

Astrology in Bruno's Mnemotechnical Works and Italian Dialogues

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The paper examines the use of zodiacal iconography and astrological motifs in Giordano Bruno's mnemotechnical works and Italian dialogues. It emphasizes that, rather than adopting the deterministic framework of judicial astrology, Bruno uses its symbolism to articulate a new philosophical discourse that encourages the active development of the intellectual faculties of the individual: zodiacal images transform from tools of future prediction into instruments for the organisation of memory, intellect, and moral reflection, thus overturning the fatalistic nature of astrology and turning it into a means for self-understanding and the exploration of hidden potentialities. Bruno's criticism towards astrology is also related to his intellectual project to deconstruct the traditional vision of the closed world, as conceived by Aristotle and Ptolemy.

Keywords: astrology, Renaissance, epistemology, mnemotechnics, ethics, cosmology

1. Introduction

Symbolic thought plays a foundational role in the oeuvre of Giordano Bruno (1548–1600), shaping both his mode of argumentation and his organization of knowledge: his philosophical writings frequently draw on allegories and paradigmatic figures to convey ideas in a vivid and evocative manner. Within this framework, the integration of astrological themes stands out as a distinctive feature of Bruno's literary production. This is quite evident in the works on the art of memory, composed at different stages of his European wanderings. Astrological motifs likewise function as key narrative elements in the Italian dialogues published in London between 1584 and 1585. While the incorporation of such themes enriched Bruno's philosophical discourse, it also reveals the complexity of his relationship with the astrological tradition, reflecting an ambivalent attitude toward astrologers' views, ultimately

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based on Albumasar's theory of great astral conjunctions.¹ Not only did Bruno reject their extremely fatalistic interpretation of reality, but he criticized the geocentric model of the universe underlying the representation of the Zodiac. This critical attitude reflects some of the broader issues surrounding the transmission of astrological knowledge in early modernity—a time marked by both the growing popularity of the art of prognostication and the increasing need to reinterpret its grounding concepts.

In the sixteenth century, astrological doctrines enjoyed widespread popularity—not only among the broader public but also within learned circles—and they were studied for their various implications across a wide range of disciplines. Theologians did not overlook the doctrinal consequences of astrological determinism, considering the way it undermines human free will: the attribution of historical causality to astral conjunctions weakened the concept of responsibility, portraying individuals as subject to forces beyond their control. The lack of consensus on the legitimacy of prognostication led Sixtus V to issue *The Heavens and the Earth* (1586), a bull condemning judicial astrology, regarded as a turning point in the history of censorship of superstition.² Remarkable critiques against some common beliefs of judicial astrology are also expressed in humanistic sources, including the works of philosophers who adapted astrological themes to their ideas, for example the unpublished *Disputation against the Judgment of the Astrologers* of Marsilio Ficino,³ the *Disputations against Judicial Astrology* of Giovanni Pico della Mirandola,⁴ and *On the False Prognostication of Deluges* of Agostino Nifo.⁵ Giordano Bruno, likewise, distanced himself from the beliefs of the astrologers. During the trial that led to his condemnation for heresy, he affirmed to his interrogators that he rejected astrological fatalism; in order to safeguard himself from the charge of such a heretical position, he affirmed his belief in providence, understood as God's ordering role in the world.⁶

¹ See (Burnett 2009), (Bertozzi 1996), (Lemay 1962).

² See (Baldini 2011), (Ernst 1991, 255–279).

³ See (Kaske 1986), (Walker 1986), (Bullard 1990), (Vasoli 1992).

⁴ See (Akopyan 2018b; Akopyan 2021).

⁵ See (Schino 2022).

⁶ See the Bruno's response in the documents of his trial (Firpo 1993, 187–188): “Respondit: [...] quanto poi alla divinatione, particolarmente quella che è dalla astrologia giudiziaria, ho detto et havuto ancora proposito di studiarla per vedere se haveva verità o conformità alcuna. Et questo mio proponimento l'ho comunicato a diversi, dicendo haver atteso a tutte quante le parti della filosofia et d'esser stato curioso in tutte le scientie eccetto che nella giudiziaria; et che havendo commodità et otio, volevo attendere a quella, trovando loco solitario et quieto; il che non ho fatto ancora et giamai proposto di fare se non a questi tempi incirca. Interrogatus se ha tenuto over detto che l'operationi del mondo sono guidate dal fato, negando la providentia d'Iddio; Respondit: Questo non si trovarà mai nelle mie parole, né meno nelle mie scritte, perché non ho mai detto né scritto che l'attioni del

