno di natura—delli quali due effetti se ne mostreranno nella sequenza le distinte ragioni. E se alla possibilità dell'applicazione è conseguente la possibilità della separatione et all'incremento il decremento, e la possibilità è di pari all'una che all'altra delle conditioni opposte, habbiamo di conseguenza la perpetua mutatione nello stato delle sussistenze tutte e le altre alterità con il nascimento et interito; restando l'immutabilità nella sola unità dell'essenza, dico che l'esser del circolo inalterato nell'unità sua piglia nell'operationi della natura e dell'arte in diversi tempi e luoghi la varietà di sussistenza e le differenze nell'estensione del quanto, restando ciò nelle sussistenze tutte singolari indifferentemente l'essenza del circolo e nell'essenza del circolo indifferentemente contenuta la moltitudine delle sussistenze."

¹⁷³ "Questi son que' dubbii e motivi, nella soluzione delli quali consiste tanta dottrina quanta sola basta a scuoprir gl'intimi e radicali errori de la filosofia volgare, et il pondo e momento de la nostra. Ecco qua la ragionee per cui non doviamo temere che cosa alcuna diffuisca, che particolar veruno o si disperda, o veramente inanisca, o si diffonda in vacuo che lo dismembre in adnihilazione. Ecco la ragione

It thus follows, Bruno believes, that anyone who sets out to attain knowledge of the workings of the infinite universe will be greeted by the friendly and supportive hand of God. This is because all things, no matter how far away nor how esoteric, are written in God's script and legible by man. Knowledge of the *perpetua mutazione* of things, like the flickering of stars and the diurnal revolution of Earth, grants the Brunonian initiate the ability to comprehend things greater than himself, such as the "story of nature" and the "divine laws" inscribed in matter and "engraved upon our hearts." With this knowledge man will be able to soar toward a higher state of moral cognition:

From these reflections, if we apply ourselves attentively, we shall see that no strange happening can be dismissed by grief or by fear, and no good fortune can be advanced by pleasure or by hope. Whereby we find the true path to morality; we will be high minded, despising that which is esteemed by childish minds; and we shall certainly become greater than those whom the blind public doth adore, for we shall attain to true contemplation of the story of nature which is inscribed within ourselves, and we shall follow the divine laws which are engraved upon our hearts. We shall recognize that there is no distinction between flight from here to heaven and from heaven hither, nor between ascent from there hither and from here to there; nor yet it there descent between one and the other. (Singer 243-44)¹⁷⁴

Bruno's goal is clear. His wish of a complete transformation of the universe by means of *mutar stato*, which takes places intellectually inside of man, shall occur once man has come to understand the guiding and restrictive principles of nature.

della mutazion vicissitudinale del tutto; per cui cosa non è di male da cui non s'esca, cosa non è di buono a cui non s'incorra: mentre per l'infinito campo, per la perpetua mutazione, tutta la sostanza persevera medesima et una" (*DFI* 315).

¹⁷⁴ "Dalla qual contemplazione (se vi saremo attenti) avverrà che nullo strano accidente ne dismetta per doglia o timore, e nessuna fortuna per piacere o speranza ne estoglia: onde aremo la via vera alla vera moralità, saremo magnanimi, spreggiatori di quel che fanciulleschi pensieri stimano, e verremo certamente più grandi che que' dèi che il cieco volgo adora, perché dovereremo veri contemplatori dell'istoria de la natura, la quale è scritta in noi medesimi, e regolati executori delle divine leggi che nel centro del nostro core son inscolpite. Conosceremo che non è altro volare da qua al cielo, che dal cielo qua, che da qua là: né è altro descendere da l'uno e l'altro termine" (*DFI* 315).

How does Stigliola believe that *mutatione* works? Is it similar to Bruno's belief? What are, according to Stigliola, its constituent parts and how might the modern magus effectuate them? According to Bruno and Stigliola the universe functions according to the principles of "nature" and "art"; the former brings about a transformation from the interior of an object, and the latter from the exterior. Derived from Bruno's metaphysics, this notion upholds that the divine laws are immutable and hence reflective of the Stigliolan and Brunonian concept of "unity." Art, conversely, is the force that transforms the material of nature. Nature has no form without art, and art does not act without a subject, which is to be understood as matter. Stigliola expounds these views in his *Delle apparenze celesti*, a lengthy encyclopedia entry dealing with philosophic, astronomic, scientific and ethical speculation about nature and the universe. This work, *On the Celestial Appearances*, brings forth questions of relativity—the relationship between the observer and the observed—which were later explored by thinkers such as Galileo Galilei in his *Discorsi*, Christian Huygens in his *De motu corporum* and Isaac Newton in his *Principia*. In addition and with greater success, it also examines the nature of tides, minerals, elements, stars, winds, rains, animals, gravity and diurnal motion.

In order to control the forces, or at least come to understand them, Stigliola believed that he must first estrange himself from a previous faith in sensory experience, ultimately reevaluating sensory function and its relationship with nature. In this way Stigliola enacted a Brunonian brand of the purgation of his spirit of the errant ways of the previous order; "sight" in the Renaissance world-view referred to a distinct concept of space and time, whereas "sight" in the modern age viewed the universe according to different spatial and temporal parameters. Bruno and Stigliola are both concerned with

analyzing and reordering man's sensory relationship with nature. Throughout Stigliola's post-prison works the Nolan Lyncean explores, questions and doubts the veracity of sensory experience—depth, weight, size, color, etc. In its place, he attends to the question of the nature of sensory experience as it functions in the infinite universe. For example, I recall the outset of *Delle apparenze celesti* in which Stigliola outlined the intention of the work, which was to relearn how man is to interpret sensory experience in the new universe. Only after a thorough understanding of the senses is man to ever understand the "celestial appearances" of the "structure of the world"; only then will he be able to alter that very structure for purposes of gain.

Invoking Brunonian terminology in Chapter 9, entitled "Nature and art are two powers proceeding both in virtue of the vital principle," Stigliola explores the intimate relationship between nature and art, including their relationship with the "vital principle," which is the mysterious animating principle of nature that draws things together.¹⁷⁵ He believes that by understanding the difference between nature and art he will come to know the newly established relationship between man, God, and objects in the "ideal unity" of the universe. This is because all objects exist between the "minimum" and the "ideal unity":

And being that the production of the singular substances in the comprehensive ideal unity and the introduction of the forms in the certain direction toward the specific end, which is exactly of nature and art, we intend therefore that nature and art are designated by the vital principle, different amongst themselves, which one brings to completion by means of movement proceeding from the interior, the other by means of movement brough on by the exterior. I say that nature taking its principle from the minimum and the concept of the seminal impression proceeds to the vegetation by means of adding the nourishment attracted to the principle taken from the concept; and with that arrives at the perfect

¹⁷⁵ "La natura e l'arte sono potestà procendenti ambe in virtù del principio vitale," "principio vitale"

amount following the ideal direction and giving alteration distinctly to the parts of the understood humor, until everything with the parts arrives in the able condition at the end. I say that the species created comes into the perfect substance because of the conception of the idea. Art following the progress of the vital power and in the external arriving beyond its proper animal constitution reflects, with the operations in the exterior bodies given to them by nature, and brings the ability of a certain use to the compositions of the works. (DC 92-93)¹⁷⁶

Here Stigliola postulates that singular substances (stones, trees, stars, clouds, etc) are created and formed into unique and identifiable things because they are constructed by the forces of nature and art. Nature and art work both together and against one another. It is man's role in the new universe to assume the role of artist, therefore, who details, describes and manipulates nature through art, which is an act of *mutatione nello stato / mutar stato*. That is because nature is supposedly "static," or the "state / stato" of things, which, according to Bruno and Stigliola, is alterable by means of *mutatione*: the transformation of the static. As cited above, Stigliola upholds that nature and art are distinct in that nature brings about change "by means of movement proceeding from the interior" whereas art brings about change "by means of movement brought on from the exterior." Matter is hence mutable; conceived by nature and shaped by art, and whose form is dependent on the unification of these two forces.

¹⁷⁶ "Et stando la produzione delle sussistenze singolari nell'unità ideale comprendente e la introduzione delle forme nella certa direzione al fine appreso, il che è proprio della natura e dell'arte, intendiamo perciò che la natura e l'arte siano proprie dell'assegnato principio vitale, differenti tra di sé, che l'una porti a compimento per movenza procedente dall'interiorità, l'altra per movenza riflessa dall'esteriorità. Dico che la natura pigliando principio dal minimo e dal concettacolo dell'impressione seminale procede per vegetatione con l'aggiunta dell'alimento avvegente al principio pigliato dal concetto; e con ciò viene nella mole perfetta seguendo la direzione ideale e dando alteratione distintamente alle parti dell'humor conceputo, sin che il tutto con le parti vengano nella conditione habile al fine. Dico che la spetie creata venga nella sussistenza perfetta della concettion dell'idea. L'arte seguendo il progresso della potestà vitale e vegnendo oltre nell'esterno della propria constitutione animale riflette con l'operationi nelli corpi esteriori somministratoli dalla natura, et porta le compositioni dell'opere all'habilità di certo uso."

In further accord, Chapter 9 of Stigliola's *Della apparenze celesti* is also similar to another passage from *De la causa, principio e uno* wherein Bruno discusses the function of nature and art upon matter. Stigliola's own position on matter echoes that of Bruno. Formed "material," according to Bruno, is much like Stigliola's "singular substance," which exist in what Stigliola calls "comprehensive ideal unity," which Bruno would consider the all-encompassing "Uno." Bruno's explanation, like Stigliola's, differentiates between nature and art as two agents that act upon the mutable body that is matter. In Bruno's philosophical dialogue the Nolan has Teofilo respond to Gervasio's question: "tell me what you mean by this name 'material', and what is it that is material in natural things" (*DFI* 234).¹⁷⁷

So nature, which art is similar to, requires that for its operations it has material: for that it is not possible that it be any random agent, because it it wants to make something, it shall have nothing else but making it; or if it wants to operate, it shall not have to do other than operate. It is therefore a type of subject, of which, with which and in which nature effectuates its own operation, its own work; and which is by it formed into many forms. (*DFI* 235)¹⁷⁸

The dependency between nature and art is also expressed in the Nolan's work *Sigillus sigillorum*, published one year before *De la causa, principio et uno*. In this work, Bruno states:

For art acts perfectly, since it is connected to nature's agency; in fact art and nature are comparable, since they are connected, and because art is somehow an imitation of nature, and because it is impossible for natural

¹⁷⁷ "dechiaratemi che cosa intendete per questo nome 'materia', e che cosa è quello che è materia nelle cose naturali"

¹⁷⁸ "Cossì la natura, a cui è simile l'arte, bisogna che de le sue operazioni abbia una materia: per che non è possibile che sia agente alcuno, che se vuol far qualche cosa, non abia di che farla; o se vuol oprare, non abbia che oprare. E' dunque una specie di soggetto, del qual, col quale e nel quale la natura effettua la sua operazione, il suo lavoro; et il quale è da lei formato di tante forme."

things to be lacking art, even as artificial things cannot be lacking nature.
(*OLC* II.2.2 195-96)¹⁷⁹

One does not work without the other. These notions echo Hermetic themes. For example, in the *Corpus Hermeticum* one finds an elaborate discussion of nature and art in the creation of material things. In Book V, a discourse between Hermes and his son Tat, Hermes explains that if one wishes to penetrate the secrets of God's divine plan, he must "examine attentively the art of this work and understand who it is that forged this beautiful and divine image of man" (131).¹⁸⁰ Moreover, in sections XIV and XV of the book *Asclepius*, part of the *Hermetica*, Hermes speaks in great detail about the principles of generation of material things.¹⁸¹ Stigliola, therefore, like Bruno, was influenced by the alternative, Hermetic universal view revived by Ficino's Florentine Neoplatonic academy.

I believe that Stigliola appropriated Bruno's use of the concepts of nature and art for the purposes of *mutatione nello stato*. In *De la causa, principio et uno*, for example, Bruno presents the very idea with the same philosophical intent that Stigliola later espouses:

This natural matter is not as sensible as artificial matter, because nature's matter does not have any form at all, but art's matter is something already formed in nature, then art is not able to operate if not on the superficiality of things formed by nature, like wood, iron, stone, wool, and similar

¹⁷⁹ "Tunc igitur perfecte agit ars, cum naturae agenti connectitur; ita enim comparatum est, ut connexionem habeant ars atque natura, et quia ars naturae quaedam imitatio existit, et quia, sicut impossibile est naturalia esse artis expertia, ita nec artificialia natura carere possunt."

¹⁸⁰ "esamina attentamente l'arte di quest'opera e apprendi chi è colui che forgia questa bella e divina immagine dell'uomo"

¹⁸¹ See pp. 317-21 of the *Corpus Hermeticum*.

things: but nature works from the center (as a matter of speaking) of the subject or material. (*DFI* 235)¹⁸²

Like Stigliola, Bruno upholds that nature operates from the center of a material subject, and, furthermore, its operation is distinct from that of art because art must operate on things already formed in nature. Bruno has created a collaborative dependency between art and nature in the creation of material subjects, but has also distinguished how nature operates from the center, or interior, implying that art, its counterpart, operates from the exterior.

How are *mutar stato*, nature, art and matter metaphors that grant insight into the development of an epoch? I believe the answer to this question is that Bruno's initial and Stigliola's later reworkings of the concepts were developed in order to solve a problem at the heart of early modern metaphysics and theology: Since Copernicanism estranged man from his prior notions of things, how then do transformations take place in the animated and infinite universe and how might man come to understand the universe in which he lives? The answer to these problems, which Bruno and Stigliola find in nature and art, is the metaphysical bedrock on which the modern magus transforms the world around him. In proper Blumenbergian terms, the revised relationship between man, nature, art and matter is a *reoccupation of a position* filled initially by a Hebrew/Christian world-view that predetermined the role and significance of these qualities. In the new universe God did not act from a distance, stationed high above, but rather He lived and breathed as the *anima* of all matter. In order to find God, therefore, in the infinite universe, one needed

¹⁸² "Questa materia naturale non è cossì sensibile come la materia artificiale, perché la materia della natura non ha forma alcuna assolutamente, ma la materia dell'arte è una cosa formata già della natura, poscia che l'arte non può oprare se non nella superficie delle cose formate da la natura, come legno, ferro, pietra, lana e cose simili: ma la natura opra dal centro (per dir cossì) del suo soggetto o materia."

only look at the content of the universal soul, which was, like the Hermetic philosophers argued, All and Everything.

Celestial Architecture and Encyclopedism: Nicola Antonio Stigliola and the Transformation of the World

Whereas Bruno theorized the arrival of the modern age, Stigliola realized it. Stigliola proposed two solutions of particular importance to the rise of the modern age: 1) Celestial Architecture; and 2) Encyclopedism. Both of these aspects, which are to be read as metaphors that hint to the problems they attempted to solve, are effectuations of Brunonian *mutar stato*. Whereas Bruno called for the modern magus, or the Architect of the Universe, Stigliola proposed what the modern age would come to accept as an even better *reoccupation of the position*: i.e., Celestial Architecture. Moreover, while Bruno proposed *ars memoriae* as a method by which man would be able to reorganize knowledge, Stigliola developed a more sophisticated and readily acceptable approach: Encyclopedism. These two contributions, unique to Stigliola, are the "other" Nolan's gifts to the modern age. A brief history of their success in the seventeenth century would go on to show how they contributed to many of the advancements of the Scientific Revolution. Through them Nicola Antonio Stigliola sought—in the vein Headley has read Campanella—a veritable transformation of the world: a reordering of the heavens and a reordering of all human knowledge. In the following pages I shall first detail Stigliolan Celestial Architecture and second Stigliolan Encyclopedism.

Brunonian Universal Architecture & Stigliolan Celestial Architecture

With the announcement of the Celestial Architect, Stigliola took Bruno's concept of the Architect of the Universe and saw it to culmination. Much like Bruno's Architect

of the Universe, who would first analyze nature and then artfully control and organize it for purposes of gain, Stigliola became the Celestial Architect who, in order to *mutar stato*, required a similar Brunonian understanding of the laws of nature. Unlike Bruno, Stigliola lived to see the birth of the telescope and the rise of astronomical observatories, both small and large, throughout Europe. Having these two tools at his disposal, Stigliola carried out his and Bruno's plan for a moral transformation of the heavens. According to Stigliola, the Celestial Architect was to probe the heavens by means of the telescope (*ispecillo celeste* / celestial probe), thereby learn of its *mutationi*, and ultimately catalogue his findings. The purpose, however, was not a mere satiation of a new-found curiosity, but rather the derivation from and attribution to the structure of the world a new set of ethics that would lead man into a new aeon.

Stigliola aspired to exalt the role of the architect in the modern age. Speaking to this, Alina Payne notes in her article, "Architectural Criticism, Science, and Visual Eloquence: Teofilo Gallaccini in Seventeenth-Century Siena," that

Cesi and Stelliola, though attentive to machines and hydraulics, were concerned with philosophy, with primary causes, with the definition of motion and forces, with astronomy, and it is from this vantage point that they sought to locate architecture among the scientific and philosophical disciplines. (157)

Stigliola's intent was to raise the study and practice of architecture into the lofty realms of the mind. Stigliola announced the Celestial Architect in a letter penned on August 30, 1612 to Europe's greatest modern thinker, Galileo. As a new member of the Lyncean Academy, Stigliola wrote that he had shifted his attention from less significant topics to the loftiness of what he called "celestial architecture." Like Bruno's "universal

architecture," Stigliola's "celestial architecture" would also shed light upon the truth of things regarding the complex "structure of the world":

To the two causes I add the third, dependent by my own affects, long awaited that, finding myself occupied by the business of the noble profession of architecture, and having, by means of the communication of the principles, transferred my studies from structural architecture to animal architecture and afterwards to celestial architecture, I console myself a great deal that in my time and during the course of my studies I saw to light the truth of things very profitable to the intelligence of the structure of the world, news of which for many centuries was buried in very dense fog, and because having some years ago composed a work by the name of *On the celestial investigations*, from the whole of Your most diligent observations comes to me no little help. (Galilei *Le Opere* XI 752: 298-99)¹⁸³

We know from Stigliola's biography that he followed quite an interesting trajectory of intellectual development over the course of his life, to which he alludes in this letter to Galileo. In nearly eight decades of life Stigliola went from the study of medicine, specifically theriac and mithridatum, to urban and municipal architecture, and then to cosmology and celestial architecture. Stigliola matured into a prominent European intellectual, and his announcement of the arrival of the Celestial Architect is significant because it signals, by means of metaphor, the first inklings of the modern age's new role for man. As such, interpreting the Celestial Architect Stigliola as a metaphor for the first modern man, one comes to understand how man, in general, perceived himself during the period: an active, engaged architect set out to correct the heavens. The Celestial

¹⁸³ "Alle quali due cause io aggiungo la terza, dipendente da' proprii miei affetti, atteso che, ritrovandomi io occupato nell'essercizio della nobil professione di architettura, et havendo, per la comunicanza de' principii, trasferito li miei studii dalla architettura fabrile alla architettura animale et indi alla architettura celeste, mi consolo molto che, a mio tempo et nel concorso de' miei studii, vegga venire in luce la verità di cose molto profittevoli alla intelligenza della fabrica mondana, la notizia delle quali per molti passati secoli era stata sepolta in densissima caligine, et perchè havendo io, alcuni anni sono, fatta composizione di una opera il cui titolo è *Delle investigazion celeste*, mi viene non lieve aiuto dal consenso delle sue diligentissime osservazioni." On a separate note, the work (*Delle investigazion celeste*) to which Stigliola alludes is either 1) his *Il telescopio over ispecillo celeste*, In Napoli, Per Domenico Maccarano, 1627, published posthumously; 2) a lost part of his *Encyclopedia pythagorea*; or 3) the only remaining chapter of that work, *Delle apparenze celesti*.

Architect would not *create* the new universe, however. Instead, he would, as Stigliola claims to Galileo, uncover the "news" that had been "buried for many centuries [...] in a very dense fog." The Celestial Architect, therefore, resembled an archeologist. He did not determine what he discovered, but merely identified the method by which he best uncovered hidden truth, buried under the celestial soil of years of history.

Unlike the archeologist who digs in soil, the Celestial Architect's object of study is composed of the stars and planets above. Instead of a shovel and a brush, the Celestial Architect uses a telescope and a sextant. Although the means to the end are different, the modes of inquiry are similar. More important than the tools of the trade, Stigliola, like Bruno, upheld that in order to carry out celestial architecture, it was necessary to acquire knowledge of the principle cause and unity for all matter in the universe. This is because it is important that the Celestial Architect understand the reasons for change in nature, the consequences of specific actions, the communication between different bodies, material and immaterial, and the laws that God has imbedded into natural objects. Stigliola explores this notion in his work on the telescope, *Il Telescopio over ispecillo celeste, The Telescope or rather Celestial Probe*. Stigliola assumes Bruno's purview with regard to the cause and unity in his work on the telescope. Therein Stigliola states that knowledge of individual things cannot come without first a "universal knowledge," linked to an "intelligence of the causes." According to Stigliola, knowledge of causes will allow for an understanding of objects as they are in their ideal form, not distorted images or shadows of the ideal. The Celestial Architect must first analyze and study the qualities and function of the sense of sight. Second, dependent on the restrictions of this sense, he

must then determine what the "powers" that "communicate in transit" through the eyes of the observer are.