Nevertheless, Bruno's oeuvre undeniably contains astrological motifs and images, the role of which becomes clearer when examined in relation to his philosophical discourses. Unlike the thinkers mentioned above, who systematically addressed the problem of judicial astrology, Bruno did not dedicate an organic reflection to this matter. Yet allusions to astrology appear throughout his argumentations related to distinct domains of knowledge, such as moral thought, philosophy of nature, mnemotechnics, epistemology, and theology. A thorough examination of these references is necessary to better understand how he approached astrological concepts and the following pages present selected passages that show how they are employed to support and enrich his philosophical reflections. Bruno's *corpus* is incredibly vast and offers many examples of his relationship with astrological knowledge, a thematic connection that could only be adequately explored within the scope of a monograph. The following analysis will focus on his writings on the art of memory and Italian dialogues—an already extensive and more than sufficient body of works to present the topic in question.

The present study emphasizes that, rather than adopting the deterministic framework of judicial astrology, Bruno repurposes the motifs of that art as tools to articulate an innovative philosophy that leads the individuum to actively develop his faculties: zodiacal images become instruments for the elaboration of memory, intellection, and moral reflection, changing a system of fatalistic prediction of future events into a medium for understanding the inner self and its hidden potentialities. Therefore, it can be inferred that Bruno overturned the meaning of the art of prognostication. His appropriation of astrological symbology reflects a broader project, which aims to expand the traditional representation of reality beyond its limits and to emphasize the active role of the individuum. In addressing this topic, the study considers opinions expressed by 20th century scholars such as Frances Yates and Eugenio Garin, as well as historians who have more recently examined the function of the occult sciences in Bruno's discourse. Although their conclusions sometimes differ (or significantly diverse), this reconstruction seeks to identify the points of convergence across multiple scholarly interpretations while highlighting their relevance for the historiographical research.

2. Signs of the times

It is difficult to determine precisely when Bruno first developed his interest in astrology. Reconstructing his astrological library is equally challenging,

mondo si governino dal fato et non dalla providentia divina; anzi, ritrovarete nei mei libri che io pongo la providentia et il libero arbitrio, da che se comprende, come si dà il libero arbitrio, se oppugna il fato.”

mostly due to a lack of explicit references in his works. Most probably, the philosopher of Nola began encountering texts on the subject since the years spent among the Dominicans at the Neapolitan convent of San Domenico Maggiore, which he had entered as a novice in 1565 and left in 1576. While studying at the ancient library of the convent, Bruno had access to a wide variety of sources which would have later influenced his philosophical reflections and his argumentative approach, based on the use of metaphors and images. Another relevant point that should not be overlooked is the presence of astrological images within the architectural environment of San Domenico Maggiore. Eugenio Canone underlined that the Carafa Chapel inside the basilica is decorated with reliefs of figures inspired by pagan planetary deities, which clearly hold allegorical values: those figures stand for military virtues and moral principles. Canone suggested that those allegorical representations influenced the fictional narrative of Bruno's *The Expulsion of the Triumphant Beast*, a dialogue constructed on both astrological symbology and mythological references.⁷ Beside Canone's assumption, it is also worth considering that the beliefs in celestial influences have caught the attention of the Dominicans for centuries. The young Bruno most likely encountered concepts of natural magic and astrology in well-known sources of medieval scholasticism. It is worth remembering the treatise *On Minerals* of Albert the Great and the *Sum of Theology* of Thomas Aquinas.⁸ Despite rejecting the identification of the stars as causes of natural changes, Aquinas believed that "the movements of bodies here below, which are various and multiform, must be referred to the movement of the heavenly bodies, as to their cause" (Thomas Aquinas 2007, 562). These reflections surely awakened Bruno's curiosity and ultimately led him to integrate themes of astral magic into his own works.

As noted by historians of philosophy, Bruno most likely addressed the theme of prognostication in the opuscle *On the Signs of the Times* (Venice, 1577), which appears to be his earliest publication. Probably printed in a limited number of copies, *On the Signs* is now lost.⁹ Therefore, its content cannot be accurately reconstructed. The scarcity of information has not prevented scholars from speculating about its plausible aims and contents. The most solid assumptions regarding the opuscle are based on biographical information that emerged in the inquisitorial documents of Bruno's trial. After being arrested in Venice in 1592, the imprisoned philosopher recalled his work multiple times without leaving any clues about its contents or the printer. According to the trial documents, it can be inferred that *On the Signs*

⁷ See (Canone 2005).