Regarding the aforementioned principle intention of the probe are consequently conjoined many speculations regarding the visual sense, necessary for the affinity of the materials; & because in the intelligence of things, one has necessity of the intelligence of the causes: & because in doctrine the singularities are not able to proceed without the universal knowledge: our contemplation will begin therefore regarding the reasons of the first prime, essential events in the visual apprehension: made principle by the two primary concurrent powers in every sense, and through the body: in which the virtues of the powers communicate in transit. It is therefore necessary to consider the consequential effects of the aforementioned three principles; I say, regarding the power of apprehension, the power of learning, and the transmitting body of the communicative virtues. (TIC 2)¹⁸⁴

The purpose of these speculations into the sense of sight, or visual sense, is to understand how man is to utilize the new tool that is the telescope. Importantly, Stigliola does not place unwavering faith in an object that further distorts the content under view. Starting from this philosophical point of departure, which provides insight not only into the first and prime cause, which is the creation of the universe, but also all subsequent causes and effects, Stigliola believes he will accurately record, detail and unveil the architecture of the universe. In other words, an investigation into the causes will lead, according to Stigliola, to a sense of the "truth" of the universe:

Progress in the determinations linked to the visual inflections. Chapter II. / The investigations of the causes: & of the certain attribution of truth, taking principle from the external appearances, proceeding into the intrinsic of things: & they receive by means of the essential cause, & first,

¹⁸⁴ "Alla detta principale intenzione d'ispecillo, vengono alligate per conseguenza molte speculazioni versanti nel geno visuale, necessarie per l'affinità della materia; & perche nella intelligenza delle cose, si hà necessit  dell'intelligenza delle cause: & *perche non possono nelle dottrine, procedere le singolarit  senza la conoscenza vniversale*: comincer  perci  la nostra contemplazione delle ragioni degli accadenti primi essenziali nell'apprension visiu : fatto principio dalle due potest  primarie concorrenti in qualunque senso, & dal corpo tramezzo: nello cui transito le virt  delle potest  han comunicanza. Vengono perci  da considerarsi gli effetti conseguenti,   detti tre principij, dico alla potest  apprensiva, alla potest  apprendibile, & al corpo trasmissiuo dell virt  comunicanti."

that which being in itself one, responds to the universality of the events.
(TIC 55-56)¹⁸⁵

Though arcane, in this passage Stigliola details an important dependency between the visual sense and truth. Knowledge of the causes perceived by the visual sense will lead to an understanding of the "universality of events." Stigliola and Bruno alike believed that an understanding of the causes, which ultimately leads back to an understanding of the original cause—*Genesis*—, was the first step in what Bruno calls an "active" process. That is, knowledge of causes allows man the ability to actively change, transform, or better *mutar* the state of things in the universe. To be more precise, knowledge of the first causes will allow man to enact, or duplicate, secondary, tertiary, etc., causes of his own design. This replication of causes is a form of *mutatione*.

Stigliola was an incredibly "active" Celestial Architect in late sixteenth and early seventeenth-century Naples. For example, Stigliola proposed establishment of the first astronomical observatory in Naples, which would have allowed, in his own words, the "exquisite correction of the celestial canons" (Qtd. in Manzi, "Un grande": 303)¹⁸⁶ The purpose of its proposed construction was twofold: 1) From this vantage and by means of

¹⁸⁵ The full chapter from which my translation is taken follows: "Progresso nelle determinazioni appartenenti alle inflessioni visive. Capo II. / Le investigazioni delle cause: & della certa assegnazione del vero, pigliando principio delle apparenze esterne, procedendo nell'intrinseco delle cose: & riceuono per causa essenziale, & prima, quella che essendo in se stessa vna, risponde all'vniversalità de gli euenti. Et stando gli euenti nell'vnità della causa, souuengono le differenze per l'aggiunta de gli accadenti. Per lo che hauendo noi dato molte determinazioni nella dottrina delle inflessioni visive, per deduzioni portate dalla proprietà delle virtù poste in opposizione: & concorrenti nella creazion dell'immagine: & per deduzioni portate dalla proprietà delle superficie inflessive: conuegnendo le dette potestà tutte nel comune effetto dell'operazion visua: resta di venire per ispeculazione intrinsecata alla rispondenza delli congetti delle virtù estremali: che essendo nell'apparenza in remotissimo l'vna dall'altra, & in manifesta opposizione: vengono nondimeno in vno; in quanto alla proprietà dell'essenza, & nell'euento de gli effetti. Oltre di ciò vien da mostrarsi, come pigliando la virtù momento in diuerso nello intrinsecarsi, o l'intrinsecarsi l'vna, o l'altra de esse: ne auuengono per detta causa gli euenti di effetti contrarij, qual speculazione, oltre che è di momento nella nostra inuestigazion proposta visua: e di molta considerazione nelle altre speculazioni tutte appartenenti alla creazion della spezie: & distinzione delli lor gradi."

¹⁸⁶ "squisita correzione dei canoni celesti." Manzi does not fully cite his source.

the telescope Stigliola sought, as he detailed in Chapter II of *Delle apparenze celesti*, to study the *mutationi* of the celestial appearances, thereby learning the principles of the heavens through nature and art; and 2) After having read from the book of the heavens, exposed through its laws and nature, Stigliola sought to correct the books written by man, which, in the new topography of the universe, no longer served to describe natural occurrences. More important, however, the books written by man no longer provided the moral compass by which man was to guide himself in the contours of the infinite universe. Although Stigliola's observatory was sadly never constructed, which would have been the first of its kind in Naples, the reason for its proposed creation is apparent. Like Brahe at Hven, Stigliola set himself to the extraordinary task of correcting the errant canons of the heavens. Stigliola coolly appropriated the role of Celestial Architect, who by means of his observatory would effectuate a purgation of the moral significance long ascribed to the constellations and planets.

Stigliola's observatory, like Galileo's in Padua, was to be the temple for the most exquisite instrument of the modern age: the Telescope. Without the telescope, Galileo would have never spotted the moons of Jupiter. But what exactly does the creation of the telescope, read as an historical metaphor, tell us about the nature of the problem that man was attempting to solve? One interpretation, I believe, is that the telescope might be read as a metaphor for man's attempt not only to extend the object of view, but also to *mutar*, or supplement, the power of the human visual sense.¹⁸⁷ The telescope is the modern age's first prosthetic, and might be read as a precursor of the dream of genetic engineering of today. The problem, therefore, is one of visual impotence, and the telescope its remedy.

¹⁸⁷ See M. Nicolson, "The Telescope and Imagination." See also T. Reiss's "Introduction: The Word/World Equation," esp. p. 4 wherein the author reads the telescope as a "representation of what happened to the linguistic sign."

Stigliola speaks to this very idea in his *Il telescopio over ispecillo celeste*, stating that the principal intention of the creation of the "Celestial probe" was to "help" the "diverse impotences of human sight" (125).¹⁸⁸ It is interesting that Stigliola believed the telescope would be able to remedy "diverse" visual "impotences," and not merely one. The instrument not only allowed sight from afar (*telescopio*), but also the alteration or "probing" of the stars (*ispecillo celeste*). The visual sense, therefore, is directly related to *mutationi*, or the power to enact a change or transformation in what is seen. That is because through the telescope the observer views the *mutationi* of the stars and planets, but, following Bruno's tenet in the *Spaccio* that the "universe is intellectually inside of us," it is also through the telescope that the observer transforms (*muta*) the state (*stato*) of the stars as they appear, like shadows, inside the viewer's mind. In this light, the telescope worked much like a wizard's wand—through it miraculous acts come to be.

Brunonian *Ars memoriae* & Stigliolan Encyclopedism

Encyclopedism is one of the most emblematic products of the seventeenth century.¹⁸⁹ What prompted its arrival? Why did it suddenly become necessary to devise a new systemization of knowledge in the seventeenth century? Read as a metaphor, what was the problem that the encyclopedia was trying to solve?

I believe it is more than mere coincidence that the birth of Encyclopedism coincided neatly with the demise of geocentrism. This is because the encyclopedia is a strong metaphor of the problem of infinitism. To begin, the modern age marks the shift,

¹⁸⁸ "[...] in via del nostro principale istituto dell'Ispecillo celeste, è propria all'intelligenza, & fabrica delli vetri istrumentali dedicato all'aiuto delle impotenze diuerse del vedere humano."

¹⁸⁹ For more information on Encyclopedism through a Blumenbergian lens see F. Luisetti, pp. 115-29.

as argued previously, from the Book of God to the Book of Nature. The relationship between nature and book, therefore, created a dependency. That is, if nature is thought to be infinite, the book, therefore, must be infinitely long. Seventeenth-century encyclopedists, accordingly, proposed the encyclopedia as the *solution* to the *problem* of infinitism. If man wished to transcribe the tablets inscribed upon nature, he would need a new book that could handle the work's implicit length. Encyclopedism as a metaphor, therefore, is a panacea for the seemingly incomprehensible infinitude of the universe.

To be properly understood, Encyclopedism attempted to better solve the problem of the organization of knowledge in the infinite universe. Utilizing Blumenbergian terminology, the Stigliolan encyclopedia served as a proposed *reoccupation of the position* of Bruno's then nearly defunct *ars memoriae*, which itself sought to categorize and systemize infinite knowledge. Stigliola's massive philosophical project, the *Encyclopedia pythagorea*, is an exemplary reordering of Bruno's *ars memoriae*. In similar fashion to Bruno's memory treatises, in the surviving dedicatory epistles and Index of the *Encyclopedia pythagorea*, Stigliola asserts that he derived his vast knowledge of the "universal principles" by means of "common intelligence." As such, knowledge came to him from "a common fount," "a supreme science," called "Sophia" or "Magia," and by the ancient Greeks, "Encyclopedia," or the "Mother of human Virtues" (*EP* Epistle to S. Cobellvtio).¹⁹⁰ In a similar manner, Bruno believed that *ars memoriae* tapped the universal principles from the universal intelligence. He writes in *De la causa, principio et uno* that this is achieved:

because as a person who does not intend one, intends nothing, so as a person who truly intends one, intends all; and who moves himself closer to

¹⁹⁰ "vniuersal principij," "intelligenza commune," "vno commun founte," "vna scienza suprema," "Madre delle Virtù humane."

the intelligence of the one, arrives closer to the understanding of everything. (DFI 296)¹⁹¹

Similar to Bruno, the encyclopedist Stigliola believed to move closer to an understanding of everything because he intended the universe to be one—the Brunonian "cause, principle and unity" of all things in nature. In *Caput I* of Bruno's *Cantus circaeus*, a work on *ars memoriae*, the philosopher explains that universal knowledge enters the mind through the gates of common sense, *sensus communis*. Moreover, Bruno consistently repeats throughout his *opera omnia* the notion that all ideas and images derive from, as he writes in the *Spaccio*, "a formal and ideal principle, fount of those" (DFI 636).¹⁹² Stigliola's massive encyclopedic project drew from the same fount that appears in Bruno. Although Bruno calls this fount the *mens sacra* or *mens universalis*, and not Mother Encyclopedia, their function is identical.

Why do Bruno and Stigliola articulate new systems for the ordering of knowledge? What problem did these systems attempt to solve? Stigliola turned to Mother Encyclopedia because he, like Bruno, believed the human condition to be in such a state of error that it became necessary to resurrect an ancient doctrine that best fit the pressing needs of a century on the verge of complete reform and upheaval. Encyclopedism as a metaphor allows us insight into the problem: the world was in disarray, and a new order needed to be imposed upon it. Contemplating this poor condition in which humankind found himself, Stigliola writes in the dedicatory to the College of Salerno of his *Encyclopedia pythagorea*:

¹⁹¹ "perché come chi non intende uno, non intende nulla, cossì chi intende veramente uno, intende tutto; e chi più s'avvicina all'intelligenze dell'uno, s'approssima più all'apprension di tutto."

¹⁹² "un principio formale et ideale, fonte di quelle."

Possessing it therefore because of its virtue, deeming it a great treasure: it did not appear agreeable to them that it should join the common crowd that follows the false attractions of the senses & is alien from the studies of reason, & of that which is right. This is mainly because, in the ensuing turbulences of the centuries, said doctrine was forgotten by man, resulting in a great worsening of the human condition. (*EP* 139)¹⁹³

This same sentiment is evoked lucidly in the epistle to Spicione Cobellvtio, wherein Stigliola argues that the knowledge remained dormant for centuries before it was resurrected to meet the needs of an era, driven by urgency, on the verge of transformation. Stigliola writes:

To the Most Illustrious and Most Reverend
Sir.

SCIPIONE COBELLVTIO

It was an antique estimation of the eminent professors of the sciences, & the arts: that the virtues of all the professions were dependent on a common fount: & that there be a supreme science from which the power of the principles of every doctrine arose. That supreme science, named according to the diverse languages of the peoples, by some Sophia, by others Magic, & by others with other names: the intentions of meaning agree with our word, Sapience. It was nonetheless the same science that by means of a more distinct and understandable, common-sense definition was called by the Greeks Encyclopedia: almost fashioned in the form of a crown, since it was instructional. And agreeing the aforementioned professors in the unity, & magnitude of said doctrine: they were also agreed that it should not be made common knowledge to just any man: but rather that only they should partake in it, since after diligent examinations made by the teachers, one found one's own soul purged of the tarnishes of the vices[,] assuming that these doctrines placed in impure souls, becoming turbulent, were the cause of great problems to the constitution of the public. Therefore conserving this science for a few people: it happened that for lack of professors, the name lingered on in the following centuries without intellectual meaning[;] actually, it came to be regarded as a thing that was distinctly contrary to what it was. [...] It now being

¹⁹³ "Hauendola dunque per la possanza della sua virtù, in estimazione di gran thesoro: non pareo lor consentaneo, che douesse farsi commune al volgo seguace delli falsi allettamenti de sensi: & alieno dalli studij della ragione, & del giusto. Questo per gran parte, è stato in causa, che nelle succendenti turbolenze de secoli, venisse detta dottrina nella obliuione de gli huomini, con molta peggioranza della condizion commune."

finally our age, & the future near[,] some ingenious minds have risen up, having been advised of the urgency of the occasion, and the necessity of the aforementioned science: they have pushed themselves with assiduous drive to bring it back to life: it remains the work of the undertaken task, whose efforts are exposed to the judgement of all people, eminent, & of knowledgeable authority, to make it known to all. [...] From Naples, the year of health 1616, the 22nd of December. *Lyncean Nicola Antonio Stigliola. (EP 137)*¹⁹⁴

Stigliola's reference to the "turbulence of the centuries" and the misplacing of the doctrine of the Encyclopedia in "impure souls" appears to be both a political and social criticism, yet he makes no reference to any specific events in any of the pages of his work. If one seeks to understand the motives for the turbulences of the era, one need, however, only call to mind the political tensions of the Reformation and Counter Reformation, the destruction of geocentrism, political oppression from Spain, and ensuing uprisings, such as Campanella's Calabrian *congiura*, just before the turn of the century. Moreover, ubiquitous late sixteenth-century millenarian sympathies and the rise of the new science and the modern age signaled the destruction of the Renaissance world-view which held the Greek cosmos in perfect order. Stigliola's encyclopedic works, therefore, when set against this political and social backdrop, remedy the ever-growing

¹⁹⁴ "All'Illustrissimo, & Reuerendissimo / Signore. / SCIPIONE COBELLVITIO / E' stata estimazione antica delli professori eminenti nelle scienze, & nelle arti: che le virtù delle professioni tutte fussero dipendenti, da vno commun fonte: & che fusse vna scienza suprema, da chi veniua mostrata la potestà delli principij di ciascuna dottrina. Qual scienza suprema, essendo chiamata secondo li diuersi idiomi de parlari, da altri Sophia, da altri Magia, & da altri con altre voci: concorrea le intentioni del significato della chiamata da noi Sapienza. Fù non dimeno l'istessa scienza con voce più distinta, & apprendibile dall'intelligenza commune, chiamata da Greci Encyclopedia: quasi corona in cui veniua compreso, quanto era di ammaestramento. Et concorrendo li detti professori nell'vnità, & nella grandezza di detta dottrina: furono anche concordi che non douesse farsi commune à qualunque huomo: ma che solo ne douessero esser partecipi coloro, che per diligente essamina fatta dalli maestri, si ritrouassero di animo purgato dalle macchie de vitij. atteso che le dottrine messe negli animi impuri, diuenendo turbolente, erano in causa de graui danni alla costituzione del publico. Conseruandosi adunque la detta scienza in poche persone: è succeduto che per mancamento de professori, ne restasse nelli seguenti secoli, il nome, senza l'intelligenza. anzi, che ne venisse in opinione di cosa, affatto contraria à qual che essa è. [...] Hora essendo finalmente nella età nostra, & nella dianzi prossima, insorti alcuni ingegni, che auuisati dalle occasioni vrgenti, della necessità di detta scienza: si sono forzati con l'assidua speculazione di rintracciarla: resta al compimento della pigliata impresa, che vengano le lor fatighe esposte à giudizio di persona, eminente nel conoscere, & di autorità nell'aprouare, da tutti conosciuta. [...] Di Napoli l'anno della salute 1616. il dì 22. di Decembre. *Nicolò Antonio Stelliola Lynceo.*"

social, political, philosophical and theological problems of an era on the verge of transformation.

Yet why is it that Stigliola turns to Mother Encyclopedia and not to Bruno's *ars memoriae*? Why develop a new solution to the problem of infinity? I believe that Stigliola must have perceived a fatal flaw at the heart of the Brunonian art. This might have been a reflection of what Stigliola thought to be the conceptual limitations of the mind: 1) If the books of man are finite, the book of nature is infinite; and 2) If the human mind is finite, the divine mind is infinite. Like east and west, the human and the divine, or the finite and the infinite, never shall meet. Accordingly, Stigliola utilized the ancient doctrine of the encyclopedia because he understood that contrary to the human mind, the written word inscribed upon the limitless pages of the encyclopedia would never succumb to the faults and weaknesses of man. For Stigliola the encyclopedia solved the problem of finitude. It was the metaphor of permanence and infinitude.

Whereas Bruno's *ars memoriae* sought to empower the mind, the Nolan never claimed that he had developed and enhanced a failproof system that would allow man to attain a sort of earthly divinity. *Ars memoriae* never sought to record infinity. Stigliola, too, never made such a bold claim. He did believe, however, that the encyclopedia's derivation from universal principles would "extend itself into the immense," and improve the "common condition" (*EP* 140; 139).¹⁹⁵ Stigliola, like other seventeenth-century encyclopedists, turned to the encyclopedia in the effort to inscribe *everything* in the universe in written word. That is not to say that the encyclopedists believed they would see its completion in their own lifetime, but rather they recognized that the encyclopedia was a transcription of a book already written. As such, it was futile to believe that man

¹⁹⁵ "si estende nell'immenso"; "Condizion commune"

would complete the project, but this fact did not dissuade encyclopedists from embarking on the endeavor. When faced with the vanity of their pursuit, they asked themselves: How did Noah collect all the animals in God's Kingdom? Was Noah's Ark not a metaphor of the ancient era's encyclopedia? If Noah first identified and then collected all the animals, then surely it is possible for modern man to identify and collect various other subgroups of knowledge, such as the varieties of minerals, diverse forms of vegetation, or cloud formations. The encyclopedists sustained themselves by means of a modern form of scientific hope and ambition. It is no surprise that the *Encyclopedia pythagorea* was never finished as it similarly is no surprise that the work could have ever had an end. The work's incompleteness is a metaphoric shadow of its ideal referent: infinity.

What does this metaphoric shadow of the referent look like? According to the surviving Index and calculations I have made based upon surviving parts, Stigliola's incomplete project was to have been enormous. For example, if Stigliola's *Delle apparenze celesti* is any measure of the projected length of the *Encyclopedia pythagorea*, then the work might have looked as such: 1) since the Index of the *Encyclopedia pythagorea* is comprised of 147 chapters (filling 12 books in all) and *Delle apparenze celesti*, a chapter, is comprised of 61 subsections, the entire work might have been made up of 8,967 subsections. 2) *Delle apparenze celesti* itself comprises approximately forty single-spaced pages, which would therefore constitute 5,880 pages in the *Encyclopedia pythagorea*. 3) Even if the *Delle apparenze celesti* were to have been twice as long as any of the other 146 proposed chapters, the work would still have been 2,960 pages long. As such, Stigliola's mammoth project dwarfs even that of Alsted. Though incomplete, the *Encyclopedia pythagorea* appears to have had the potential to be early modern

Europe's longest encyclopedia, and Stigliola therefore Europe's greatest encyclopedist. Notwithstanding the length, a complete knowledge of the function and purpose of nature would have reached not only Stigliola's dream of ascribing significance to all things, but also Bruno's long-sought dream of *mutar stato*. I have provided a large sample of the surviving Index of Stigliola's *Encyclopedia pythagorea*. Therein one recognizes not only the presence of Brunonian ideas, but also the breadth of Stigliola's interests. I have put in bold those section titles that most clearly echo Bruno.

II.

On nature, & art.

On the power of principles.

On the consequences [resulting] from the substance-unity: & of the direction toward the final unity.

On celestial observations.

On the celestial structure.

On the celestial dimension.

On the immense, & [the] small: & effects, which from [the] said difference, happen in the celestial appearances.

On the description of the surface of the terrestrial orb.

III.

On the first & universal corporeal sense; & of the particular senses in the plant types, & animal.

On the seed: concept: life: [the] curing [of] disease & death.

III.

Regarding the science of Volcanoes, & dependent effects resulting from the alteration of heat & of cold.

On maturity, & immaturity: & on the perfect, & imperfect proceeding from circulation of the two extremes, & their passage in the unity of substance.

V.

On the three types of being, distinct in the being, substance, & appearance.

On the creation of the forms.

On the numeric necessity in the creation of things, & in their being.

On the Harmonious unity.

VI.

On the pasture; culture: arts: military: & market.

On deception, & pacts.

On the laws: & of their expedient.

On the moral virtues.

On the hidden roots of acquisitions, & losses.

On the possession of substances: & of contemplation.

On the private, & public, & of the Heroic virtues.

VII.

On nominal signification.

On scientific inventions.

On poems, & numerical compositions of speaking: & their applications in human utility.

On persuasion.

VIII.

On the discipline of Architecture.

IX.

On the military ordinances.

On castration.

On military machines.

X.

On the science of sight.

On the celestial probe: & its benefit in the observation of celestial bodies.

On the science of music.

XI.

On the being, & one.

On the emanation from the one being in the two types of beings: which are the ideal, & the substance.

On the first incorporeal substances: & of the corporeal substance.

That the infinite virtue is from the indivisible essence: & that the receiver infinitely is of extension.

On the unity, & the others: & their dependence, of the masculine, & feminine: *stato*, & *mutazione*: perfect, & imperfect: sufficiency, & indigence: full, & empty. That in the movement of all, all of the parts concent by necessity: & that in said movement the parts do not *mutino* position between themselves.

Of the examination taken from the unity & others from movements: if it is apparent from the exterior, happens because of *mutazione* of place taken by the viewer, regarding what is seen: or because of *mutazion* of place taken by that which is seen by the viewer: or because of a *mutazione* of both.

XII.

On truth, and of falsity, & on opinion: & that science is very much of the ideal form.

On the half of one, between the recess of the individuated, & the recess of the infinite extension.

On the agreement of all the sciences in the unity of the Encyclopedia.

On the eminence of the principles of the Encyclopedia Pythagorea. (EP 140-47)¹⁹⁶

Stigliola's interests were certainly vast, and his project undeniably enormous. Apart from the similarities in content between Bruno and Stigliola evinced in the above Index, and apart from the theoretical similarities between *ars memoriae* and Encyclopedism, at the base of Bruno's thought one finds a structural inclination that appears to have aimed directly at the proposed solution of Encyclopedism. In Bruno's Italian Dialogues and previous works one notices that the Nolan never provided extensive Indexes, often referring to the works content in lengthy and often cumbersome summaries that preceded

¹⁹⁶ "II. / Della natura, & dell'arte. / Delle potestà de principij. / Delle conseguenze dall'vnità sussistente: & della direzione all'vnità finale. / Delle osseuazioni celesti. / Della struttura celeste. / Della dimension celeste. / Dell'immenso, & demenso: & effetti, che da detta differenza, auuengono nelle apparenze celesti. / Della descrizione della superficie dell'orbe terrestre. / III. / Del primo & vniversal senso corporeo; & delli sensi particolari nel geno piantale, & animale. / Del seme: concetto: vita: sanità morbo & morte. / IIII. / Della scienza Vulcanica, & effetti dipendenti dalla alternazione del caldo & del freddo. / Della maturità, & immaturità: & del perfetto, & imperfetto procedenti dalla circolazione delle due estremità, & lor concorso nell'vnità di sustanza. / V. / Delli tre geni di essere, distinti nell'essente, sussistente, & apparente. / Della creazion delle forme. / Della necessità numerale nella creazione delle cose, & nel loro essere. / Dell'vnità Harmonica. / VI. / Della pastura; cultura: arti: milizia: & mercatura. / Dell'inganno, & patti. / Delle leggi: & dello espediente. / Delle virtù morali. / Delle radici occulte degli acquisti, & perdizioni. / Del possesso delle sustanze: & della contemplazione. / Del priuato, & publico, & delle virtù Heroiche. / VII. / Della significazion nominale. / Delle inuenzioni scienziali. / Delli poemi, & composizioni numerate del parlare: & loro applicazioni nelle vtilità humane. / Della persuasione. / VIII. / Della facoltà Architettonica. / IX. / Delle ordinanze militari. / Della castramentazione. / Delle machine militari. / X. / Della scienza visiuu. / Dell'ispecillo celeste: & suo beneficio nell osseuazioni de corpi celesti. / Della scienza musica. / XI. / Dell'essente, & vno. / Dell'emanazione dall'vno essente nelli due geni di essere: che sono l'ideale, & il sussistente. / Delle sussistenze prime incorporee: & della sussistenza corporea. / Che la virtù infinita sia dell'essenza indiuisa: & che il ricettiuo infinitamente, sia dell'estensione. / Dell'vnità, & alterità: & loro dipendenze, di mascolino, & femino: stato, & mutazione: perfetto, & imperfetto: sufficienza, & indigenza: pieno, & vacuo. / Che nel mouimento del tutto, consentano di necessità le sue parti tutte: & che in detto mouimento non mutino posizione tra di sé le parti. / Dell'essamina pigliata dall'vnità & alterità de mouimenti: se'l della esteriorità apparente, auuenga per mutazione di luoco fatta dal visiuo, stando il veduto: ò per mutazion di luoco fatta dal veduto stando il visiuo: ò per mutazion di ambi. / XII. / Del vero, del falso, & dell'opinione: & che la scienza sia propria del geno ideale. / Della mezanità dell'vno, tra il recesso dell'indiuiso, & il recesso dell'estensione infinita. / Del consenso delle scienze tutte nella vnità della Encyclopedia. / Dell'eminenza de principij dell'Encyclopedia Pythagorea."

the dialogues. In his later works, however, Bruno begins to make use of the Index as a means of organizing his many ideas in clearer form. This new systemization, I believe, is an allusion to the arrival of seventeenth-century Encyclopedism. Bruno's ever complex Indexes are metaphors of the arrival of the refined and ordered encyclopedias. In Bruno's later works, primarily those composed in Frankfurt, the Nolan provides Indexes wherein he divides each "book," or section, into numerous "chapters," or subsections. In *De immenso et innumerabilibus* (1591) Bruno divides the work into 2 parts, 8 books, and 108 chapters. The result is a work that is accessible to the reader and facilitates quick use. Although Bruno never once used the word "encyclopedia," I believe that his choice to include elaborate Indexes in his later works means that he understood the necessity for a revised Book of Nature that best mirrored the infinite universe. Bruno chose to detail his works in encyclopedic form because the encyclopedic solution, which was to arrive just a few decades after his death, better fit the nature of the problem at hand. That is, the problem of infinitude ushered in the arrival of highly organized, indexed books that contained succinct and specific information for their readers, granting access to the secrets of the complex world. Albeit texts since classical times, such as Pliny's *Naturalis historia*, and many passing through the Middle Ages, had long been organized into parts, books and chapters, the Encyclopedism of the seventeenth century is distinct in that it constituted a veritable attempt, when read metaphorically, to dislodge and revamp the beasts of political, social, theological and philosophical hegemony still breathing after the fall of geocentrism.

To conclude and summarize, Stigliolan Encyclopedism is a metaphor of infinitude. Encyclopedism derived impetus from Bruno's and others' elaborate systems of

mnemonics developed and elaborated in the sixteenth century. Stigliola upheld that, unlike *ars memoriae*, Encyclopedism best adhered to the complexity of the infinite universe and therefore stood as a better solution to the problem of a limitless space and limitless knowledge. The encyclopedia provided the early seventeenth century the most innovative and creative solution to the problem of infinity because it, like infinity, had no structural limitation. Moreover, the encyclopedia was understood as not being the creation of man, but rather the verbal reflection of the living and breathing book of nature. Man did not compose the encyclopedia, he merely transcribed the *image* of nature into words, which themselves lived harmoniously with the object that they described. This is a well known Platonic idea: The object in view is a shadow of the ideal. The Celestial Architect, Magus, or Architect of the Universe sought to penetrate as far as possible into the occult significances of the objects in view. The goal of the encyclopedia and the mnemonic arts was to arrive at the ideal form of things in the universe. In order to do this, however, a dependency was placed on language that—as would later falter in the twentieth century with the advent of post-structuralism—required a privileged relationship between word and object. The encyclopedia required that the words it used *were* the objects they described. Unlike the Book of God, which avoids this Achilles' heel because it claims to be *the* word of God, therefore Truth, the encyclopedia sought a similar ideal or privileged relationship between word and object. The solution to this problem was that the encyclopedists justified their work's validity on its being *derived* from the book of nature, not merely an interpretation of it. With regard to Stigliola, he thought that the encyclopedia best arrived at this ideal state because he, like Bruno, believed that the shadows of ideas he found inscribed in nature were identical to the very

words he used to describe them. As such, a bird is a bird, a song is a song. Bruno announced this similar faith in the word/object relation in the "Epistola esplicatoria" of the *Spaccio de la bestia trionfante*. Therein he states that he has developed a new language that lives in harmony with things and natures:

Here Giordano speaks in a vulgar manner, freely designates, gives the appropriate name to him to whom Nature gives and appropriate being. He does not call shameful that which Nature calls worthy, does not cover that which she reveals openly. He calls bread, bread; wine, wine; the head, the head; the foot, the foot; and all other parts by their own names. He calls food, food; sleep, sleep; drink, drink; and likewise signifies the other natural acts with their proper titles. He regards miracles as miracles; acts of prowess and marvels as acts of prowess and marvels; truth as truth; doctrine as doctrine; goodness and virtue as goodness and virtue; impostures as impostures; deceptions as deceptions; the knife and fire and the knife and fire; words and dreams as words and dreams; peace as peace; and love as love. He regards philosophers as philosophers; pedants as pedants; monks as monks; ministers as ministers; preachers as preachers; leeches and leeches; useless mountebanks, charlatans, triflers, swindlers, actors, and parrots as they are called, show themselves, and are. He regards workers, benefits, wise men, and heroes as the same. Come! Come! We see how this man, as a citizen and servant of the world, a child of Father Sun and Mother Earth, because he loves the world too much, must be hated, censured, persecuted, and extinguished by it. But, in the meantime, may he not be idle or badly employed while awaiting his death, his transmigration, his change. (Imerti 71-72)¹⁹⁷

Besides the highly prophetic tone with regard to his own death, in this passage Bruno has stepped into a realm of signification in which there is an harmonious coexistence between

¹⁹⁷ "Qua Giordano parla per volgare, nomina liberamente, dona il proprio nome a chi la natura dona il proprio essere; non dice vergognoso quel che fa degno la natura; non cuopre quel ch'ella mostra aperto; chiama il pane, pane; il vino, vino; il capo, capo; il piede, piede; et altre parti, di proprio nome; dice il mangiare, mangiare; il dormire, dormire; il bere, bere: e cossì gli altri atti naturali significa con proprio titolo. Ha i miracoli per miracoli; le prodezze e meraviglie, per prodezze e meraviglie; la verità per verità, la dottrina per dottrina, la bontà e virtù per bontà e virtù, le imposture per imposture, gl'inganni per inganni, il coltello e fuoco per coltello e fuoco, le paroli e sogni per paroli e sogni, la pace per pace, l'amore per amore. Stima gli filosofi per filosofi, gli pedanti per pedanti, gli monachi per monachi, li ministri per ministri, li predicanti per predicanti, le sanguisughe per sanguisughe, gli disutili per disutili, montainbanco, ciarlatani, bagattellieri, barattoni, istrioni, papagalli, per quel che si dicono, mostrano e sono; ha gli operarii, benèfici, sapienti et eroi per questo medesimo. Orsù, orsù: questo, come cittadino o domestico del mondo, figlio del padre Sole e de la Terra madre, perché ama troppo il mondo, veggiamo come debba essere odiato, biasimato, perseguitato e spinto da quello. Ma in questo mentre non stia ocioso, né mal occupato su l'aspettar de la sua morte, de la sua transmigrazione, del suo cangiamento" (DFI 461-62).

objects and words. The metaphor Bruno employs in this passage reveals a problem at the root of the development of modern science: Is it possible to find the perfect language that speaks of objects as they are, is universal and indisputable? If Nature is to be read like a book, then the words in which its meaning is expressed must be derived from the greatest Author, God Himself. But is man able to duplicate this language? Bruno exalts the word/object relation to the point of indisputability, taking what is natural to him—his mother tongue—and combining it with the objects under question. In an instance of further extension of the word/object relation, in *De rerum principiis* Bruno references the bold claim of the Cabalists. In this passage the Nolan states that the many believe that a nominal *mutatione* often results in *mutatione* of the object itself, such as the change from "Iacob" to "Israëlem," or "Sarai" to "Saram" (560).

To the principles here espoused there remains the duty to take into consideration the fact that a great power is evinced in names, according to the virtues of which one upholds that they produce the sort and the condition of the thing that brings that specific name; moreover many affirm that the *mutatione* of the sort or of the genus agrees with the *mutationem* of the names. (*OLC* III.5 560)¹⁹⁸

The modern age believes the opposite to be true: scientific language aspires to name the unnamed. In the end, the encyclopedia might be the last book of the Renaissance wherein utter dependency between word and object played a critical role in its validation, for certainly the twentieth century saw the demise of any such faith.

Stigliola's Student & The Brunonian Legacy: Andrea Fodio Gambara, Encyclopedism
and the Labyrinth of Uncertainties

¹⁹⁸ "Ad haec etiam principia pertinet considerare vim magnam insitam esse in nominibus, cum quorum virtute fortunam et statum rei nominatae currere existimant, praetereaque cum nominum mutatione convenire mutationem fortunae vel genii plurimi affirmant."

Stigliola's legacy is exemplified in the work of his student, Andrea Fodio
Gambara. The Calabrian medical doctor's *Il Camaleonte antipodagrico, discorso
enciclopedico* reveals the strong presence of his mentor, Stigliola. For example, Fodio
writes:

For the Moral [part] the World already knows, whose nobility is evident as quick as one hears the name, Encyclopedia, when God awakened the elevated minds to discuss it; amongst those, first was my very dear friend Lyncean Nicola Antonio Stigliola, worthy son of our very noble Lyncean Academy of Rome. He, having showed publicly only the frontespiece of the Encyclopedia, was admired throughout Europe, not simply Italy alone. And having worked together for a long time on many parts of the promised Encyclopedia, we had perfected a great portion of them and at our disposal. But since the misfortunes of the World choose to work against noble intentions, he was crossed by fortune with an immature death, & myself with infinite other occurrences; such that he was not able to give to the World anything more than the Celestial Scope, [...] and the Celestial Appearances, and the mirror of Nature, of Birth, Life, Death, Health, & The Infirmary of things, which, I hope, will be made strongly evident to the public in the Encyclopedic principles; of the Being, Substance and Appearance.

Under those Encyclopedic principles I having subsequently wrote about the Physical Chameleon, which does not mean anything other than natural in any other language; and dividing that into Mineral, Vegetable, & Animal. (CA 5-6)¹⁹⁹

The line, "Enciclopedici principij dell'Essente, Sussistente, & Apparente," in fact, is an echo of the title of Capo III of the Nolan Lyncean's *Delle apparenze celesti*:

¹⁹⁹ "Per la Morale già sà il Mondo, che della nobilissima Enciclopedia appena s'hauea cognitione anche in quanto al nome, quando Iddio risuegliò gl'ingegni eleuati a discorrer di quella; fra' quali primo fu, il mio amicissimo Nicolò Antonio Stelliola Linceo, degno figlio della nostra nobilissima Academia di Lincei di Roma. Costui hauendo mostrato in publica scena il solo frontespicio dell'Enciclopedia fu ammirato da tutta l'Europa, non che dall'Italia. Et essendoci vnitamente trauagliati per lungo tempo sopra molte materie nell'Enciclopedia promesse, haueuamo gran parte di quelle e disposte, e perfettionate. Ma perche i disagi del Mondo si sogliono opporre a' nobili disegni, egli fu attrauersato dalla fortuna, e da immature morte, & io da infiniti altri intoppi; sì che non ha potuto il Mondo altro che il Celeste Occhiale vedere, [...] e le Apparenze Celesti, e lo specchio della Natura, del Nascimento, Vita, Morte, Sanità, & Infermità delle cose, quali spero, che tosto si vedranno in publico sotto gli Enciclopedici principij; dell'Essente, Sussistente, & Apparente.

"Sotto a' quali Enciclopedici principij hauendo io in più progressi di tempo scritto del Camaleonte Fisico, che altro in nostra fauella non suona, che naturale; e quello diuidendo, in Minerale, Vegetabile, & Animale."

"Dell'apparente, del sussistente e dell'essente." These Stigliolan concepts are also linked to Bruno's vocabulary, so there is therefore duplicity of influence. More important, however, Fodio unremittingly took on his mentor's task of the universalization of knowledge in the form of encyclopedia in both his lost work, *Triumphus Encyclopedicus de Labyrintho Hasitationum*, and surviving work, *Il Cameleonte antipodagrico, discorso enciclopedico*. Fodio reiterates his mentor's perception of the link between his work and Mother Encyclopedia:

Encyclopedic Discourse. That is then called Encyclopedic, which is not a Name, or Middle Name, but a true Last Name derived from its true Mother Encyclopedia, both for its Moral part through Ethical virtue, as from Physics by means of its own nature and production. (CA 7)²⁰⁰

Fodio chose to present his medicinal remedy for gout in the form of an encyclopedic discourse because he sought to continue Stigliola's project. Evidenced, therefore, is a complex tangential link between Fodio and Bruno by means of Stigliola: 1) Fodio's Encyclopedism links to Bruno's *ars memoriae* by means of Stigliola's Encyclopedism; 2) Fodio is therefore linked to both Bruno and Stigliola's greater philosophical dream of *mutar stato*. Fodio's work is by title and methodology an extension of the encyclopedic project of his mentor. Stigliola would have written Fodio's himself had the Nolan Lyncean completed his all-encompassing *Encyclopedia pythagorea*. This is because Encyclopedism did not create the knowledge enshrined within its leaves, but rather revealed universal truths unveiled in the almighty book of nature in the form of words. Fodio explains:

²⁰⁰ "Discurso *Enciclopedico*. Che poi lo chiami Enciclopedico, ciò non è di Nome, o Agnome, ma vero Cognome deriuato dalla sua vera Madre Enciclopedia, sì per la parte Morale per virtù Etica, come dalla Fisica per propria natura, e produzione."

The Encyclopedia being therefore true Knowledge and beginning of every Science, & Art, dependent on the very general Gender, every science, or Art, which does not begin from another science, as a start between her, and the Encyclopedia, reasonably, one will say, to have an immediate start from the Encyclopedia.

Appearing as such to all, as it appears to me, that my Discovery [The Antipodagric Chameleon] does not have any start from another Science, or Art, one must esteem its beginning as sought, and found in the universal Mother of the sciences, which is the Encyclopedia, from which it legitimately took the last name of Encyclopedic, publicly giving honor to it. (CA 9)²⁰¹

Having derived his proposed treatment—a potion that functions much like a chameleon, i.e., mutating in accordance with the humors of the patient inflicted with gout—from Mother Encyclopedia, Fodio's claim is not so much that he *created* the antipodagric chameleon, but rather had the great privilege of having *found* it in the "Mother of the sciences." Fodio's medicine is therefore assured of its worth and he earns commendation for having gained access to the universal font from where all Knowledge, Science and Art originates.

Another way in which Fodio honors and recognizes his mentor is by calling to mind Pythagoras of Samos, who had once supposedly traveled in Calabria.²⁰² Fodio's esteem for Pythagoras brings to mind Stigliola's veneration of the great philosopher in his work's title: *Encyclopedia pythagorea*. Fodio possesses a certain affinity with Pythagoras, about whom he writes that "Encyclopedia is Mother, and producer of every science, but equally because it was cultivated in my dear homeland, where Pythagoras

²⁰¹ "Essendo adunque l'Enciclopedia vera Sapienza e d'ogni Scienza, & Arte principio, dipendente dal Genere generalissimo, ogni scienza, o Arte, che da altra scienza non prende principio, come principio mezano fra ella, e l'Enciclopedia, ragioneuolmente hauer si dirà dall'Enciclopedia principio immediato.

"E così parendo a tutti, come a me pare, che'l mio Ritrouato [i.e., *Il Camaleonte antipodagric*] non hauendo principio alcuno da altra Scienza, o Arte, deve stimare il suo principio come ricercato, e ritrouato nella universal Madre delle scienze, ch'è l'Enciclopedia, da cui ha legitimamente preso il cognome d'Enciclopedico, e publicamente honorar se ne dee."

²⁰² For more information on Pythagoras see J. S. Morrison's informative article, "Pythagoras of Samos."

promoted it" (CA 7).²⁰³ Fodio believed that he, like Stigliola, was continuing an ancient project advanced by Pythagoras. Fodio's Encyclopedism did not merely reproduce Stigliola's method, but instead continued the unique, universalizing project inaugurated millennia ago.

Further following the footsteps of Stigliola, and thereby Bruno, Fodio upheld that there be a unique principle from which all knowledge is born. Being that his knowledge of the virtues and powers of the chameleonic medicine had never been extracted from this universal font before his present work, Fodio unveiled it as his great gift to humanity. In line with his Nolan predecessors, Fodio believed that no single thing can be understood without first understanding the nature of this single, unifying principle. As such, Fodio's claim to have discovered the Antipodagric Chameleon in the universal encyclopedia implied that he understood how all knowledge derived from the One. He writes:

Regarding the Physical part, Encyclopedia comes from the word ἐγκύκλιος [sic], that signifies Crown, and means nothing else but Coronal Science, in which there is no beginning nor end, but every part is beginning and end, thus the sciences are conjoined, though subordinated to the Encyclopedia, as a unique principle, the one cannot be without the others, and, & *qui unam habuerit, omnes habebit*. (CA 8)²⁰⁴

Although Fodio reiterated many of his mentors claims and ambitions, this, however, does not imply that Fodio lacked originality and foresight. In fact, toward the end of *Il Camaleonte antipodagrico, discorso enciclopedico*, Fodio alluded to the futility of Bruno and Stigliola's comprehensive project to tap the universal mind and draw out its

²⁰³ "Enciclopedia [...] è Madre, e produttrice d'ogni scienza, ma parimente parche fu coltiuta nel mio suolo natio, oue la promulgò il gran Pitagora."