⁸ See (Rutkin 2013; Rutkin 2019) and (Zambelli 1992, chapter 6).

⁹ See (Scapparone 2014), (Spruit 2002), (Carella 1992), (Ernst 1992).

was prepared in a relatively short time—about one month and a half—while the Nolan was in Venice before his European travels. Moreover, he stated that his opusculum was printed with the purpose to cover financial needs, and that seems credible: after all, Bruno was living a period of instability and uncertainty following his departure from the Dominican convent. Despite leaving the Order of Preachers, he did not distance himself from religious authorities, and recalled having shown the manuscript of *On the Signs* to Remigio Nannini of Florence, a Dominican and a discerning connoisseur of Aristotle's *Meteorology*; Bruno probably needed his approval to proceed with the printing of *On the Signs*.¹⁰ Scholars have emphasized this detail to corroborate the idea that the opusculum concerned weather prognostication or perhaps astrological predictions regarding the changes in political power or religious-eschatological events. Undoubtedly, astrological beliefs gained popularity in the sixteenth century. This is partly due to the observation of uncommon phenomena in the sky: it is worth remembering the *nova* of 1572 and the comet of 1577. These celestial novelties sparked a sense of wonder and astonishment in learned circles and beyond. Venetian printers took advantage of the rising popularity of astrology to sell opuscles and compendiums on weather prognostication, and related topics: for instance, in 1534 or 1535, Bernardino Bindoni printed the *Prognostication* of the medic Girolamo Cardano, who admittedly wrote it to earn a living in those hard times;¹¹ the writing *On the Signification of Planets*, falsely attributed to Regiomontanus, was printed in 1578 by Pietro de' Franceschi, who was active in Frezzaria, a Venetian area where Bruno has stayed; in 1540 Geronimo Scotto published Agostino Nifo's *On the Truest Signs*, a compendium on meteorology and climate change. The title of this meteorological treatise sounds almost like the one later chosen by Bruno for his own opusculum. Although Germana Ernst has sought to find a connection between the two texts, there is no solid evidence that Nifo's treatise influenced Bruno's opusculum and the question is still open.

¹⁰ See the statements of Bruno in the documents of his trial (Firpo 1993, 159–160): “Venni a Venetia per il Po. Dove stetti un mese e mezzo in Frezzaria a camera locante in casa de uno dell’Arsenale [...]; et mentre stetti qui, feci stampar un certo libretto intitolato *De’ segni de’ tempi*; et feci stampar quest’opera per metter insieme un pocco de danari per potermi sustentar; la qual opera feci veder prima al reverendo padre maestro Remigio de Fiorenza”; (Firpo 1993, 295): “Di lí me n’andai in Savoia, Turino, e tornai a Venetia, dove feci stampar il libro *De’ segni de’ tempi*.”

¹¹ See (Martin 2022), (Ernst 1999).

3. The wheels and the Zodiac

While the discourse on the opusculum *On the Signs of the Times* remains hypothetical, the influence of astrological knowledge on Bruno's mnemotechnical production is evident and undeniable. His works on the art of memory develop various teachings of rhetoricians and mnemonists of distinct historical periods, such as Cicero, Ramon Llull, and Peter Tomai, who developed virtual systems to organize and elaborate knowledge for a variety of purposes. The integration of spiritual and occult themes into Bruno's theories on the art of memory further underscores the role of imagination as an intellectual faculty grounded in symbolic thought, representing a distinctive feature of his art.¹² The presence of magico-astrological themes in his mnemotechnical production has long attracted attention of scholars—most notably that of Frances Yates, whose pioneering research on the memory systems and the expressions of occultism in the Elizabethan era still remain influential. According to Yates, Renaissance intellectuals such as Giordano Bruno and Giulio Camillo “exhibit a profound conviction that man, the image of the greater world, can grasp, hold, and understand the greater world through the power of his imagination” (Yates 1999, 230). In fact, in their mnemonic systems, symbols establish a link between the spiritual intentions of man and the intelligible world. While these aspects of Yates' studies continue to be widely accepted, her claims concerning Bruno's relationship with astral magic and occultism—particularly the role she assigns to hermetic allusions in his works—have been questioned. Yates presented Bruno as a Hermetic magus, interpreting his seals and diagrams as magical devices comparable to the symbols of ceremonial magic found in magico-hermetic sources such as the *Picatrix* and Cornelius Agrippa's books on occult philosophy: “The art of memory has become in Giordano Bruno's occult transformation of it, a magico-religious technique, a way of becoming joined to the soul of the world as part of a Hermetic mystery cult” (Yates 1999, 259). Over the last three decades, scholars have rejected this opinion, noting that Yates placed disproportionate weight on Bruno's engagement with the occult sciences and the Hermetic tradition: in fact, these elements constitute only one facet of the author's complex thought, which draws on multiple intellectual traditions to articulate an original vision. Bruno never declared the intention to revive an ancient religious cult—unlike what Yates claims.¹³