²⁰⁴ "In quanto poi alla parte Fisica, Encyclopedia dalla parola ἐγκύκλιος, che significa Corona, altro non significa, che Scienza Coronale, in cui non è principio, nè fine, ma ogni parte è principio, e fine, così le scienze sono congiunte, che subordinate all'Enciclopedia, come in vnico principio, l'vna non può esser senza l'altre, & *qui unam habuerit, omnes habebit*."

mysteries. With a tinge of irony in regard to Bruno's own "Expulsion" of the "Triumphant Beast" Fodio, too, argued that he "Triumphed" over the "Labyrinth of Uncertainties"—yet he contradicts his title by subsequently claiming the encyclopedia impossible to finish. Although the Calabrian doctor does not seem to have grasped the magnitude of this insight, for he stated it only in passing, it remains a glimmering instance of his independence of mind and an early modern presage:

Actually bringing myself to other infinites of diverse matters, I took from them a lot, Physics, Morals, Mathematics, Freedoms and Mechanics, about which I wrote a Treatise titled *Encyclopedic Triumph of the Labyrinth of Uncertainties*: subject in truth, had I lived the fabulous years of Nestor, or the historic ones of Methuselah, *one would never be able to bring to an end. Neither is this marvelous, because it is a Labyrinth.* (CA 99)²⁰⁵

In referring to his lost work, Fodio here reveals a glimpse of its contents. That is, in dealing with numerous topics Fodio concluded that the encyclopedic project initiated by Bruno's revolutionary readings of the heavens and articulated in Stigliola's works was, however, impossible to bring to closure. This is because 1) the sheer immensity of the universal mind dwarfs that of man; and 2) like oil and water, the temporal constraints of human existence and the infinitude of the universe shall never mix. Thus, Fodio intended that when man enters the circular, coronal wheels of the Encyclopedia, or spins the mnemonic wheels of *ars memoriae*, inevitably he shall lose himself in the inescapable Labyrinth of Infinitude.

²⁰⁵ "Anzi occorendomene altri infiniti di diverse materie, n'ho sciolti assai e Fisici, e Morali, e Matematici, e Liberali, e Mecanici, de'quali ho scritto vn Trattato da me intitolato *Triumphus Encyclopedicus de Labyrintho Hasitationum*: soggetto in vero, che s'io viuessii fauolosi anni di Nestore, o gli historici di Matusalemme, *nè anche si potrebbe ridurre a fine. Nè questo sia maraviglia, perche è Labirinto.*"

A FURTHER INSTANCE OF EPOCHAL REFORM: FROM TWO NOLANS TO FODIO

I now wish to turn to an altogether different realm of metaphors: medicine. No more than twenty scholarly pages are dedicated to the Calabrian medical doctor, Andrea Fodio Gambara. The "Encyclopedic Chameleon" of southern Italy undeservedly has been submerged in the annals of history. It is fortunate, however, that one Italian critic, Massimo Rinaldi, recently dedicated a great deal of effort to the study and "resurrection" of Fodio's mentor, Stigliola. The fortuitous fruits of this scholar's research into Stigliola subsequently "resurrected" Fodio from his abysmal slumber. Rinaldi's monograph, *L'Audacia di Pythio: Filosofia, Scienza e Architettura in Colantonio Stigliola*, delivers a picture of Stigliola as an early modern utopist and architect. In passing, Rinaldi also focuses on Fodio's mysterious treatise on gout, *Il Camaleonte antipodagrigo, discorso enciclopedico* (1651). Rinaldi argues that Fodio's encyclopedic treatise, in which the author pays homage to his Nolan teacher, underlines pervasive "theoretical difficulties" in the encyclopedic project (5). In line with the section above wherein I argue that Fodio divines the futility of the Stigliolan project as a form of never-ending labyrinth, Rinaldi too argues for a developmental interpretation of history that initiated with *ars memoriae* and culminated in the demise of the encyclopedia. Specifically, Rinaldi upholds that the circular wheels of the Brunonian mnemonic arts inspired the circular, coronal wheels of the "*encyclios*" in Stigliola, and which eventually took on the spiralforn character of the "*labyrinthos*" of uncertainties in Fodio (6-7). Although Rinaldi highlights this instance in seventeenth-century thought as one of theoretical disenchantment with the encyclopedic project, the critic does not believe that it stands as a rejection of Fodio's mentor's model. Instead, the doctor's work on gout follows his mentor's path to near perfection by calling

upon Mother Encyclopedia, thereby tapping the universal fount of knowledge and awakening the dormant and ancient doctrine of Pythagoras. *Il Camaleonte antipodagrico, discorso enciclopedico* is very much what the work's title implies: a contribution to the encyclopedic project. Its contribution to modern thought and science, therefore, is a relic of Encyclopedism, not a rejection of it.

Medical Metaphors of Reform

I wish to explore another coherent link between these three thinkers. It is of interest that Stigliola—a thinker who in 1577 inaugurated his publishing career with a treatise on theriac and mithridatium, and subsequently garnered both respect and disdain in Italy for his confrontational medical theories—inspired two students who went on to publish medical treatises of their own, each earning respect as a premiere seventeenth-century southern Italian medical doctor: Andrea Fodio Gambara and Marco Aurelio Severino (1580-1656). One speculates that it is likely that Stigliola, who received his education in medicine in Salerno, emphasized medical studies in his private Neapolitan lessons.²⁰⁶ The Lyncean Nolan chose not to publish nor continue his own investigations into medicine *per se*, as he turned to the art of celestial architecture, yet his two students, particularly Severino, filled hundreds of pages in the field.

Both Severino and Fodio's works infuse diverse branches of philosophical speculation, many of which echo Stigliola's metaphysical and cosmological encyclopedic works published in the early seventeenth century. I ask: How apparent is Stigliola's Brunonian philosophical lean in the works of Severino and Fodio? More important,

²⁰⁶ On Stigliola's school see P. Manzi, "Un grande nolano obliato," pp. 294-95 & 308.

using Blumenbergian terminology, what medical and philosophical metaphors are invoked in these two authors' works that reveal the *reoccupations of positions* filled initially by Giordano Bruno? Although I would like to dedicate this dissertation to both Severino and Fodio, I focus my attention solely on the latter of the two.²⁰⁷

Medicine's Blumenbergian Problem is Health

Read metaphorically and in its absolute, medicine symbolizes man's attempt to solve the problem of what constitutes health. Any inquiry into the body, which prompts remedy or cure, also grants insight into the philosophical bedrock upon which medical inquiry is founded. Analysis of specific medical advancements, therefore, always refers, though tangentially, to the primary problem of how man addresses his own perception of health. For example, Bruno's work, the *Medicina lulliana*, addresses the relationship between the body in which the spirit of God is manifest, and the natural world. The Blumenbergian problem that Bruno takes as his central concern is: If the magus seeks

²⁰⁷ The medical doctor is the author of numerous works, of which I list the following editions found in Harvard's Hollis: *Vipera Pythia; id est, De viperae natura, veneno, medicina, demonstrationes, & experimenta nona*. Patavii, Typis Pauli Frambotti, 1651; *De efficaci medicina libri III. qva Herculeae qvasi manu, ferri ignisque viribus armata, cuncta, sive externa sive interna, tetriona & contumaciora mala colliduntur, proterunter, extinguuntur; adjuvantibus aequae pragmatias experimento, methodi fulcimento, auctoritatis complemento. Opus ante hac in arte desideratum, nunc rursum in lucem datum*. Francofurti ad Moenum, Sumptibus Ioan. Lvdoici Dvfovr, Genevensis; typis Balthas. Christophori Wustij, Iun., 1682; *Marci Aurelii Severini quaestiones anatomicae quattuor. Prima, De aqua pericardiae. Secunda, De cordis adipe. Tertia, De poris cholidochis. Quarta, osteologia pro Galeno adversus argutiores epidochae in totidem alias Julii Jasolini*. Francofurti, Apud Hermannum à Sande, 1668; *Trimembris chirurgia, in qua Diaetetico-Chirurgica Pharmaco-Chirurgica, et Chymico-Chirurgica traditio est. Ad clarissimum virum Michaellem Rupertum Beslerum*. Francofurti, Ioannis Godefridi Schönwetteri, 1653; and *Zootomia democritea; id est, Anatome generalis totius animantium opificii, libris quinque distincta, quorum seriem sequens facies delineabit [...]*. Noribergae: Literis Endterianis, 1645. Severino also published on chess theory and its connection with the universe: *La filosofia, ovvero, Il perchè degli scacchi per cui chiaramente si mostra prima l'artificio della fabrica universale, poscia la ragion particolare della ordinanza, & degli andamenti tutti degli scacchi : trattato non tanto per lo gradevole scherzo, quanto per la riposta contezza delle cose pregiate / di M. Aurelio Severino [...]*; dedicato all'illustrissimo Signore D. Benedetto Caracciolo [...]. In Napoli: A spese d'Antonio Bulifon, 1690. In a future study I will explore Stigliola's and Bruno's influences on Severino.

empowerment through an uncovering of the mysteries of God's universe by means of careful analysis of nature and art, then it follows that if he were to take his body as the object of his investigations, which is shaped in nature by the greatest artist, God, then through it he might learn of miraculous ways to prolong life, cure disease, and secure health. Medicine's Blumenbergian problem is health.

In the *Medicina lulliana* Bruno undertakes the Blumenbergian problem of health by shining a spotlight on the soul's finite vehicle, the *corpus humanum*. Diversions from health arise because the body, like all objects in God's universe, is subject to the eternal *mutazioni* of and in the universe. The soul finds passage in the body, yet the body submits to the laws and restrictions of nature. No cosmological or existential question rivals in primacy that of the desire to conquer one's own body. If the body were not the prison in which the soul were temporarily held captive, it would require no aid and no attention. The body would thereby cease to be a *problem* requiring a *solution*—all medical inquiry would disappear. The proponents and advocates of medical inquiry blossom every day as if doomed at the inception of life.

Broadly speaking, I believe that under this umbrella—that all of medicine is a metaphor for the desire to achieve health—it is possible to understand why and how specific advancements in the history of medicine have come to fruition. Any study of medical history conveys, by means of metaphor, the processes leading up to a medical concept's formation. The metaphorologist, therefore, unveils this process leading up to concept formation through an analysis of medical advancements as how people perceived the problem of health. The result is not a process of looking back upon time, but rather of

a reconstitution of the evolution of a concept—how did it come about, what prompted its arrival and the demise of its predecessor, and what might be its fate?

How Medicine and Health Reveal Epochal Change

The seventeenth century saw great developments in the field of medicine and the causes for such successes are not to be interpreted in a vacuum. Whatever prompted the demise of Renaissance medicine and sparked the arrival of modern medicine is likely part of a complex network of threads that weave about diverse branches of thought, even including aspects of philosophy, science, and theology. Although the modern medical doctor has little time for anything but "hard evidence," experiments, tests, prognoses, diagnoses, prescription and cure, at the base of his medical empiricism is found a complex ontology that he took from diverse sources.

Unlike astronomy and cosmology, in medicine the object of study is our very own self—the human body. Because widespread interest in medical advancement is a pressing concern in order to sustain and promote health, advancements in medicine happen rapidly and regularly. Thanks to this continual and unwavering interest in sustaining and promoting health, an inquiry into the steady and revolutionary medical developments of the seventeenth century will prove helpful in determining how the modern age came about. Unlike other branches of learning, medicine has never gone dormant.

Seventeenth-Century Medicine: Where is the Epochal Shift?

If medicine is the object of study, then through it should be evinced aspects of the epochal shift to the modern age. I move to example: William Harvey is perhaps the most important name in seventeenth-century medicine. His *De motu cordis*, in which he proved that blood circulated throughout the body by the muscle of the heart and in a circular fashion, stands as one of the most emblematic instances of modern medical inquiry. What Galileo achieved in terms of physics and astronomy, Harvey achieved in medicine. That is, the famous student of Fabricius applied mathematics to the field of biology—an instance of pure revolution.

Bruno, conversely, is never mentioned as a specialist of medical inquiry. The reasons for this may be expressed through a comparison of the two thinkers. Andrew Gregory studies the similarities and differences between Harvey and Bruno in the chapter, "Macrocosm, Microcosm and the Circulation of the Blood: Bruno and Harvey," in editor Hilary Gatti's *Giordano Bruno: Philosopher of the Renaissance*. Gregory cites Bruno's *De rerum principiis*: "The blood and other humours are in continuous and most rapid circulation." Blood "[g]oes out to the whole of the body and comes back from the latter to the heart, as from the centre to the circumference and from the circumference to the centre, proceeding so as to make a sphere" (368). Yates would argue that this instance of speculative brilliance was a mere extension of his Hermeticism. That is, unlike Harvey, whose theory was proved true through empirically based evidence, Bruno intuited the process of the circulation of blood based upon his metaphysics. This distinctive difference of method in Harvey and Bruno used to achieve similar ends is the fine resting point around which our modern mind draws the dividing line in the perception of seventeenth-century science vs. Renaissance science. Although Harvey

mentions the importance of a Hermetic microcosm-macrocosm analogy, which he attributes to Aristotle, in his *De motu cordis*, he does it predominantly for the sake of analogy alone, rather than as a means to unveil how the analogy is the prime mover. Gregory concludes that we must always, therefore, keep in mind the important difference between Bruno and Harvey (and, resultantly, thinkers of similar distinction): "Bruno was a Neoplatonist, and sought a correspondence between the nature of soul in the macrocosm and soul in the microcosm, Harvey was a neo-Aristotelian more interested in the detailed functioning of the heart and the circulation of blood" (380). Seventeenth-century medicine, like other branches of science, is modern in that it occupied itself with a mechanistic, empirical universe, not the metaphysics of the late-Renaissance. To decisively argue that Bruno contributed to modern medicine, therefore, one would have to demonstrate how his philosophy partook in the establishment of the modern scientific method. This, I believe, is possible. I must, however, first present the Nolan's theories on medicine and health before explaining its influence.

From the Beginning: Bruno's Theories of Health & Medicine

We see that the intellect, so skillful in dealing with the inert, is awkward the moment it touches the living. Whether it wants to treat the life of the body or the life of the mind, it proceeds with the rigor, the stiffness and the brutality of an instrument not designed for such use. The history of hygiene or of pedagogy teaches us much in this matter. When we think of the cardinal, urgent and constant need we have to preserve our bodies and to raise our souls, of the special faculties given to each of us, in this field, to experiment continually on ourselves and on others, of the palpable injury by which the wrongness of a medical or pedagogical practise is both made manifest and punished at once, we are amazed at the stupidity and especially at the persistence of errors. We might easily find their origin in the natural obstinacy with which we treat the living like the lifeless and think all reality, however fluid, under the form of the sharply defined solid. We are at ease only in the discontinuous, in the immobile, in the dead. *The intellect is characterized by a natural inability to comprehend life.*

Henri Bergson, *Creative Evolution*, p. 165.

By nature, Bruno, too, possessed an inability to comprehend life. This is why, like many others, Bruno's contribution to medical knowledge was minimal, if even

extant. No surprise, therefore, that few scholars have sought to understand it. Bruno's medical ideas, which might seem preposterous to the sharpened modern mind, were not all that unusual. Certainly more outlandish claims have been made by medical doctors, magicians, alchemists, etc., than the link between the body and the stars! In any case, the words "Bruno, medicine and health" rarely, if ever, appear near one another in any monograph or article. Bruno, however, found great interest in the study of medicine and health. Any oversight on the part of scholarship to explore this link has resulted in the impoverishment of our knowledge of the past. Specifically, I believe attention must be given to Bruno's important and understudied text, *Medicina lulliana partim ex mathematicis partim ex physicis principiis educta*, along with his reform of *De magia*, the *De rerum principiis et elementis et causis* (1590). Palpable textual links with medicine are also found in other works Bruno wrote during his two last years of freedom, such as both *De vinculis in genere* and *Lampas triginta statuarum*, along with mentions in *De magia* and *De la causa, principio et uno*. Herein, however, I dedicate my energies primarily to Bruno's *Medicina lulliana*, the most exemplary and least studied of the aforementioned works.

Bruno's *Medicina lulliana* is a curious aberration in the author's corpus of literature. Bruno never received formal training in medicine, nor did he ever practice or claim to have practiced medicine during his travels in Europe. Any notion Bruno devised in relation to medicine, therefore, was likely divined from his infinite pananimism. Moreover, one must question Bruno's use of the word *Medicina*, as it likely evokes an extreme diversion from the use one finds, for example, in Harvey. Speaking to this, Bruno describes the work's *Intentio*:

In this treatise we intend not so much to list according to diffuse habit those principles of medicine that are tightly linked to strict medical practice, as much as apply a specific discipline and modify, while remaining true to its principles and its intentions, that general art devised by Lull for all the sciences and all the occasions, so that whoever wishes is able to easily reach full understanding of true medicine. (*OLC* III.6 572)²⁰⁸

Although Bruno fearlessly wrote and preached on topics often outside his realm of command, such as mathematics, I do not believe he would have, due to technical ignorance, written a treatise on medicine dealing with specific illnesses and their treatments. This is not to suggest that Bruno did not possess the mind for such discussions, but rather that the Nolan occupied himself primarily with cosmological and moral questions. The human body interested Bruno only in as much as it was the *minimo*, a metaphoric microcosmic representation of the entire universe. The *Medicina lulliana* reconciles cosmological, speculative mysticism with treatments in the field of medicine and should therefore be read as an expansion of his philosophical system, not a pure investigation into specific treatments and practice.

Not surprisingly, therefore, Bruno's medical treatise displays no indisputable originality in the field of medicine. Apart from his initial statement of the work's ability to teach the path to "true medicine," the whole work is derived, as the title reveals, from the famous medieval mnemonist philosopher and doctor, Ramon Lull, specifically from two of his medical books, *Liber principiorum medicinae* (c.1274-78) and *Liber de regionibus sanitatis et infirmitatis* (1303). The parallels between Bruno's work and these two texts is undeniable.²⁰⁹ For example, Bruno's work follows the identical format of

²⁰⁸ "Intentio nostra est non tam vulgari more principia medicinae, quae praxi proxima sunt, adducere, quam artem Lullii illam generalem ad omnes scientias et facultates ita limitare et modificare iuxta eius intentiones, ut quilibet facile in verae medicinae totius cognitionem venire possit."

Lull's *Liber principorum medicinae*. To begin, Bruno defines various types of fevers, such as tertian and severe, and details, in concurrence with Lull, the necessity for such distinctions. To follow, as in Lull, Bruno dedicates ample sections to the analysis of a patient's urine in the effort to identify imbalances in the humors. In further accord with Lull, Bruno provides an analysis of the significance and diverse interpretations of the pulse. In sum, the work re-writes Lull's initial treatise, though it also combines it with the broader intention of unifying Lullian medicine with Brunonian cosmology. That is, in the brief work and in line with Lull, Bruno identifies the object of concern as the *corpus humanum* and studies its relation with the heavens and nature. Bruno believed the human body to be composed of the four elements (fire, air, water and earth), and governed both by the distant "celestial bodies" as positioned at a life's inception, and the position of the stars at the time of analysis (574). The body is dominated by one of the four elements at birth, which results in a dominance of a certain humor (phlegmatic, choleric, melancholic, sanguine), along with temperature and fluidity (hot & cold, dry & moist). The celestial bodies, which are in constant flux, may both disturb and balance the body's humors. The Lullian medical doctor, according to Bruno, seeks to emulate and imitate the influences of the stars in the hope of balancing irregular humors in the patient. This is achieved through a careful reading of the zodiac and a recognition of specific imbalances in the temperament of the patient, which is done through an analysis of fever, pulse or urine. Once all of these qualities have been identified—achieved through the use of a Lullian "wheel," composed of diverse "houses" that chart the seasons, months, days, and hours in which influences in "universe, which means the megacosmos,"²¹⁰ act out their

²⁰⁹ See F. Yates, *Lull & Bruno*, pp. 25-27.

powers upon the body—the Lullian doctor prescribes a cure, such as a change in appetite or climate (775). It is important to note, however, that Bruno carefully avoids prescribing any remedy. For the sake of precision, I believe that if one were to succinctly label Bruno's concept of the medical doctor it would be a sort of Lullian combinatoric medical astrologist of the infinite universe. Bruno provides a useful description of this aspiration:

Thus, proceeding according to an order that, more than obscure or logical, is clear, [and which is] founded by and evidenced in physical principles, we push ourselves to follow and conduct that Lullian art where it truly tends; and certainly we will obtain and understand not a little if we are able to reach those universal principles that consist in enumerated combination, that proceeds according to the diverse succession of the four regions, departing from the eight houses placed under the twelve signs and multiplied in a sevenfold revolution, which designate by means of their ordered series the dominion of the seven planets, or rather the seven kings of the days. This method of invention and of judgment—if we retain that no one applying it has until now obtained easy and significant results, which is itself understandable if one considers that not even Lull himself sought to practice it, the operation that is not easy without the precision that we have herein brought—has however identified a far away light, to it homogeneous and conformed in the universal and common principles, which are very similar to the very universal and very common principles of the Lullian Inventive Art, heuristic, combinatoric, and also called great or brief or with other names, too. To these principles is also provided a greater determination and application, the closest possible, or at least, close enough, to the work, since a task of such sort is not granted to all, neither to more, neither to anyone of my knowing. There is nothing therefore of marvel that such a precious treasure has been until now undervalued, dirtied and disparaged by nitwit men lacking intellectual light. (813)²¹¹

²¹⁰ "universo, nempe megacosmo."

²¹¹ "Itaque non caeco et logico, sed claro, evidenti et physico ordine progrediendum, eo hanc artem Lullii promovemus quo tendit, a quo non modicum habemus et recognoscimus, si universalia principia nacti sumus, quae consistunt in enumerata combinatione, quae sequitur ex diverso ordine quatuor regionum iuxta octo domos sub duodecim signis multiplicatas in septemplici revolutione, quae dominium septem planetarum seu regum septem dierum suo ordine insinuant; quam sane viam inveniendi et iudicandi—etiamsi secundum ipsam neminem hactenus potuisse proficere facile credamus, quamque etiam ne Lullius quidem ipse ad praxin revocarit, siquidem sine distinctionibus a nobis allatis non esset facile—lucem tamen ipsam veluti a longe ita indicavit, ut compar erat in principiis universalissimis et communissimis suae Artis inventivae seu combinatoriae seu magnae brevis seu alio quovis nomine intitulatae; quibus deinceps praebere maiorem limitationem et applicationem operi proximam seu propinquiorem saltem, iuxta tantem momenti non omnibus datum fuit neque pluribus neque alteri quem viderim. Ideoque non est mirum si tantus thesaurus ad hoc usque tempus brutorum pedibus conculcatus et feodatus extiterit."