The Yatesian interpretation of Bruno's philosophy as a reappropriation of ancient occult sciences and hermetic spirituality contrasts with Eugenio

¹² For an overview on Bruno's art of memory, see (Rossi 2000, chapter 4), (Mertens 2018) and (Matteoli 2004; Matteoli 2019).

¹³ See also (Yates 1969). On the debate against her thesis, see (Gatti 1999) and (Dell'Omodarme 2004).

Garin's approach, which treats the iconographical elements of Bruno's works with greater caution. According to Garin, there is no necessary connection between hermetic ceremonial magic and the combinatorial diagrams and mnemonic seals in Bruno's production on epistemology and mnemotechnics. Reflecting on the treatise *On the Shadows of Ideas* (Paris, 1582), Garin claimed that Bruno relies on "images of the 'decans' for its 'wheels', but it strips them of occultism for the sake of the functioning of the mnemonic systems" (Garin 1983, 110).¹⁴ Taking a direction opposite to that of Yates, Garin emphasized Bruno's demythologization of astrology, arguing that the astrological images in his mnemotechnical works do not preserve any occult meaning related to Albumasar's doctrine of conjunctions or any other aspect of astral magic: in Bruno's works, traditional astrological iconography is rather employed as an allegorical tool to serve the art of memory and its practical purpose—that is, the organization of knowledge. Inspired by the visual elements in the works of Ramon Llull, Bruno developed similar devices in the form of concentric wheels, which basically function as virtual machines for the re-elaboration of knowledge. He divided those wheels into internal sections marked with alphabetical letters: by rotating the wheels, letter combinations are generated, allowing the mnemonist to construct mnemonic scenes and elaborate complex information. It is worth noting that the wheels in *On the Shadows* are often accompanied by solar symbols or signs of the Zodiac. Garin noticed similarities between those representations and the common depictions of decans (or facets) in traditional astrological iconography, which were originally designed for the division of time; therefore, Garin argued that Bruno adapted the geometrical division of the Zodiac to a completely different domain—epistemology rather than divination or occultism. Unlike Yates, who interpreted Bruno's diagrams as magical devices by inferring intentions from his allusions to occultism, Garin emphasized their practical function in structuring knowledge, excluding any esoteric connotation. His interpretation appears more compelling, as it is grounded in philological methodology. Although their perspectives differ significantly, both scholars agree on the pivotal role of astrological iconography in Bruno's mnemotechnics, which involves more than just the presence of astral symbols within the combinatorial wheels.¹⁵

In addition to the zodiacal and solar figures mentioned above, the treatise *On the Shadows* includes further illustrations clearly related to the astrological tradition. Such is the case of the xylography of the twenty-eight mansions of the Moon: as noted by Mino Gabriele and Eugenio Canone, the figure printed in the appendix of Bruno's treatise corresponds to an image in

¹⁴ See also (Garin 1950) and (Garin 2009).

¹⁵ For example, see the zodiacal images in the apparatus of the book of (Saxl 1915).