Bruno's command of Lull is well documented by scholars.²¹² In all of Bruno's mnemonic works the Nolan philosopher references the Majorcan Ramon Lull, the Middle Age's greatest promoter of the mnemonic arts. Lull's magisterial command of the language of *ars combinatoria* inspired diverse Renaissance mnemonists, most certainly Bruno. In the *Medicina lulliana* Bruno combines Lull's complex *ars combinatoria* and medicine. The product richly unites two systems of thought that to the modern mind appears rather muddled and highly unsystematic. With regard to Lull's art, Bruno believes that in the effort to identify an illness, the medical doctor must attentively analyze the body in search of evidence of particular states of illness or well being. Illness and well being manifest themselves in the form of Lullian shadows in the body's physical composition, emoting irregular heartbeats or fever, a vibrant complexion, or an absence of pain. These Lullian shadows provide the medical doctor insight regarding the presence of imbalances and disorders. The doctor arrives at the nature of the ideal form, which has a specific and unalterable remedy, by means of an interpretation of the illness's shadow. A correct interpretation of the significance of the shadows will allow for diagnosis and remedy. Leaping ahead, one might say that whereas Bruno used the term "shadow," modern medical doctors use the term "symptom."

The *Medicina lulliana* extends Bruno's philosophy, it does not refine it. Bruno does not delve into the field of medicine to establish himself as one of the field's experts, but rather attempts to strengthen his argument that *Nolana filosofia* (a combination of Hermeticism, Neoplatonism, Natural Magic, Lullism, Monadism, Humanism, Ars

²¹² For example see F. Yates's collected articles on the topic, *Lull & Bruno* & her outstanding study on the history and importance of the mnemonic arts in *The Art of Memory*, esp. pp. 173-265; see also A. Nowicki, "*Il pluralismo metodologico e i modelli lulliani di Giordano Bruno*."

memoriae, Copernicism, Jewish Cabala, Pythagorism, etc.) applies to all things in God's dominion. Bruno universalizes his medical theories through a claimed understanding of the Principle, Cause and Unity of the universe. No natural event escapes the rules that emanate from the divine and paradoxically ubiquitous center of all things. Bruno's focus on the *corpus humanum* is therefore practically arbitrary. In the *Medicina lulliana* the *corpus humanum* metaphorically represents the infinite universe because the body further reveals how universal laws govern all things, much as those very laws would govern a tree or a stream.

Bruno's Concept of Spiritual Health vs. The Modern Age's Concept of Physical Health

One of the most eminent Bruno scholars, Edward Gosselin, explored the link between Bruno and medicine in an article published in 1984 in the *Sixteenth Century Journal*. In "'Doctor' Bruno's Solar Medicine" Gosselin argued that the Nolan's famous defense of Copernican cosmology, *La cena de le ceneri*, should be read as a sort of metaphoric philosophical-medical treatise. Gosselin's thesis is that Bruno's *Cena* is a "drug which would cure the madness of religious division" in England (216). Gosselin believes that "the social and intellectual ills afflicting England is made possible by the eucharistic medicine of the Sun, the 'hellebore' that the Nolan was bringing to England" (217). Gosselin justifies this position by establishing the work in the tradition of "solar literature," which originated, according to Eugenio Garin, whom Gosselin cites, in Julian's *Oratio ad solem* (210). The *Cena*, according to Gosselin, would return to the Sun in the effort to cure the social and intellectual illnesses of the sixteenth and seventeenth centuries (212). The critic finds evidence of medical metaphors throughout the work's

dialogues, such as the curing of blindness and the freeing of the mind, all of which were devised because the Nolan believed that there be "a close connection between cosmology and virtue" (217).

Gosselin's article, I believe, is a shrewd metaphorological—though not intentionally in the Blumenbergian vein—reading of Bruno's *Cena*. From this vantage the problem that the philosophy of Bruno attempted to solve was the "sickness" of Christian myth, which had permeated all facets of social and political order. Only through a recuperation of a Julianesque form of "solar medicine" would the diseased English—and perhaps Europeans—have been able to overcome the travails of long-standing, malignant myth and return to a state of health. The *Cena*, therefore, is the metaphorical "prescription," Bruno the "medical doctor," and the Sun is the "medicine." In Blumenbergian terms, Gosselin's metaphorology highlights the nature of the problem leading up to concept formation. That is, Bruno's evocation of the metaphoric "solar medicine" sought to both respond to and remedy an ever-present problem at the heart of Christian dogma. Building upon Gosselin's idea, I believe Bruno's *Spaccio de la bestia trionfante* also has a medicinal quality. In this moral dialogue Bruno proposes a remedy much in line with the *Cena*'s "solar medicine," which would first alleviate and remove the diseased "beast" of errant doctrine and second replace it with the a healthy brand of Brunonian cosmo-spirituality. In this metaphoric light, then, *mutar stato* is the modern age's prescription.

Following this line of thinking, one might argue that Bruno's most innovative "medical" theories were not those proposed in his *Medicina lulliana*. Instead, Bruno's greatest contribution was his attention to the spiritual and philosophical health of the

world that was then drowning in the ocean of ruptured dogma. One might argue that Bruno's entire corpus of literature aspired to "cure the madness of religious division" because he thought that the Copernican Revolution allowed for the even greater revolution: the unification of religious division throughout the world. By means of the "new light" of the Copernican Revolution, Bruno believed it was possible to cure the ailing and misguided hearts of men. In order to demonstrate this, I return once again to the opening sonnet of *De l'infinito, universo e mondi*. As I demonstrated earlier in this dissertation, in this sonnet Bruno announced his liberation from the dark, stagnant prison of the previous order. To this I add the interpretation that I discussed briefly before: this liberation, brought on by the Nolan's reading of Copernicus, was akin to the metaphysical and spiritual "healing" of the modern age. Speaking directly to the Sun—metaphor of hope, truth and revolution—Bruno writes that he brought to him "healing":

Escaped from the narrow murky prison,
Where for so many years error held me straightly,
Here I leave the chain that bound me
And the shadow of my fiercely malicious foe
Who can force me no longer to the gloomy dusk of night.
For he who hath overcome the great Python
With whose blood he hath dyed the waters of the sea
Hath put to flight the Fury that pursued me.
To thee I turn, I soar, O my sustaining Voice;
I render thanks to thee, my Sun, my divine Light,
For thou hast summoned me from that horrible torture,
Thou hast led me to a goodlier tabernacle;
Thou hast brought healing to my bruised heart. (Singer 248; my emph.)²¹³

²¹³ "Uscito de priggione angusta e nera, / ove tant'anni error stretto m'avinse, / qua lascio la catena, che mi cinse / la man di mia nemica invid'e fera. / Presentarmi a la notte fosca sera / oltre non mi potrà: perché chi vinse / il gran Piton, e del suo sangue tinse / l'acqui del mar, ha spinta mia Megera. / A te mi volgo e assorgo, alma mia voce; / ti ringrazio, mio sol, mia diva luce; / ti consacro il mio cor, eccelsa mano: / che m'avocaste da quel graffio atroce, / ch'a miglior stanze a me ti festi duce, / ch'il cor attrito mi rendeste sano" (*DFI* 321).

Bruno's "divine Light" "summoned" him "from that horrible torture," granting him access to the "goodlier tabernacle," which he equates with "healing." To Bruno, the Sun, symbol of truth, works as a medicine that heals his spirit, much as a pill alleviates a headache or diminishes inflammation.

In Bruno's understudied *Lampas triginta statuarum* (1587), a work that again touches on Lullian themes, the Nolan establishes a direct correlation between the state of spiritual health and the presence of truth. Truth, Bruno upholds, acts as nutrition for the soul, thereby restoring health in a malnourished body.

The soul's food, as is known, is truth: this in fact may transform itself into the substance of the soul, as if it were the natural cure. Perfection and end of such nutrition is the light of contemplation. (*OLC* III.1 3)²¹⁴

A body or soul that receives the bounty of truth will, Bruno's logic follows, attain a state of physical and spiritual health. Bruno regarded his philosophy as the Brunonian "new light," which necessitated a "new truth" for Europe, and would therefore allow for the acquisition and sustainment of health in the modern age. Philosophical truth results in health.

Fodio's idea of health is similar to Bruno's. As in Bruno, Fodio's metaphoric *Camaleonte* aspires not only to cure the body of a specific ailment, but, more important, seeks to soothe and remedy the ailments of the soul. Accordingly, Fodio writes that when a patient takes the *Camaleonte antipodagrigo*, his "Metaphoric" medicine goes through a series of "Metamorphoses": 1) "Its first Metamorphoses is one of pity"; 2) "The second is for common folk, and of mediocre fortune"; 3) "The third is for Great People";

²¹⁴ "Animae cibum esse veritatem, utpote quae in eius substantiam, veluti proprium nutrimentum, transmutabilis est, [esse] constat: perfectio et finis huius nutrimenti est lumen contemplationis, quo animus noster oculis intelligentiae primum quidem solem primae veritatis, deinde ea quae circa ipsum sunt, valet intueri."

and 4) "The fourth takes place in sublime People" (CA 33).²¹⁵ The medicine understands and sympathizes with the inflicted patient. The *Camaleonte antipodagrico* is a benevolent medicine that does not, however, judge or show preference for men (though he never mentions women) of higher or lower social stature: "distributing itself always the same for everyone, without making distinctions between Kings and Common Folk" (CA 34).²¹⁶ In agreement with Bruno, Fodio believes that health derives from truth.

Fodio's medicine, which has attained this state of medicinal "truth," is not the product of the arguments and discussions of medical doctors, but rather the compilation of all things into "one unique harmony of truth" (CA 41).²¹⁷ Fodio writes: "I, conversely, have sought health in the end, and for that reason I have called [the antipodagric medicine] *the staff of health*" (CA 97).²¹⁸ By this Fodio means that unlike many medical doctors of his era—vain, pedantic, self-promoting—his only aspiration is medical truth and healing. Of course, it appears evident that Fodio, in truth, is merely playing a well crafted hand in the same game of cards.

From this it appears that Bruno and Fodio's medical theories did not alone prompt any concrete developments in the highly specialized field of medicine. Bruno's greatest concern in his *Spaccio* and *Cena*, for example, was primarily the healing of the soul, not of the body. In contrast to Bruno, the modern age has largely neglected the necessity for spiritual and moral "health," which is a direct ramification of the age's acknowledgement

²¹⁵ "La sua primiera Metamorfose è di pietà"; "La seconda è nelle persone popolari, e di mediocre fortuna"; "La terza nelle Persone Grandi"; "La quarta in Personaggi sublimi."

²¹⁶ "distribuendosi sempre il medesimo a tutti, senza far differenza tra i Re, e' Popolari."

²¹⁷ "in vna sola armonia di verità"

²¹⁸ "Io per contrario ho hauuto per vero fine la salute, e perciò l'ho chiamato *lignum salutis*."

that if health is to be sustained the body demands greater attention than does the spirit. In due course, medicine has narrowed its field of concern to only those topics within the grasp of the senses, and thereby easily subject to scientific experimentation. Unreliable metaphysics, magic and spirituality have been reoccupied by the material sciences. In Blumenbergian terms, Bruno's "solar medicine" was not supplanted by an alternative *reoccupation of a position*, but was rather dismissed by modern medical doctors as a less than immediate object of their concern.

Although Bruno would never likely earn a chapter alone in a traditional textbook on the history of medicine, I believe it is possible to read Bruno's influence, by means of his medical theories, as both strong and weak in the development of the medical knowledge and the modern age. First, Bruno influenced modern medicine strongly by advocating an alternative interpretive lens with which to view the body as it relates to the universe. This lens, Hermeticism, participated in the demise of the Renaissance mind. Bruno supplemented his works' Hippocratean, Aristotelian foundation with Lullism and Hermeticism. Second, Bruno's attention to spiritual health and not corporeal health, for which the seventeenth century and the modern age show little interest, highlights how the period shifted from the Hermetic paradigm, which relied on "correspondence" in an "animate" universe, to that of the material or mechanistic approach, which dismissed the belief in action at a distance. I believe, however, that the dismantlement of Hermetic dualism, ironically, ushered in animism's greatest antagonist: Materialism. In this light, the rejection of Bruno's brand of Hermetic thought demarcates and validates the line that scholars have drawn between the pre-modern and the modern ages. Brunonian esoterism, more specifically, Hermeticism, when read metaphorically, provides evidence as to how

the early modern period may be properly read as one of complete reform. Specifically, Brunonian Hermeticism proposed a solution to the problem of the hegemony of the orthodox doctrines recycled in the colleges and universities throughout Europe, most commonly those of Aristotle. Although Hermeticism might not have triumphed in itself, as a metaphor it successfully signaled the eventual demise of its predecessor.

Hermeticism's popularity resulted from an apparent interest in the early modern period to identify an alternative lens through which to view the changed universe. Although seemingly contradictory, Hermeticism's greatest achievement was the opening of its doors to Materialism. Similar to the Hermetic perception that upholds that there are correspondences in nature built upon the relationships of monads, Materialism, too, perceives nature as being comprised of atoms and connected parts constituting a whole. Materialism has proved to be a better solution than Hermeticism to the problem of matter and natural relationships because it eliminated the precarious and paradoxical Hermetic duality of "Above" and "Below." The modern age dismissed duality, yet in birth held tightly to the Hermetic paradigm that there be strict relationships between material things. What I argue, therefore, is that a part of the modern age was founded on monadistic ontology. That is, the Hermetic monad, paradoxically smallest and simultaneously largest particle in the universe, is a metaphoric representation of the function of and relationships within the material world. By disposing of duality, the modern age, consequently, dispensed of what I call, using a neologism, the "hermespiritual" significance of monadism, focusing instead only on material relationships in nature. Modern medicine has little time for questions of spirituality or the health of the soul

because, unlike the tangible and mutable material world, spiritual (immaterial) health proves evasive to the modern medical doctor.

Medicine & Hermeticism as a Joint Metaphor of Reform

I begin with Hermeticism. All modes of enquiry into medicine rest upon, I argue, uniform bedrock. An understanding of the composite function of the body requires knowledge of two distinct categories: 1) the individual parts, such as the heart and lungs and bodily functions, such as the circulation of blood, the nervous system and the senses; and 2) the *relationships, similarities and differences* amongst those parts situated in the whole. This bedrock is one of a complex differentiation between constituent parts, yet also an acknowledgement that no part functions alone. Ancient and modern doctors alike have relied on an understanding of the diverse functions of the body in relation to one another in the effort to diagnose and cure illness. The body is connected to all of the universe by means of a complex relationship between itself and what is foreign to it. An action might appear "at a distance," but only in as much as the mind sees the body and the surrounding natural world as being independent and not linked through a material universe. For example, a supernova light-years away from Earth communicates "at a distance" with a human the instant that its light become visible to the human eye. This act of communication is not "mystical," or "magical," but rather verifiable and empirical. Ancient through Renaissance astrology explored this link between the stars and the body. Although many modern minds dismiss ancient opinions as naïve beliefs in communication at a distance, when read as a metaphor, ancient astrology provides sharp insight into the modern understanding of the relationship between the body and the

natural world. That is, astrology is not to be read as a curious relic of the past, but rather as the metaphoric representation of the significant leap of intuition that upheld the idea that there be a complex relationship between diverse and sometimes distant objects in nature. The astrologer's argument that the stars influence man at a distance is a solution to a problem—how does the human body relate to nature and why does it appear that one corrupts the other? It is not an errant and historically dismissible instance of faulty intuition. One might argue, therefore, that much of Renaissance and early modern "mysticism" and "magic" foreshadowed modern advancements in the sciences. Sharing and expanding this opinion, Allen Debus interprets the historical rush to find texts in the occult sciences, "astrology, alchemy, the cabala and Pythagorean numerology" as a "search for a new key that would unlock the mysteries of the universe" (*Man and Nature* 133). Debus's claim is that the alternative modes of inquiry brought to life in the Renaissance were vital to the reform of diverse branches of knowledge, including medicine, whether or not they individually lead to accepted scientific advancements. He writes:

This humanistic strain, Hermetic, magical, and alchemical, was deeply ingrained in the science of the period. These scholar-mystics continually repeated their belief that man must study God's Creation so that he might better understand the Creator himself. True science and medicine for them was nothing but the knowledge of the secrets – and the hidden powers – of nature. In short, science and medicine were both seen as aspects of natural magic. Man would learn by his observation of those essential harmonies that linked all parts of nature. Agrippa, Porta, and Dee all participated in this mystical search for truth through nature. But the most influential of all were the Paracelsians, who openly called for the destruction of ancient authority. They were the ones – rather than the Paduan anatomists or the Copernicans – who saw the immediate need for a new and a different science and medicine. And their conviction that this would be based on their own medico-chemical system resulted in a debate that was as acrid as it was significant. (*Man and Nature* 133)

Although Debus stresses the Paracelsian revolution as most important in the birth of modern medicine, the critic alludes to an argument that I currently defend: unorthodox, innovative, and reformist paradigms of thought, when read as metaphors, stand as historical recognitions of the deeper complexity of problem that one, or groups, believed had until then been poorly solved. For example, the Hermeticists, like the Paracelsians, sought an alternative means of understanding nature for spiritual, medical and philosophic purposes. Regardless of the means, the *intent* underlines the mounting reformist sensibility and distaste for orthodoxy that extended throughout Europe at the crux of the modern age. Bruno, Stigliola and Fodio were some of the greatest promoters of Hermetic thought in sixteenth and seventeenth centuries. In each of their works Hermes Trismegistus is either directly cited or his ideas are referenced. This is because Hermeticism—a strong current of reformist thought—is both one of the greatest fruits of the renascence of ancient texts, yet also one of motives for which the Renaissance saw its demise.

What is it about Hermeticism—or similar branches of occultism and esoterism—that signals the demise and subsequent birth of the modern age? More than a set of books comprising the *Hermetica*, Hermeticism is, as Paul Colilli explained, "a vast ensemble of doctrines, beliefs and practices that [...] includes the Christian Cabbala and most of the forms of modern esoterism" (*Signs* 2). It is in this light that Frances Yates analyzed the "Hermetic Tradition": a compilation of parts extrapolated from the gamut of esoteric Renaissance literature. Hermeticism is a system of thought akin to a "strong Neoplatonism," more than it is a corpus of literature (*Signs* 2). Identification of Hermetic thought, therefore, does not solely require philological attribution of specific references

to the *Corpus Hermeticum*, but rather (or also), identification of an intellectual paradigm.

Colilli provides an "identikit" for the paradigm that is Hermetic thought:

1. The rejection of quantitative measurement;
2. The conviction that everything is in a continuous state of flux;
3. The belief that all elements of the universe influence each other through reciprocal action;
4. The rejection of causalism, thus excluding any logic connecting cause to effect, and in its place a spiral-like logic of reciprocally sympathetic elements;
5. The refusal of dualism, namely, a rejection of the rupture between the self and the world, between object and subject;²¹⁹
6. The rejection of an agnostic worldview, and in so doing Hermetic thought is Gnostic. The Hermetic worldview reveres the entire gamut of traditional wisdom, for even when there exists contradiction between assumptions, each assumption contains a part of the truth. Truth is perceived as the entire domain of contrasting ideas;
7. The hermesemiotic model of Hermetic sign production pivots chiefly on a tropology of similitude. (*Signs* 3)

As has been well established by Yates, Giordano Bruno exemplifies late-Renaissance Hermeticism. Bruno's system of thought—which certainly is not limited to Hermetic thought—adheres to all seven points of Colilli's identikit. That is, Bruno denies measurement, acknowledges continuous flux, rejects necessary dependencies, exalts contradictions, and studies relationships between objects in terms of similitude.

As a point of emphasis, I repeat: Hermeticism is what Colilli describes as an "interpretive paradigm." Hermeticism, however, has garnered great attention and contrasting interpretations.²²⁰ Although numerous opinions exist about what constitutes Hermeticism, I am primarily concerned with the system of thought's connection with epoch making. When read as a metaphor, the arrival and use of the Hermetic interpretive

²¹⁹ I add, however, to point 5 that albeit Hermeticism perceives a monist ontology (i.e., an *Uno-Ente*), dualism remains a precarious and necessary component, based on Hermetic monadism, of Hermetic thought. Hermeticism both accepts and rejects dualism.

²²⁰ See *Signs of the Hermetic Imagination*, p. 9.

paradigm signifies the culmination of the very intellectual reform that Bruno and other early modern precursors exhibited. Hermeticism's resurrection as a key doctrine in an era of reform is exemplary of the process through which the early modern mind converted itself into the modern mind. In contrast, when not read as a metaphor, Hermeticism has been interpreted as an interpretive paradigm that had lost in the battle against Cartesianism and Enlightenment rationality. This is because unlike Cartesianism, for example, Bruno and Fodio's Hermetic paradigm was not altogether original, but rather a compilation of arcane strands of esoterism that led back to antiquity. For example, no historian of science would claim Bruno's *Medicina lulliana* was or is equally significant as the Nolan's moral and cosmological dialogues. In the *Medicina lulliana*, Bruno simply recycled archaic relics of Medieval astrology, phrenology, Lullism, and the study of the humors. This dominant view reads history in reverse, judging Hermeticism a failure against history's intellectual "successes" because the modern mind no longer makes use of the Hermetic interpretive paradigm.²²¹ However, when read as a metaphor, the *Medicina lulliana* rises to great importance because it signed the impending arrival of what Kuhn would define a "paradigm shift" and Blumenberg would define as a *reoccupation of a position*, though for radically different intentions.²²² The evocation of the Hermetic paradigm signaled reform.

Moving to specifics, both Bruno and Fodio employed the Hermetic interpretive paradigm in their medical treatises. The first of the two thinkers devised his theories of

²²¹ Arguments have been put forth for a revaluation of hermeticism's contemporary involvement. See G. Agamben's *Idea of Prose*, and *Infancy and History*; and P. Colilli's *Idea of a Living Spirit: Poetic Logic as a Contemporary Theory*, *The Angel's Corpse* and *Signs of the Hermetic Imagination*.

²²² See Kuhn's important and essential work, *The Structure of Scientific Revolutions*.

medicine through a monadistic universal-view, which, as I stated previously, is an essential theoretical component of Hermeticism. As a precursor of Materialism, Bruno's monadism built upon the paradoxical Hermetic relationship between the maximum and the minimum. Materialism drew from the plentiful reservoir of Hermetic thought once it had successfully dismantled the oligarchic Hermetic duality of "above" and "below," settling instead solely on belief in the *Uno-Ente*, yet concurrently preserved Hermeticism's intricate world-view entangled in ubiquitous and manipulable relationships of material things. Bruno's Hermetic celestial realm is a metaphor for the immutable totality of the Brunonian "megacosmo," or the *massimo*, the totality of the universe. Conversely, the human body functions as the *minimo*, which is finite and subject to the eternal *mutazioni* taking place the *massimo*. The *minimo* and *massimo* are independent, yet, working both together and against one another, paradoxically one and the same. Speaking to this, Bruno writes in *Medicina lulliana*:

We have therefore brought to a close our treatise on the regions of health and disease, that configure, by means of their extension, the space inside of which one constitutes every form of health and disease. In fact the celestial bodies, or rather the universal beings of nature, do not produce any health or disease above or outside of these regions. (*OLC* III.6 594)²²³

The body and the universe engage in a relationship, about which the Brunonian medical doctor must learn a great deal if he should attempt to diagnose and cure illnesses, both of the physical and spiritual type.

Bruno's Hermetic understanding of the body's health and its relation to the world finds a comfortable home in the work of Fodio. This is not to suggest Fodio's thought depended on Bruno's, for never does the Calabrian cite the Nolan in any of the

²²³ "Postquam perfecimus tractatum de regionibus sanitatis et aegritudinis, in quarum latitudine omnis sanitas et infirmitas constituitur; corpora enim coelestia seu universalis naturae ultra ipsas et extra sanitatem et infirmitatem non inducunt [...]."

approximately one hundred leaves of his work on gout, yet it does suggest an indebtedness. Although Fodio likely read Bruno, as he does cite thinkers of similar philosophical ilk (Campanella, Lull, Cardano, Stigliola), it is highly probable that, like others, he carefully avoided mention of the unrepentant Nolan heretic whose works would find a permanent home in the Index. Although this argument is founded primarily on speculation, I nonetheless believe that Stigliola handed down, intentionally or not, this Brunonian Hermetic world-view to his Calabrian student through texts they both read and ideas they shared when compiling together the *Encyclopedia pythagorea*. Fodio attended Stigliola's lessons in Naples during the very period in which the Nolan Lyncean most adamantly echoed his Nolan compatriot. Moreover, Fodio worked with Stigliola on his *Encyclopedia pythagorea* and assisted the Lynceans in locating Stigliola's *corpus* of literature after his death in 1623.²²⁴ It is no surprise, therefore, that Fodio inherited Bruno's legacy from his mentor, perhaps without ever hearing mention of Bruno's name. Seeing, however, that both Bruno and Fodio's medical theories had little direct impact on the rise of specific medical advancements, and must be read, instead, as examples of the tendency toward an impending need of reform, one might use Bruno and Fodio as historical counterfactuals. That is, had the moribund esotericism of late Medieval and Renaissance scholasticism not permeated seventeenth-century medical thought, and thereby served as its point of contrast, then the mechanistic, or materialistic view of nature and the body would have never been confirmed as a surer and more promising path. As such, Bruno's *failures* in medicine (study of the humors, astrology, Hermetic medicine), which appear in Fodio's nearly forgotten and obscure treatise, underline the

²²⁴ See CA, pp. 5-6 and M. Rinaldi, *L'Audacia di Pythio*, p. 5n.

necessity for an epochal demarcation in the seventeenth century. Amongst these numerous relics, specific examples of Fodio's Hermetic interpretive paradigm abound. To begin, Fodio briefly pays homage to Hermes Trismegistus through a citation of the Thrice-Great prophet (CA 89). Moreover, Italian critic Massimo Marra argued with regards to Fodio's *Camaleonte antipodagrico* that:

Published a few decades after Stigliola had died, Fodio's book, author whose attitude and doctrines were certainly not comparable to those of his teacher, brings out entirely, however, in its philosophical and scientific presuppositions, the evident trace of the hermetic conception of reality emerging from the scientific program²²⁵ of the Nolan Lyncean and presents moreover some particularities that render [...] [the book] an object of particular interest. (*Il Pulcinella* 35)²²⁶

Fodio's Hermetic platform is evident in the strong metaphor found in his work's title: *Camaleonte*. The chameleon, like many other reptiles, has long played an integral role in alchemical and magical symbolism.²²⁷ Accordingly, the chameleon appears on Fodio's work's frontispiece; awash in the rays of the sun that pass through him and extend toward a human being who appears to have undergone a mystical transformation. The chameleon is an important metaphor of change and mutation. Fodio's perception of health, therefore, was the enactment of corporeal, moral and spiritual transformations. An example is found on the frontispiece of his work: "The Sun transforms in me and I take on virtues. In man I transform myself and I render virtues" [See appendix: Figs 8 &

²²⁵ I believe Marra derived the concept that Stigliola had a "scientific project," or "programma scientifico," from N. Badaloni's article, "Il programma scientifico di un bruniano: Colantonio Stelliola."

²²⁶ "Uscito a decenni dalla scomparsa dello Stigliola, il libro del Fodio, autore il cui spessore e la cui dottrina non sono certo paragonabili a quelli del suo maestro, riporta tuttavia integralmente, nei presupposti filosofici e scientifici, la traccia evidente della concezione ermetica della realtà emergente dal programma scientifico del Linceo nolano e presenta inoltre alcune particolarità che lo rendono oggetto di particolare interesse."

²²⁷ For example see H. Agrippa, *Three Books of Occult Philosophy*, pp. 38, 42n, 53, 57n, 69, 81, 129, & 130n.

9].²²⁸ The "me" stands for the chameleon, symbol with which Fodio identifies himself and his medicine. The metaphoric interpretation of this image is that of human spiritual and physical transformation represented by the "mutable," illuminated chameleon. Furthermore, at the outset of the work Fodio presents two sonnets, the first of which, "The Author to the Chameleon," identifies the principal characteristic of the chameleonic medicine as that which, initiated by the "God of the Gods," undergoes a transformation from "light" into "man." The second sonnet, which is titled "The Work," reiterates the chameleonic medicine's power of transformation: "Because my Nature gives me my strengths, / And I transform myself into the divine qualities" (CA Incipit).²²⁹ The chameleon may be read as a metaphoric extension of Stigliolan *mutatione nello stato*. After having explained the specific attributes of his medicine, Fodio argues that:

It doesn't therefore appear impossible, nor strange, that my physical Antipodagric Chameleon is able to be, & is home to such Sympathetic faculties, and magnetic virtues, for which it is able to do and does the aforementioned Metamorphoses and Transubstantiations in the human body. (69)²³⁰

²²⁸ "Il Sole in me trasforma e virtù prendo. / Nell'huomo mi trasformo e virtù rendo."

²²⁹ The sonnets in their entirety follow: "L'AVTORE AL CAMALEONTE / Qval dubbio, qual timor t'adombra il petto, / Mentre in sorte ti diè de'Numi il Nume / Di trasformarti in Apollineo lume / E poggiar novo Febo al gran cospetto? / Se verserà la Diva il Suo diletto / Vestirti ella potrà d'aurate piume, / E volerai col natural costume / Innanzi al Semideo Reale aspetto. Ardisci adunque, e spera; che se l'ale / Il Ciel ti nega, tu da' Regij Draghi / Non men veloci le otterrai, ch'ardite. / E al Monarca inchinarti in atti vaghi, / Ene l'huom trasformarti, e render tale / Potrai, che canti l'opre sue gradite.

"L'OPERA / Temeraria parrò, ch'i' ardisca tanto / Vuota di merti, e di splendor sì priua, / Che giugner spero a quella eccelsa riu, / Oue splende Real purpureo manto. / Per Maestà non misuenir mi vanto, / Perche mie forze mia Natura auuiua, / E mi trasformo in qualità sì diua, / Quale è l'Obbietto, a cui m'appresso intanto, / Souerchio i'appellerei quest'ardir mio, / Ma so, ch'al Creator Sommo, & Eterno / Rustiche biade ancor dansi in tributo. / L'Affetto sì gradisce . e ben veduto / Sarà dal mio Signor l'ossequio interno, / Che se pouero è il don, ricco è il desio."

²³⁰ "Non paia adunque impossibile, nè strano, che il mio Cameleonte fisico Antipodagric possa essere, & sia dotato di tali facoltà Simpatiche, e virtù magnetiche, per le quali possa fare, e faccia le sudette Metamorfosi, e Trasustantiationi nel corpo humano."

Like the chameleon, which changes color in accordance with its natural surroundings as a means of protecting life, the Antipodagric Chameleon changes in accordance with the humors and temperament of the person infected with gout. Fodio's medicine is a form of Hermetic *mutatione nello stato*, changing nature by means of its art, and therefore carries on both Bruno and Stigliola's legacy. Fodio chose the title because he believed the animal a perfect metaphor of the remedy he proposed. Like the animal, Fodio's medicine "transformed itself" into the "Qualities," which found themselves "in battle" in one's body. The *Camaleonte* "discharged the Evil" by facilitating the body's return to "symmetry." Moreover, it is a "Moral," "Physical," "Human" and "universal" medicine, which can be applied to "all illnesses." Its purpose, I infer, is to empower all of mankind through its universal applicability. Fodio writes:

I call the medicine Antipodagric Chameleon, & the Discourse Encyclopedic. It is worthwhile to call it Chameleon because of its metaphoric relation to the Animal Chameleon, that, according to the Naturals, and the Relations amongst themselves, who travel in Barberia, it transforms itself in the color of the colored thing above which it situates itself; however physically speaking it transforms itself into the Qualities, which oppressed find themselves in battle, which Nature does with Evil in the parts burdened by podagric fluctuations, and invigorating those, and enlivening the temperament, discharges the Evil, and Cause by means of a reduction of those Qualities into symmetry, which being in excess of rigor, change the Evil; and therefore I have appropriately named it Physical Chameleon, & Human. (2)²³¹

Like Bruno, Fodio believed in a healthy body's "symmetry," which only when disturbed produces illness. The medical doctor's duty, therefore, is to identify the disruptive "Evil"

²³¹ "Chiamo il Medicamento Camaleonte Antipodagrico, & il Discorso Enciclopedico. Camaleonte è conuenuto dinominarlo per assonta metafora dal Camaleonte Animale, che, secondo i Naturali, e le Relationi di coloro, che nauiganoo in Barberia, si trasforma nel colore della cosa colorata, sopra la quale si posa; imperoche fisicamente parlando si trasmuta nelle Qualità, che oppresse si trouano nella lotta, che fa la Natura col Male nelle parti trauagliate dalle flussioni podagriche, e quelle invigorendo, e viuificando il temperamento, espugna il Male, e la Causa di quello con ridurre a simmetria quelle Qualità, che essendo in eccesso di rigore, cagionauano il Male; e perciò meritamente Camaleonte Fisico l'ho chiamato, & Humano."

and subsequently discharge it through "reduction," "invigorating" and "enlivening."

Fodio has such faith in the chameleon's medicinal powers, capable of discharging "Evil"

and bringing about "symmetry," that, in the work's dedicatory epistle to the King of

Spain, Philip IV, the Calabrian doctor boldly writes:

Strange maybe and fearful it will appear that a little or unknown man finds the strength to bring himself to the attention of such a great Monarch in the effort to present him a small animal, which is the Chameleon. Also, if one will consider the strong Austrian sword more famous than that of Alexander, which cut the Gordian knot, to have cut the first word from *Non plus ultra*, which the great Alcides placed between the two columns, Abila and Calpe, should not appear to have fear of being courageous, for if in the vulgar tongue

*Medicine can't remove the crippling effects of gout*²³² I in the present century instead of the *can't remove* choose to put *can remove* [...]. (CA Epistle 1).²³³

In this passage Fodio exhibits courage and faith in his medicine. Through the correction of the Ovidian line, "*Solvere nodosā nescit medicina podagrā*," Fodio does not hesitate to claim that his metaphoric animal even proved Ovid wrong. As is known, gout afflicted numerous people in early modern Europe, particularly the wealthy because the disease is the result of acidic imbalances triggered typically by heavy gorging and imbibing. Fodio

²³² Fodio Gambara cites Ovid. For more information see W.S.C. Copeman and Marianne Winder's article, "The First Medical Monograph on the Gout."

²³³ The passage follows in full: "Strano forse, e temerario parrà ch'vn'huomo poco, o nulla conosciuto ardisca di comparire alla presenza di sì gran Monarca per douer presentargli vn picciolo animaletto, quale è il Camaleonte. Pure, se si considererà, che la potente spada Austriaca più famosa di quella d'Alesandro, che tagliò il nodo Gordiano, ha tagliato la prima parola dal *Non plus ultra*, che il grande Alcide pose nelle due colonne, Abila, e Calpe, non dourà parer temerario l'ardire, che se nel volgato detto "*Solvere nodosā nescit medicina podagrā* io nel presente secolo in vece del *nescit* possa porre *reperit*, riuerente comparisca auanti al Real cospetto di V.M. Tanto più che come a mio natural Signore le deuo il tributo del raccolto dalle mie fatiche, il quale se non è ricco d'vtile, non è però pouero d'affetto; che m'affida a prostrarmi a gli augustissimi piedi di V.M. per baciargliele infinitamente, e m'obbliga a pregarle dal Monarca supremo quelle felicità che all'accrescimento della sua Real Corona, & alla tranquillità de'suoi Vassalli son douute. Napoli il dì della gloria del Patriarca San Domenico Guzman. 4.d'Agosto. L'anno della Nascita del celeste Monarca. 1651. / D.V.M. Cattolica / Humilissimo vassallo / Andrea Fodio Gambara."

perceived the "Podagric Fluctuations nothing more than an expulsion" of humoric imbalances, which arise in the "Brain" and pass to the "ignoble parts, which are for the most part the outer extremities[.]" such as the toe (CA 15).²³⁴ Since wealthy patients often suffered of gout, they were also capable of financing medical doctors' research into the field in the hope of finding a remedy for their ailment. For many patients gout caused such great pain that it would drive them to commit suicide. Fodio recounts a few instances of this in Naples:

The Monopolite of the revered memory of Leo X, honored with the title of Archpoet, being afflicted with Podagra in the hospital of the Incurable in the City of Naples, desperately seeking to no longer suffer from the pain, killed himself with a knife.

Regarding this, I bring to *Vostro Signore's* [i.e., Giorlamo Berti's] mind two men whom we both knew. Around 1617, near Your home was found a sick Sir who was then a Duke, now a Prince of S.[?], whom I visited, and the B.[?] soul of my own friend, & requiring the certain need of a Surgeon, Giovanni Tomaso Ambrosino was called upon, man of great valor & experience. This gentleman was so deeply afflicted and burdened by Gout that it was necessary to lead him to his own bed by the arm. And when asked by the Surgeon what he did when he was afflicted by new fluctuations that caused such great pains, he replied that he placed a large quantity of snow in a pail of water until it was very chilled, & at that time he placed the inflicted part inside of it until the pains ceased. Of this description we both disagreed, stating that neither by Medical rule, nor in good conscience, should he do that, because it reduces it into knots, and an even worse condition, and even that he was killing himself. He responded that he believed it a lesser of two evils to suffer for a long time that to die in desperation.

Many years thereafter Podagra afflicted with great fury that very Surgeon [Giovanni Tomaso Ambrosino], whom I attended to, I learned the pains were eccessive, such that he decided to take a bath in ice water. I reprimanded him regarding this, much like Ambrosino had done to his patient[...] [.] He replied that the medical doctor acts in one way when he suffers, & and another way when he orders others: and he did not wish to break himself from that opinion, which he knew was wrong, that coming to a point of desperation he threw himself out of a window. (CA 87-88)²³⁵

²³⁴ "Le Flussioni Podagriche altro non sono, che vna espulsione, che a la facoltà Naturale stimolata dalla qualità, e quantità d'humori, dalla parte principale, ch'è il Cerebro, alle parti ignobili, che per lo più sono i membri remoti."

As a medical doctor of great conviction, Fodio espoused disdain for such hypocrisy. Fodio derived this confidence from the self-claimed power of his medicine. In Fodio's meditation on the Antipodagric Chameleon the author, however, carefully avoided any description of the medicinal properties of the treatment.

Of the nearly one-hundred pages only in a few does Fodio actually describe his proposed treatment. This makes Fodio's intention two-fold: 1) He wished to incite trust in his readers and his dedicatee, Girolamo Berti; and 2) He sought to protect the secret of what he believed to have been a valuable and potentially lucrative cure, even if it were the case that he based such claims on false premises. According to Fodio, "being [that the Chameleonic medicine is] *my very own secret* there is no need of reasons, but only example" (CA 34).²³⁶ However, on those few pages in which Fodio speaks briefly of the *secretum meum mihi*, one is provided a glimpse of the actual medicine's use, but little, if anything, of its content. Regarding its use, Fodio writes: "One may take my liquor by

²³⁵ "Il Monopolitano della fel. mem. di Leone Decimo honorato col titolo d'Arcipoeta, essendo afflitto dalle Podagre nell'hospedale degl'Incurabili di questa Città di Napoli, disperando poter più soffrire i dolori con vn coltello di propria mano si uccise.

"Ricorderò a V. S. a questo proposito due huomini da noi conosciuti. Intorno all'anno 1617, vicino la casa di V. S. si trouaua infermo vn Signore allhora Duca, hora Principe di S. che visitauamo io, e la B. anima di vn mio amico, & occurendoui certa necessit  di Chirurgo, fu chiamato Gio. Tomaso Ambrosino, huomo di molto valore, & esperienza. Staua costui s  nodoso, & inchiodato dalle Podagre, ch'era necessario farsi condurre in braccia infino al letto dell'infermo. E richiesto dal C. come faceua quando era afflitto da nuoue flussioni per soffrire quegli eccessiui dolori? Rispose, che faceua porre in vno tinaccio d'acqua molta quantit  di neve infino a tanto, che si fosse ben bene rafredata; & al hora vi poneua le membra patienti tenendouele fin che cessassero i dolori. A questo ci oppenemmo, dicendo che n  per regola di Medicina, n  in coscienza douea farlo, s  perche si riduceua a nodi, e disagi peggiori, come anche perche era homicida di se stesso. Replic  che stimaua molto minor male il douer patire a lungo, che di morir disperato.

"Molti anni dappoi la Podagra con gran furia affal  il C. a cui andato io, seppi, che i dolori erano eccessiui, tutto che vi hauesse fatto il bagno d'acqua agghiacciata. E rimprouerato da me di quello, di che l'Ambrosino era stato da lui, Rispose, che il Medico fa altro personaggio quando patisce, & altro quando ordina: e ch'egli stimaua miglior partito il seruirsi di quello, che ben conosceua per errore, che per disperatione precipita si da vna finestra."

²³⁶"essendo *secretum meum mihi* non ha bisogno di ragioni, ma solo d'esempio."

way of mouth, [...] reducing the qualities of our body into symmetry" (CA 35-36).²³⁷

Fodio continues to describe how it is that one who drinks his "Supernatural" potion

immediately becomes aware of its powers:

In taking and tasting said liquor for the greater part one recognizes its perfections.

First, one recognizes a pleasurable and very delicate flavour, clearly a sign of a good digestive, and a well mixed concoction, possessing a regulated and proportioned heat. (CA 36)²³⁸

Fodio, though, does not limit its usage merely to ingestion. The Chameleonic medicine may also be applied to the skin. As is now known, gout causes extreme arthritic pain due to an excess of uric acid in the blood stream. Fodio's treatment, therefore, may have been applied directly to the source of the pain. Upon application, the medicine then transforms itself both physically and, as Fodio argues, morally in the patient, providing relief and cure.

The application of it to Podagra one does in the following manner. One goes about carefully applying the medicine on the spot where the pain is greatest until it has fully been absorbed. After that, one covers the part with a cloth wrap, delicately attaching it until it remains in place, and then it is left there until the following day.

One may apply this unction at any time, in the morning, the evening, before and after lunch and dinner.

After having applied the unction to the part, in a few hours the pain begins to pass; nevertheless, the action does not cease because during the passing of time one feels in the part the sensation of heat as if it were the most scorching rays of the Sun, which in short time diminish. (CA 37)²³⁹

²³⁷"Il mio licore si può prender per bocca, [...] riducendo le qualità del nostro corpo a simmetria."

²³⁸ "Nel prendere, & assaggiare ditto licore si conoscono in buona parte le sue perfettioni. Primieramente si conosce vn gratissimo, e soavissimo sapore, contrasegno certo d'vn ben digesto, e ben concotto misto, con regolato, e proportionato calore."

²³⁹ "Nell'applicarlo poi alle Podagre si sa in questa maniera. Si vâ soauemente vngendo la parte, oue è maggiore il dolore, infino a tanto che penetri. Da poi si cuopre, e fascia la parte con panno; leggiermente legandola quanto basti a ritenerlo, e così si lascia infino al seguente giorno.

"Questa vntione si può fare in ogni tempo, di mattina, e di sera; prima e dopo il pranzo, e la cena.

Fodio's concoction possessed supernatural qualities. Only then could the Calabrian have claimed not only to have the "perfected cure of all types of Podagra" but also rid the body and spirit of all other types of "Evil" (CA 96).²⁴⁰

In his medical treatise, Fodio put forward an ornate world in which the human body participates and relates to the universe around and inside of it. Fodio's notion of the body's "symmetry" serves, I believe, as the most appropriate synonym for the Calabrian's idea of "health." "Health," the notion of the ideal physical state, requires a "symmetrical" balance of the body's functions and properties. Diseases, like gout, disrupt the body's symmetry.

The philosophical tools Fodio uses to attain "symmetry" and diagnose "dissymmetry" echo those of his mentor and Bruno. For example, returning to themes presented in the previous chapter, Fodio's Antipodagric Chameleon transforms nature through a process similar to Brunonian *mutar stato* and Stigliolan *mutatione nello stato*. Like Bruno, Fodio brings about transformations by way of natural magic and Lullism. Furthermore, Fodio achieves *mutatione nello stato* in the same way as his Nolan predecessors: *coincidentia oppositorum* and the intricate Hermetic manipulation of Nature through Art. Speaking to the former, the goal of the medical doctor, according to Fodio, is "inducing symmetry" in the dissymmetrical body (38).²⁴¹ He writes, "[...] since [the human body] is composed of contrary qualities, when they, amongst themselves, remain proportionate, it sustains a healthy life in an equality of Temperament" (CA

"Dopo vnta la parte fra poche hore comincia a passare il dolore; nondimeno l'attione non cessa perche di quando in quando si sentono nella parte alcuni calorette come fossero i raggi del Sole sotto la canicola; i quali breuemente suaniscono."

²⁴⁰ "la perfettionata cura d'ogni Podagra"

²⁴¹ "inducendosi simmetria"

38).²⁴² Speaking to the latter, Fodio echoes the Hermetic notions of Nature and Art in his work before he describes a specific use of this knowledge in the natural world, which is the grafting of trees (CA 47-49). The "Nature of the Medicine" Fodio proposed functions on the basis of the Calabrian's knowledge of the Hermetic relationship between Nature and Art, similar to grafting trees (CA 45). In line with Bruno's *Medicina lulliana*, Fodio, too, has a solid grounding in Lullian astrology and medicine. For example, like in Bruno's *Medicina lulliana*, Fodio also calls upon the Majorcan in his *Camaleonte antipodagrigo*. Fodio mentions Lull in the following two passages: "And this in fact corresponds with the mind of the Philosopher of the *Ars Magna*"—as is known, the author of this text was Ramon Lull (CA 10).²⁴³ However, Fodio's calling upon Lull also reveals the very Hermetic overtones that are seen in Bruno. That is, Fodio makes use of Lullist astrology and the reading of the stars and the celestial realms as having an influence over man, yet he distinguishes, in line with Stigliola, the "celestial influences" and the "little efficacious world." In addition to referencing Lull, Fodio adds Hermetic dualism to the Majorican's astrological dualism: stars and man. The result is a mixture of Lullist and Hermetic branches of thought. The only earlier historical example of this is in the works of Bruno—it appears Fodio's use is less than coincidental:

The other thing is, that there being such homogeneity, Lull called quite correctly Heaven, and Holland *nearly incorruptible heaven*.

And equally making itself said pure homogeneity in the Specifics, and then with the first Compound the second union, with similar reason one will say truly to have relation to the Stars (that otherwise in true Philosophy are not other than part of Heaven together restricted) that one

²⁴²"[...] perche è composto di qualità contrarie, mentre quelle stanno proportionatamente fra loro refratte, si viue sanamente in equalità di Temperamento[...]."

²⁴³ "E questo appunto corrisponde alla mente del Filosofo dell'Arte Magna."

goes cutting off in said philosophic Heaven; & in those the virtues of Heaven join themselves, as the Solar rays in the mirror, by means of the density from which then is derived the powerful reflection, that will burn more than the Sun itself: so therefore for the union of said Specifics the celestial influences arrive in the bottom World, or to say it better, in the little efficacious World, directed toward diverse members according to the diversity of the Specifics.

And similarly one finds very strong reason by which my Compound applied from the outside extends itself across the whole Body; While the Elemental purities remain in all those intrinsic & extrinsic parts without diffusion between them, just as the mixture of wine does with water when one particle touches the other, so also in any place that one applies my Chameleon there is found its Nature, and purity with which one unites, and for which with all the body one goes about meaning, as that does: and by the specific influence it even goes to that part, where Heaven has directed it, and has ordered supernaturally. (CA 63)²⁴⁴

In this passage, Fodio has amalgamated Lull, Stigliola and Bruno in one unique philosophical system. For example, Fodio emphasizes how the Antipodagric Chameleon mutates, sympathizes and adjusts to the nature and temperament of any body through an understanding of the relationships between the stars to the body. The Antipodagric Chameleon is "directed" by nature, and he, the medical doctor, merely applies the divine concoction to the body. In this way, Fodio's medicine reveals metaphorically his intention to seek out God's knowledge. Speaking to this, Fodio writes: "O' us happy

²⁴⁴"L'altra cosa è, ch'essendoui tale homogeneità a gran ragione dal Lullio vien detta, Cielo, e dall'Hollando, *quasi incorruptibile caelum*.

"E parimente facendosi detta pura homogeneità negli Specifici, e dappoi col primiero Composto la seconda vnione, con simigliante ragione si dirà veramente hauer relatione alle Stelle (che altro in vera Filosofia non sono, che parte del Cielo insieme ristretto) che si vanno incastrando nel detto Cielo filosofico; & in quelle le virtù del Cielo si uniscono, come i raggi Solari nello specchio, per la densità del quale poi ne risulta la riflessione così potente, che abbrucierà più che lo stesso Sole: così appu[n]to per la vnione di detti Specifici ne ve[n]gono le celesti influenze nel basso Mondo, o per dir meglio nel picciol Mondo efficacissime, dirette a diuersi membri secondo la diversità degli Specifici.

"E quindi similmente si caua potentissima ragione, per qual causa il mio Composto applicato di fuori si trasfonde per tutto il Corpo; Mentre le purità Elementari stanno in tutte le parti di quello intrinseche, & estrinseche senza diuisione fra loro, ma appunto come la mescolanza del vino con l'acqua toccandosi l'vna particella con l'altra, sì che in qualunque parte si appone il mio Camaleonte vi ritroua la sua Natura, e purità con la quale si vnisce, e per la quale con tutto il corpo si va insinuando, come fa quella; e per la influenza specifica se ne va a dirittura a quella parte, che il Cielo gli ha destinato, e sopranaturalmente ordinato."

mortals, if we remember ourselves then it will be with ease that we will be able to arrive at knowledge of God, & the acquisition of knowledge" (CA 90).²⁴⁵ With it he proposed to effectuate marvelous acts, using Bruno's language, of "natural magic." In fact, Bruno believed that "natural magic" had a home in the field of medicine. For example, Bruno defines the term "natural magic" in *De magia*:

As with any other topic, before we begin our treatise *On Magic*, it is necessary to distinguish the various meanings of the term, for there are as many meanings of 'magic' as there are of magician.

First, the term 'magician' means a wise man; for example, the trismegistes among the Egyptians, the druids among the Gauls, the gymnosophists among the Indians, the cabalists among the Hebrews, the magi among the Persians (who were followers of Zoroaster), the sophists among the Greeks and the wise men among the Latins.

Second, 'magician' refers to someone who does wondrous things merely by manipulating active and passive powers, as occurs in chemistry, medicine and such fields; this is commonly called 'natural magic'.
(Blackwell 105)²⁴⁶

As Bruno's definition suggests, Fodio, who sought to do "wondrous things," and whose theory of the Antipodagric Chameleon sought to manipulate "active and passive powers," sits neatly in the history of natural magic. Fodio, the Brunonian magician, was a master of corporeal *mutazione*. Fodio's brand of the modern medical doctor serves as the modern age's metaphoric extension of the Brunonian project for *mutar stato* into the field of medicine.

²⁴⁵ "O felici noi mortali se rammentassimo di noi stessi facilmente potremmo arrivare alla cognition di Dio, & all'acquisto della sapienza."

²⁴⁶ "Antequam De magia, sicut antequam de quocunque subiecto disseratur, nomen in sua significata est dividendum; totidem autem sunt significata magiae, quot et magi. Magus primo sumitor pro sapiente, cuiusmodi erant Trimegisti apud Aegyptios, Druidae apud Gallos, Gymnosphistae apud Indos, Cabalistae apud Hebraeos, Magi apud Persas (qui a Zoroastre), Sophi apud Graecos, Sapientes apud Latinos. Secundo sumitor magus pro faciente mirabilia sola applicatione activorum et passivorum, ut est medicina et chymia secundum genus; et haec est naturalis magia communitur dicta" (*OLC* III.3 397).

A Continuation of the Reoccupation: The Metaphor of a Hermetic Universal Panacea as a Further Footprint of Modern Materialism (or Mechanism)

As an extension to the metaphoric reading of the Hermetic interpretive paradigm as an example of the mounting reformist tendency in the early modern era, I add the metaphor of Fodio's Antipodagric Chameleon as an instance of early modern intuition into the modern age's accepted belief that every illness has an attainable "material" cure. Fodio argued that his chameleonic medicine possessed "Supernatural" powers and is thereby able to cure all forms of illness, not solely gout. When read metaphorically, Fodio's suggestion of a "Supernatural" medicine implies that during his age—neatly situated at the heart of the modern—, all illnesses had not only a cure, but one within man's grasp. The importance of the idea is not so much that the medicine surpasses the laws of nature, as much as it is that man himself achieved such divine knowledge and power. This very notion continues today in a materialist view of the universe that dominates the medical sciences. This view upholds that since all things are composed of matter and are subject to *mutatione*, it therefore follows that the medical doctor's duty is to discover and alter the course of material change in order to benefit man or mankind. Fodio's claim to have found a "Supernatural" medicine, therefore, implies a view of nature not at odds with modern age Materialism. A "Supernatural" medicine implies a doctor's mastery of the material world, not limited to the highest humanly attainable prong of the Medieval ladder of being that ascends toward God. The ability to conquer the body with medicine displaces and subordinates the Divine and the Unexplainable—all things are subject to observable laws which not even God can hide forever.

How does the concept of a universal panacea lead to Materialism? In the Hermetic view the universe is comprised of similarities and contraries. Any diversion

from the "symmetry" of the natural laws requires, as Fodio proposed, a "chameleonic" re-balancing of the body and spirit with the laws of nature. Although Fodio argued for a specific treatment of gout, as the work's title suggests, his more important suggestion was that the Antipodagric Chameleon acted also as a universal panacea. Fodio claimed to have amply described this in his *Centuria Antipodagricarum Observationum*, a work which has either been lost or was never written (13). Regardless, in the *Camaleonte antipodagrico*, however, Fodio issued this claim of the "universal Chameleon Medicine" (CA 9).²⁴⁷ As such, Fodio described his *Camaleonte* not only as a "Physical" medicine, but also a "Moral Chameleon": "I have also called it Moral Chameleon; because being that my scope, that which becomes useful universally, I transformed it to benefit all illnesses" (2).²⁴⁸ Fodio's medicine cures what I might call "moral dysymmetry." With regard to the "Physical," in line with the alchemists who sought the ever-evasive *aurum nostrum*, Fodio, in his dedication to Girolamo Berti, identifies the Antipodagric Chameleon as "Potable Gold": "Whereby putting myself to work I made Potable Gold [...] and with it I healed many afflicted with podagra" (CA 14).²⁴⁹ As is well known, many of the alchemists and magicians of the era sought to find the elusive quintessence; in fact, a great portion of them claimed to have found it. The motives behind such claims were predominantly driven by self-interest, yet this does not subtract from the significance of the quest for a universal medicine as a representation of a human tendency to seek out a "key" to the problem of health. Fodio claimed to have found the

²⁴⁷ "Camaleonte Medicamento vniuersale"

²⁴⁸ "L'ho parimente detto Camaleonte Morale; perche essendo il mio scopo, che diuenga vtile in vniuersale, l'ho trasformato nelle fortune di tutti gl'infermi."

²⁴⁹ "Onde datomi a trauagliare feci l'Oro Potabile [...] e con esso ho sanato molti podagrosi" (14).

"Supernatural" "key" in his *Camaleonte*. He writes "[...] my Medicine produces effects in such a way that they might be called Supernatural" (CA 3).²⁵⁰ This claim implies that the author, in finding the remedy, had to have first surpassed the laws of nature herself. The suggestion of a "Supernatural" medicine necessarily implies that it is not only possible to *attain knowledge of nature's laws*, but also *surpass those very laws*. Similarly, a great achievement of the modern age in the field of medicine was the liberation of medical inquiry from the sovereignty and fate of the divine. In the modern age medicine is its own God. Fodio's mentor, Stigliola, in the work *Theriace et Mithridatia* [See appendix: Fig. 4 & 5] dealt also with cures that have traditionally been interpreted for having a universal applicability. Therefore, the argument that Stigliola's initial investigations in theriac,²⁵¹ a potential universal panacea, inspired an encore in the work of his student, appears a readily acceptable opinion.²⁵² The pervasive Hermetic overtones in Fodio's work, however, do not appear to stem from Stigliola's early medical treatise on theriac, which was not dependent on esoteric, let alone Hermetic, thought. Instead, Fodio likely received training in medicine by Stigliola *after* the "other" Nolan's had accepted and converted himself to Copernicanism and Brunonianism, the likely result of Bruno's works' circulation through Europe in the late 1580s. One might then argue that Fodio in his treatise on the "Supernatural" medicine grafted the two diverse branches of the Nolan

²⁵⁰ "[...] il mio Medicamento fa effetti quasi per vn modo di così dire Sopranaturali."

²⁵¹ For a complete study on Theriac and Mithridatium see G. Watson, *Theriac and Mithridatium. A Study in Therapeutics*.

²⁵² Although there is no explicit reference to Stigliola's *Theriace et Mithridatia* in Fodio's work, there are a few instances wherein the medical doctor discusses venoms and anti-venoms. For a passing mention of "Theriaca," see p. 25; for bites, venoms and anti-venoms, see p. 46 (noted here in text) and pp. 76-77.

imagination: Stigliolan medicine with Brunonian cosmology. This combination of Brunonian cosmology with Stigliola's medical interest in venoms and antivenoms is revealed in Fodio's description of what he called "Medicinal Filosofia" (CA 46). Fodio writes:

[...] while the Antidote, which deals for the most parts with counter-venoms, contains small particles of subordinate venoms, when either it is taken orally or applied locally, the venomous parts join with the venom that has entered the body, as if natural friends, and the same way counter-venoms enter the body, which being of greater quantity and quality, supersede the others. (CA 46)²⁵³

The philosophical foundation of this passage is the analysis of humoric imbalances based upon a similar brand of Brunonian "medicina filosofale", which is a combined knowledge of specific illnesses (*a posteriori*) with philosophical knowledge of causes (*a priori*) (DFI 234). Like Bruno, Fodio, too, was sensitive to the issue of *a priori* vs. *a posteriori* analysis, or a careful balance of philosophical speculation and the physical world. He writes:

How are we to come to know these occult qualities, and faculties, certainly we will never identify them *a priori*, that is from the causes to the effects. We will identify them *a posteriori*, that is reasoning from the effects toward the causes. (CA 46)²⁵⁴

Although Fodio reasoned unidirectionally, each branch (both cause and effect) are vital to the identification of the illness or imbalance. That is, one may reason in either direction, yet Fodio argued that in order to best identify the "occult qualities, and faculties" one should procede from the effects toward the causes. One must, however, not supersede

²⁵³ "[...] mentre l'Antidoto, il qual costa per la maggior parte in predominio di cose contro veleni, contiene alcune particelle di veleni in subdominio, quando o si dà per bocca, o si applica localmente, le parti velenose si vniscono col veleno insinuato nel corpo, come di natura amicheuole, e per la stessa strada entrano i contro veleni, i quali essendo di maggior quantità di qualità, superano gli altri."

²⁵⁴ "Come poi possiamo noi conoscere queste qualità occulte, e facoltà, certa cosa è, che *à priori*, cioè dalle cause a gli effetti, mai non lo conosceremo . il conosceremo ben sì *à posteriori*, cioè da gli effetti argomentando le cause." Here is an apparent reference to Aristotle.

the other if a doctor is to restore health in his patient. Required in both Bruno and Fodio is a delicate balance between medical and philosophical knowledge. In a passage on the reasons "for the great enmity between [...] schools of medicine," Bruno speaks to this unique balance in his *De la causa, principio et uno*:

Gervasio. What is the reason for the great enmity between these schools of medicine?

Teofilo. Greed, envy, ambition and ignorance. In the main, they hardly understand their own method of treatment, much less those of other schools. Most of them try to get ahead by casting the others down and showing contempt for whatever they cannot acquire, being unable to elevate themselves to honour and profit thanks to their own merits. The best and truest among them is he who is not only physician, but also alchemist and astrologer. But, to return to our point, the best philosophy is that which brings about the perfection of the human intellect most easily and eminently, and most closely corresponds to the truth of nature. The best one renders us, as far as possible, co-operators with nature, whether by divination (I mean according to the natural order and the principles of change, not by animal instinct in the manner of beasts and those who resemble them, nor by the inspiration of good or bad demons, like the prophets, nor, finally, under the effect of melancholic enthusiasm, like poets or other contemplatives), or by instituting laws and reforming customs, by practising medicine, or even becoming acquainted with and leading a blessed and more divine life. That is why no well-organized philosophy exists that does not contain some special quality not found in the others. I understand the same of medicine, which derives from principles that presuppose a fairly good philosophical outlook, as the function of the hand or foot presupposes that of the eye. Thus, it is said that there cannot be good medical principles where there is not a good point of departure in philosophy. (De Lucca 63-64)²⁵⁵

²⁵⁵ "GERVASIO Onde avviene che son tanto nemiche tra lor queste sette di medici?

"TEOFILO Dall'avarizia, dall'invidia, dall'ambizione e dall'ignoranza. Comunmente a pena intendono il proprio metodo di medicare, tanto si manca che possano aver ragione di quel d'altrui. Oltre che la maggior parte non possendo alzarsi all'onore e guadagno con proprie virtù, studia di preferirsi con abbassar gli altri, mostrando dispreggiar quello che non può acquistare. Ma di questi l'ottimo e vero, è quello che non è sì fisico, che non sia anco chimico e matematico. Or per venir al proposito: tra le specie della filosofia, quella è la miglior che più comoda et altamente effettua la perfezzione de l'intelletto umano, et è più corrispondente alla verità della natura, e quanto sia possibile [ne renda] coperatori di quella, o divinando (dico per ordine naturale, e ragione di vicissitudine; non per animale istinto come fanno le bestie e que' che gli sono simili; non per ispirazione di buoni o mali demoni, come fanno i profeti; non per melancolico entusiasmo, come i poeti et altri contemplativi), o ordinando leggi e riformando costumi, o medicando, o pur conoscendo e vivendo una vita più beata e più divina. Eccovi dunque come non è sorte di filosofia, che non sia stata ordinata da regolato sentimento, la quale non contegna in sé qualche buona proprietà, che non è contenuta da le altre. Il simile intendo della medicina, che da tai principii deriva, quali

Fodio acknowledges this Brunonian reverence for a unified medical-philosophic conception of the universe and the body, a quality he likely inherited from his mentor. For example, in the *Encyclopedia pythagorea's* Index is found a palpable textual reference to medicine nestled amongst numerous Hermetic notions. Stigliola passes from Hermetic questions of intrinsic and extrinsic factors leading to binary oppositions and humoric imbalances to a chapter "On food, medicine, and poison" (*EP* 142).²⁵⁶

In closing, Stigliola's interest in Brunonian philosophy as that which better provided solutions to the Blumenbergian problems pertinent to the era that was then on the verge of transformation, manifested itself in works with strong Brunonian inclinations.

Although Stigliola did not return to medical inquiry in his later years, his philosophical interests found a home in Fodio, a thinker who syncretized the two branches of *Nolana filosofia* into one unique brand of "medicinal filosofia." Fodio's work is emblematic of both the successes and failures of Brunonian solutions in the modern age and therefore, as a factual and counterfactual, metaphorically represents how the modern age came to be.

presupponeno non imperfetto abito di filosofia: come l'operazion del piede o della mano, quella dell'occhio. Però è detto che non può aver buono principio di medicina, chi non ha buon termine di filosofia" (*DFI* 244-455).

²⁵⁶ "Del cibo, medicina, & veleno"

CHAPTER IV: CONCLUSION

Summary

Like a "new light," Giordano Bruno shines brightly in modern age (the period which coincided with the birth of the new science of the seventeenth century). The luminous rays of Bruno's "new light" are comprised of the radical, infinite and pananimistic readings he brought to the Copernican Revolution. Bruno upheld that the problem of Copernicanism implicitly required a reassessment of all facets of human inquiry into nature and morality. Accordingly, Bruno put forth a revolutionary system of thought that went on to inspire countless others, including his compatriot, Nicola Antonio Stigliola, and Stigliola's Calabrian student, Andrea Fodio Gambarà. Although neither of these authors cited Bruno in their works, they both assumed, both directly and tangentially, aspects of Bruno's philosophy. Utilizing Brunonian thought, both Stigliola and Fodio engaged in broader, universal questions that played integral roles in the development of the modern age. This is because Bruno's goal was to destroy (or at least renovate) millennia of Hebrew and Christian thought and replace it with the "new light" of cosmological and spiritual infinitism. To demonstrate this, in the dissertation I employed Blumenberg's metaphorology in order to understand ideas as they saw their own growth—not from the privileged and biased vantage of looking back. I studied specific "problems" and their "solutions," which stand as temporary *reoccupations of*

positions, in each of the three thinkers. Here is a general outline of the problems I analyzed:

1) Problem: How is man to order and control knowledge in an infinite universe?

Solution: Bruno's *Ars memoriae* => Stigliola's Infinite Encyclopedia => Fodio's Encyclopedic Labyrinth

2) Problem: How to effectuate change in the infinite universe?

Solution: Bruno's *mutar stato* => Stigliola's *mutazione nello stato* => Fodio's metaphoric *Camaleonte*

3) Problem: What is man's role in an infinite universe?

Solution: Bruno's Architect of the Universe, or Magus => Stigliola's Celestial Architect => Fodio's Magical Medical-Philosopher

4) Problem: How does the universe work?

Solution: Bruno's Nature & Art => Stigliola's Nature & Art => Fodio's Nature & Art

5) Problem: What principle guided the creation of the universe and might teach man how to manipulate it?

Solution: Bruno's *Coincidentia oppositorum* => Stigliola's *Coincidentia oppositorum* => Fodio's *Coincidentia oppositorum*.

6) Problem: How does man read the book of nature? What are all things in nature?

Solution: Bruno's (Neoplatonic / Lullian) shadows => Stigliola's (Neoplatonic) shadows => Fodio's (Lullian / Neoplatonic) shadows

7) What lens provides the greatest insight into nature?

Solution: Bruno's Hermeticism => Stigliola's Hermeticism => Fodio's Hermeticism

These contributions to the epochal shift from the pre-modern to the modern age does not imply that a synchronic reading of inheritance is in order. Instead, each thinker devised his own interpretation of each of these philosophical "solutions" to "problems" in the effort

to better relieve the tensions arising from the destruction of a previous and no longer relevant order.

Implications in Field

Hans Blumenberg's monumental philosophical trilogy situates the Nolan at the crux of the modern age—a choice that can hardly be called arbitrary. In respect of Blumenberg's labors I have accepted the critic's theoretical stance and have appropriated his lens: metaphorology. Recent contributors to Bruno studies are Arielle Saiber, Maria Pia Ellero, Fabrizio Meroi, and Leo Catana (see bibliography). Each has carved his or her own niche in the vast universe of Bruno criticism, from Saiber's study of Bruno's language throughout the gamut of his literature to Leo Catana's detailed analysis of the concept of contraction. These scholars are on the forefront of new research, having amply read the works of previous critics and responded appropriately to the questions raised therein. I believe my research fits nicely into the corpus of contemporary Bruno scholarship because I promote the necessity for a revaluation of critical methodology. The fruits of my research are two fold: 1) I have described and utilized in detail an alternative approach to reading history, metaphorology; and 2) I have added to knowledge of Bruno's reception and influence in the works and minds of two seventeenth-century Italians who had been relegated to a far, dark corner of the library.

Directions for Future Research

First, a refinement of methodology is in order. Although I believe metaphorology is a functional and helpful analytical tool, I seek to further explore the intricacies of the

method. Second, I believe more fruitful results would rise from a study of thinkers of greater intellect—or, should I say, greater originality—than Stigliola or Fodio. A metaphorological study of Bruno & Leibniz, or Spinoza, or Kepler, or Galileo, let alone thinkers of slightly lesser might, such as Campanella, or Della Porta, would be welcome and likely prove valuable, narrowly speaking, to Bruno studies, and, broadly speaking, European intellectual history. Third, edited volumes of Stigliola and Fodio's works are due. I would like within the next five years to see all of Stigliola's collected works published in one volume, paired with facing-page English translations. Moreover, Fodio's work could be published separately, again with a facing-page translation, though it might fit nicely in a volume primarily dedicated to Stigliola. I believe this would engender greater discussion about their contributions to Italian and European thought.

Finis

APPENDIX

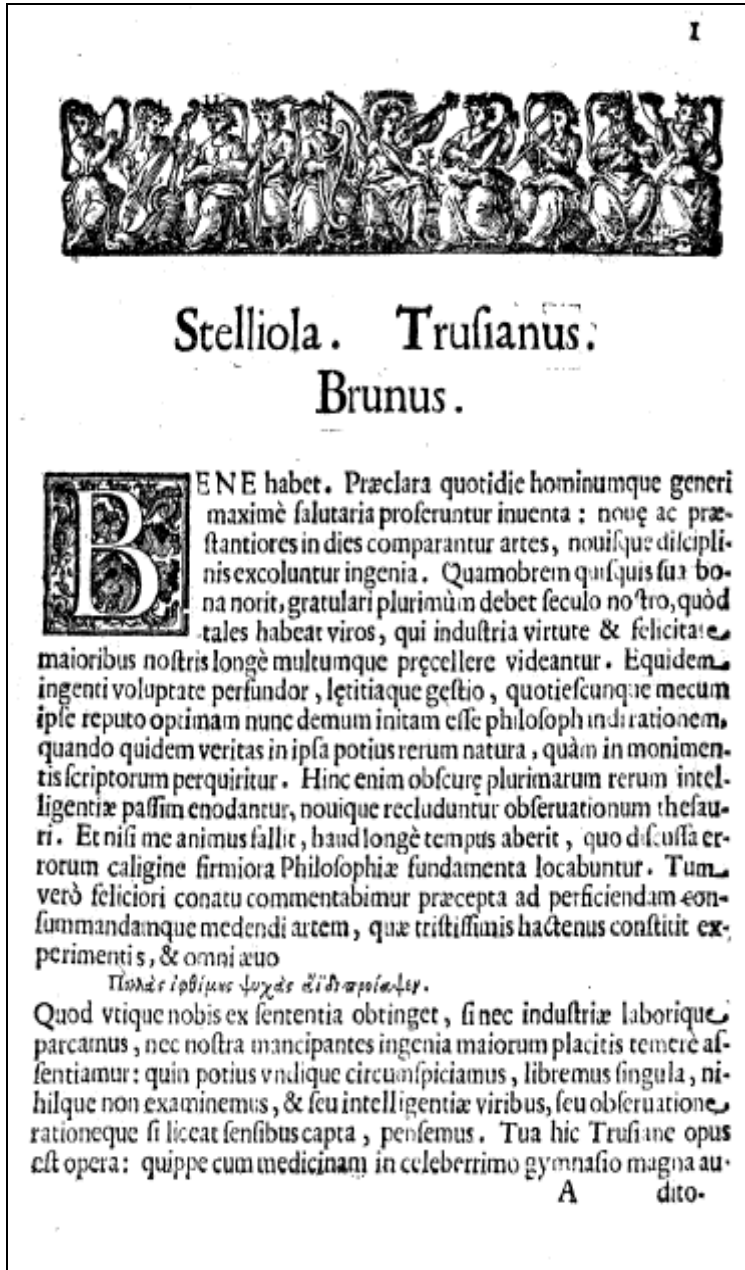
Figure 1:



Monument to Giordano Bruno, Campo de' Fiori, Rome:

"IX GIVGNO MDCCCLXXXIX
A BRVNO
IL SECOLO DA LVI DIVINATO
QVI
DOVE IL ROGO ARSE"

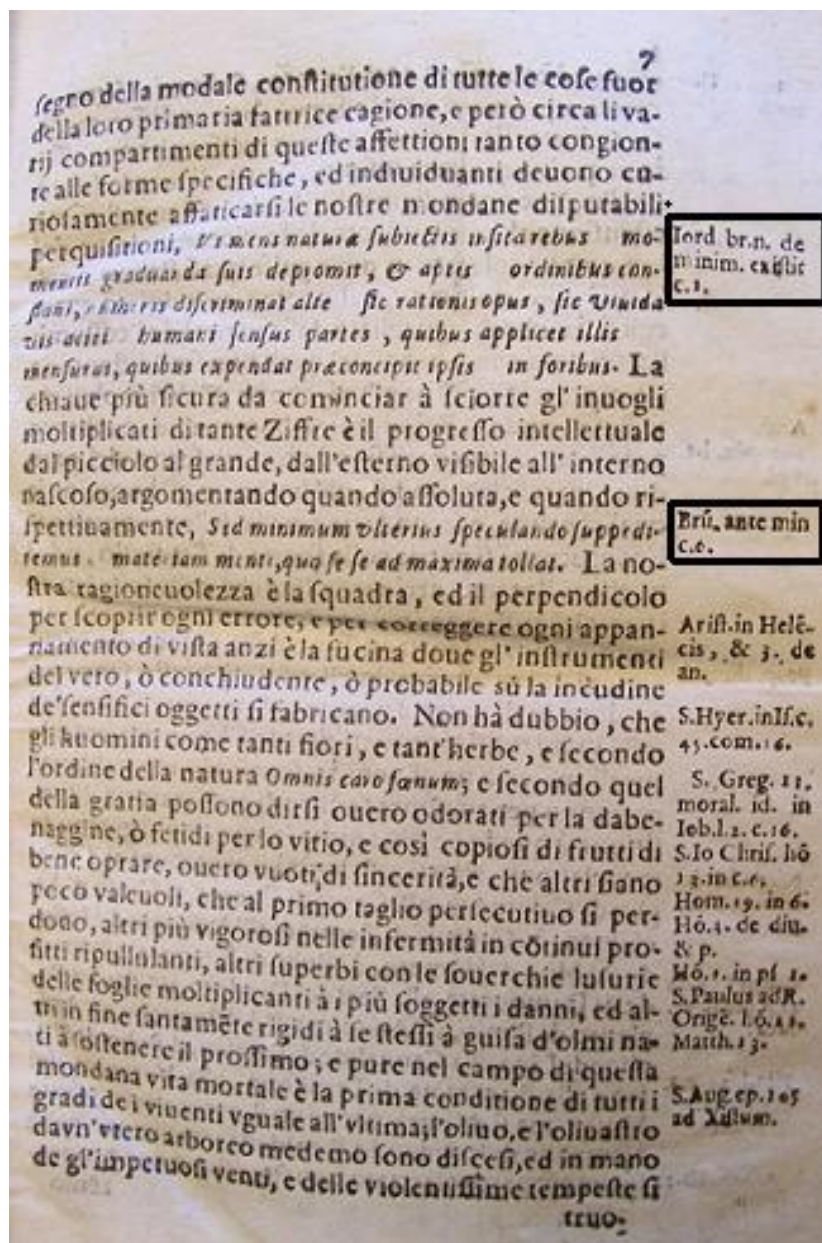
Figure 2:



Progymnasmata physica. Venetiis, Typis Haeredvm Fran.ci Baba., MDCLXIII.

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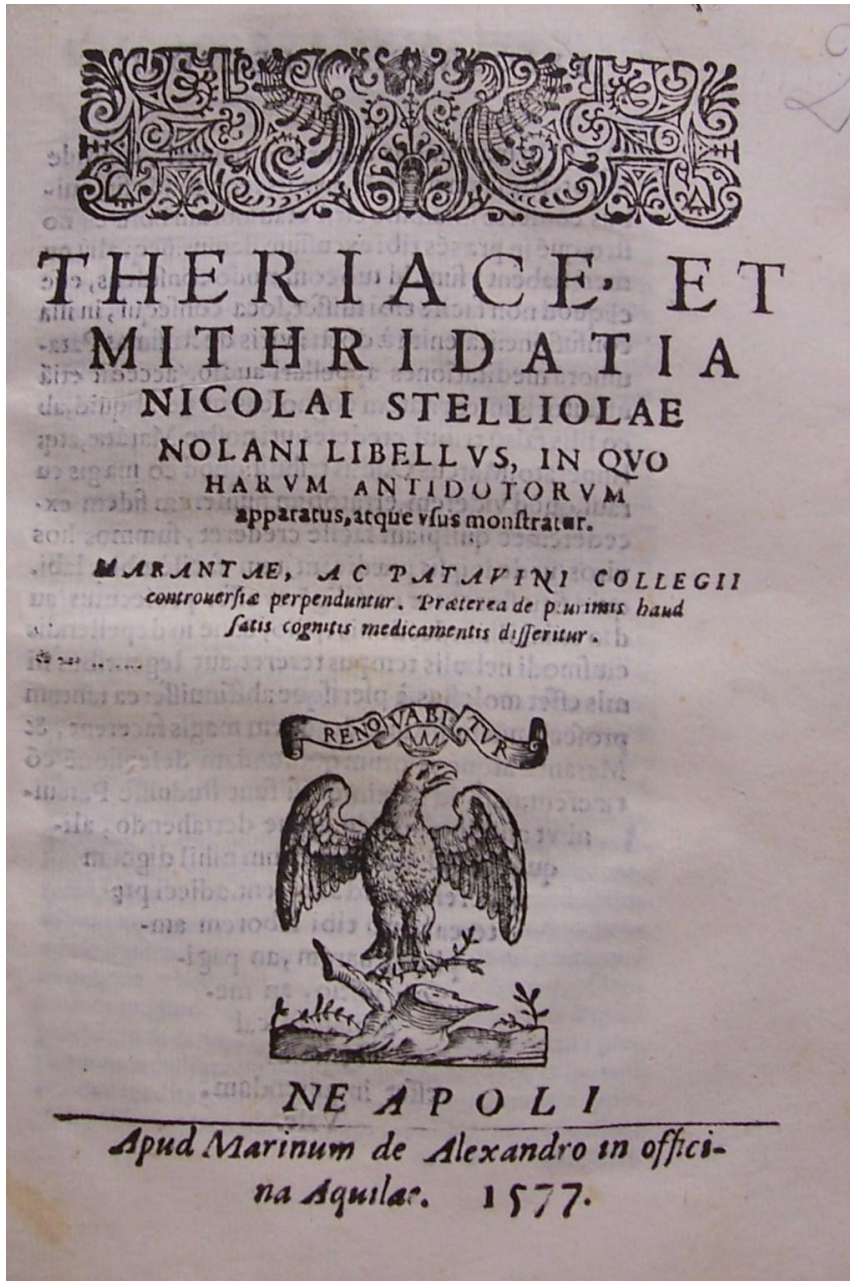
Figure 3



Cronoscopia ouero Speculatione dell'età varie nelle piante. Col vaticinio delle stelle nell'anno 1641. Bologna: presso Gio. Battista Ferroni.

Biblioteca Nazionale di Napoli, Inventario: 51424, Collocazione: B. Branc. 105C 113(4)

Figure 4:



Theriace et Mithridatia Nicolai Stelliolae Nolani Libellus, in quo harum antidotorum apparatus, atque usus monstratur Marantae, ac Patavini Collegii controversie perpenduntur. Praeterea de plurimis haud Satis cognitis medicamentis disseritur. Neapoli, Apud Marinum de Alexandro in officina Aquilae, 1577.

Biblioteca Universitaria di Bologna, Inventario: A 5499, Collocazione: A.4. B.7. 18/2

(From Ulisse Aldrovandi's collection donated to the University of Bologna.)

Figure 5:

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	tes habent fo.	Cyphi	39 b
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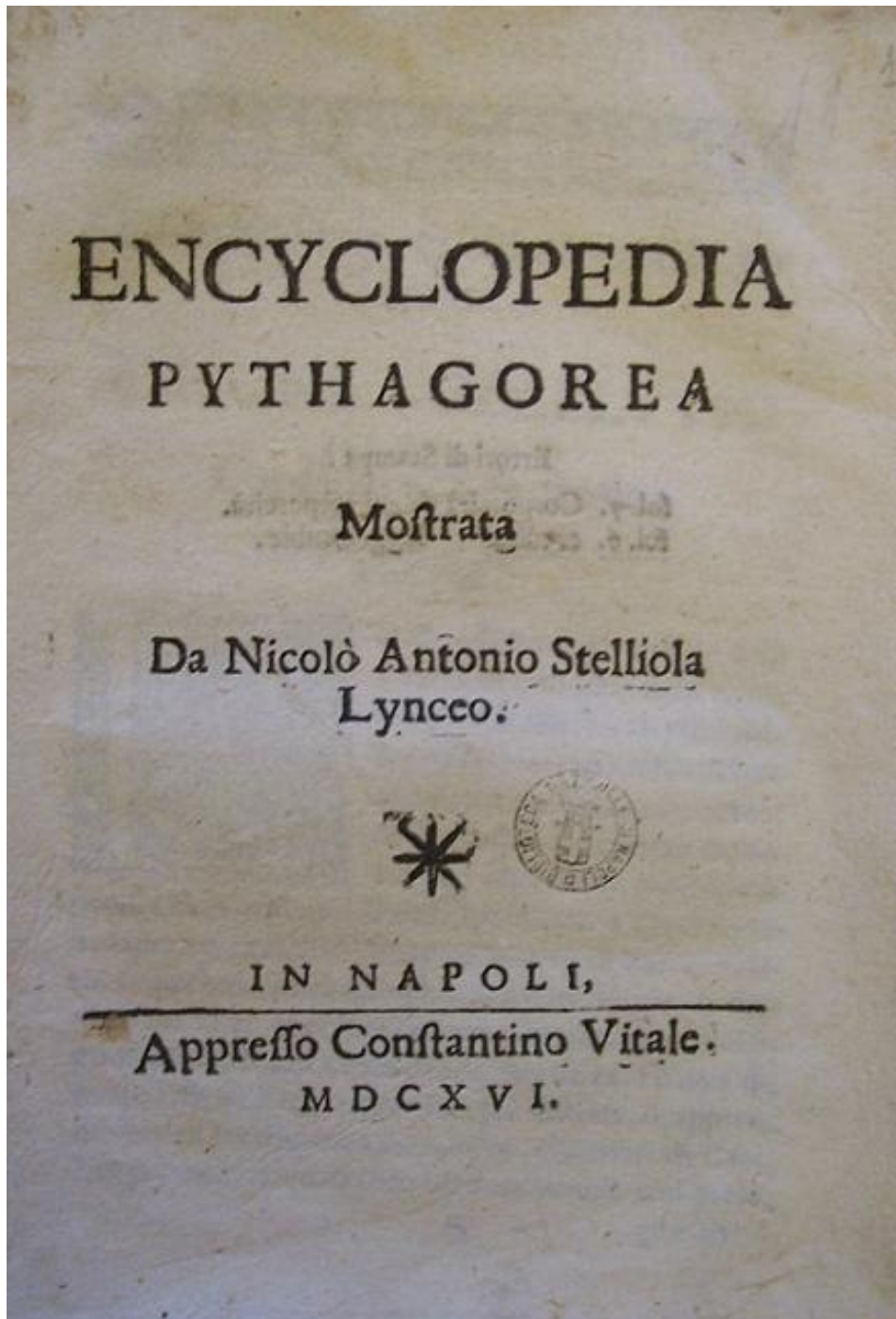
Figure 6:



Mario Cartaro & Nicola Antonio Stigliola: "Regno di Napoli."

Ms. x11 D 100 "Cartaro" (1613)
Biblioteca Nazionale di Napoli

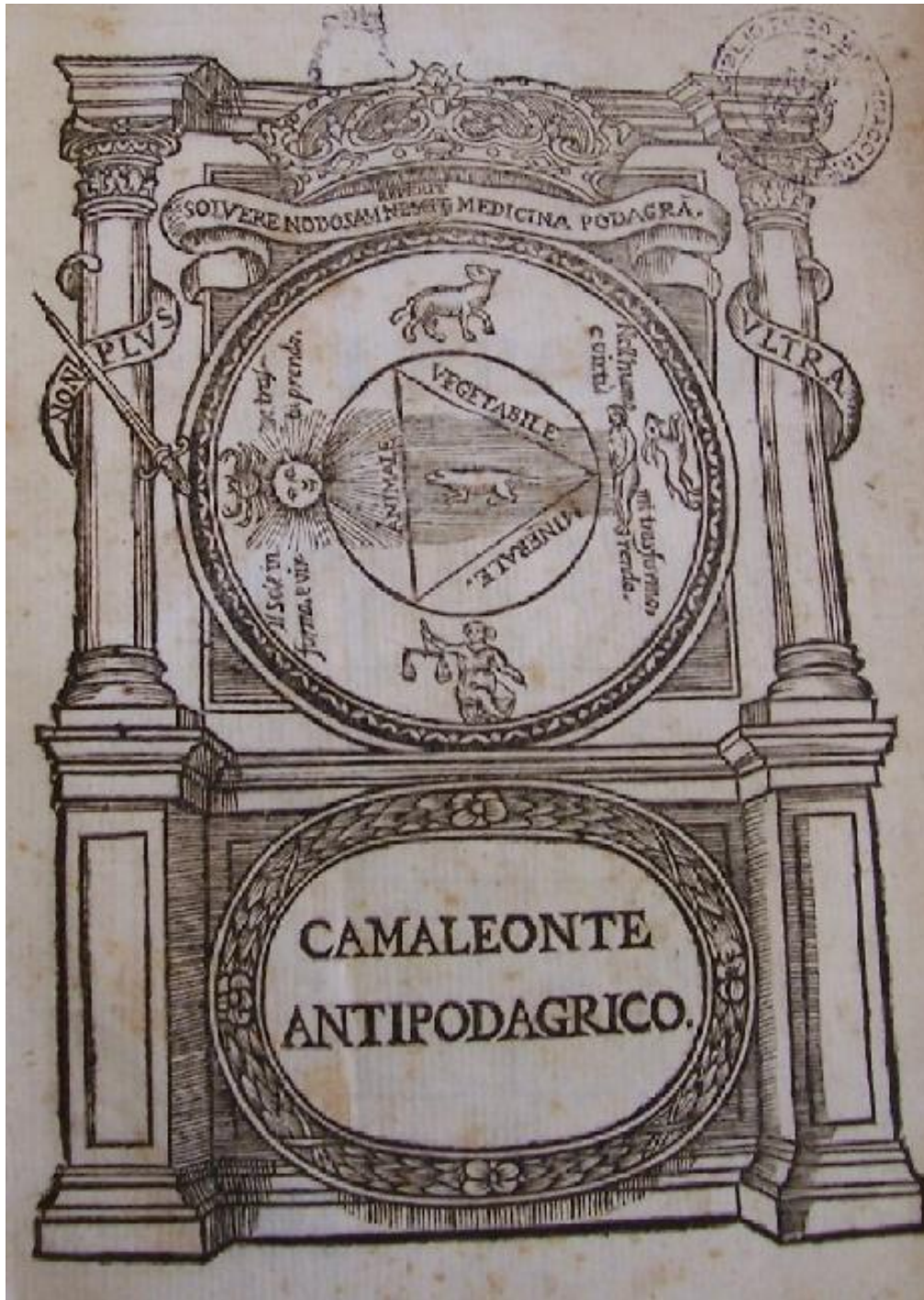
Figure 7:



Frontispiece. Nicola Antonio Stigliola, *Encyclopedia pythagorea*. In Napoli, Appresso Costantino Vitale, 1616.

Biblioteca Nazionale di Napoli, Collocazione: S.Q. XXXIV C 31/12

Figure 8:



Frontispiece. Andrea Fodio Gambara, *Il Camaleonte antipodagrico, discorso enciclopico*. In Napoli, Per Ettore Cicconio, 1651.

Biblioteca Nazionale di Napoli, Inventario: 20836, Collocazione: B. Branc. 050D 54

Figure 9:



From Frontispiece of *Il Camaleonte antipodagrico, discorso enciclopedico*.

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