the frontispiece of Mauro Fiorentino's commentary on the *Sphere* (Florence, 1550), a popular astronomical treatise. Bruno must have borrowed this figure and incorporated it into his own discourse, thereby attaching a new meaning to the lunar mansions represented in that image.¹⁶ Additional representations of the zodiacal signs and triumphs—planetary gods on chariots—are present in the text titled *Art of Memory*, published alongside the treatise *On the Shadows*. Mino Gabriele has shown the correspondences of the images printed in the Brunian work to those in Venetian editions of Albumasar's texts—particularly the *Florilegia of Astrology*, *Introduction of Astronomy*, and *On the Great Conjunctions*, published by Sessa around the year 1500.¹⁷ The iconography printed in those sources was circulated among artists and humanists. Bruno took advantage of the influence of the astrological tradition on the arts and the culture of his time: he promoted the application of zodiacal images to mnemotechnics to rely on their evocative value, thereby making his mnemotechnics accessible and comprehensible for his contemporaries. He recalled the teachings of Teucer the Babylonian, an ancient Greek thinker, about whom little information remains to the present day, but the author was likely well-known among humanists.¹⁸ Bruno's references to Teucer and his doctrine on the astrological facets are widely drawn from Cornelius Agrippa's *On Occult Philosophy*, a sum published in Paris in 1531, which provides a historical account of astrological theories, also referring to Teucer and the later reception of his teachings in the Arab world: "There are besides in the Zodiac thirty-six images, according to the number of the faces, of the which (as *Porphyry* saith) *Teucer* the Babylonian long since wrote, who was a most ancient mathematician, after whom the Arabians also wrote of these things" (Agrippa of Nettesheim, Henry Cornelius 2004, 2, 37, 377). In many cases, Bruno's descriptions of zodiacal facets match those found in Agrippa's sum of occult philosophy, as well as in medieval Arab sources which influenced the astrological tradition of the Latin world. It appears that Bruno associated the vaguely mentioned "Arabs" in Agrippa's account with the authority of Albumasar, which explains the integration of Teucer's teachings with the images of the printed editions of Albumasar's works such as the *Introduction of Astronomy*. According to Ornella Pompeo Faracovi, Agrippa would not be sole Brunian source on Teucer. It is likely

¹⁶ See (Canone 2001) and the remarks of Mino Gabriele in (Bruno 2001, 92–95). See also *On the Shadows of Ideas* in (Bruno 2004, 324–337).

¹⁷ Images of zodiacal signs are also present in the previous edition of Albumasar's works published by Erhard Ratdolt in Augsburg around the year 1488. However, the printed illustrations in *On the Shadows* match with those of the Venetian edition of Sessa. See the remarks of Mino Gabriele in (Bruno 2001, 86 ff) and (Dell'Omodarme 2014).

¹⁸ See (Bruno 2004, 290): "Imagines Facierum Signorum ex Teucro Babilonico, quae ad usum presentis artis quam commode trahi possunt."

that both he and Bruno were familiar with the Greek author through a well-established tradition transmitting knowledge of the constellations that rise on the zodiacal ecliptic (*paranatellonta*)¹⁹—a knowledge also related to Albumasar’s theory of astral conjunction and the *scientia astrorum* developed in the Christian world. The combination of conceptual and visual elements emphasizes a continuity between Arab and Latin sources, thereby revealing a transcultural heritage.²⁰

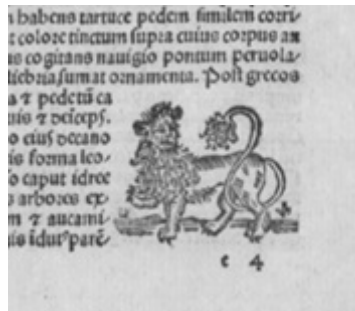


Figure 1: *Leo* in (Albumasar 1506, 4).

¹⁹ See (Pompeo Faracovi 2012, 132).

²⁰ For example, both Albumasar and Bruno describe the first facet of Aries as a black man with flaming eyes. See (Albumasar 1995, 2, 216): “vir niger, rubeis oculis et magni corporis, fortis et magnanimus indutus lintheo laneo albo, precinctus in suo medio fune, et est iratus stans super pedes suos”; see the similar reference in *De umbris idearum* of (Bruno 2004, 290): “Ascendit in prima facie Arietis homo niger, immodicae staturae, ardentibus oculis, severo vultu, stans candida precinctus palla.” Similar details are present in the second part of *Picatrix* and in the second book of Cornelius Agrippa’s sum *On Occult Philosophy*, which also draws upon the magical knowledge of the Arabs. As highlighted by Aby Warburg (1999, 748) in his studies on the astrological iconography in Renaissance art, the images of zodiacal facets be traced back to the Indian cultural tradition, which influenced both Persians and Arabs. For an overview on decans in the history of astrology, see (Gundel 1936).



Figure 2: *Leo* in (Bruno 1582, 80v).

4. Seals of memory

After writing the treatise *On the Shadows*, Giordano Bruno did not abandon the use of combinatorial wheels, letters, and symbols. Those elements remain central in his discourse on gnoseology and memory, and they are prominently featured in the *Explication of Thirty Seals*, published in London in 1583. This Latin work shows the author's propensity to develop a new discourse based on visual thinking, which connects themes of mnemotechnics and Neoplatonic philosophy.²¹ The seals described in the *Explication* should not be regarded as mere mnemonic devices: they are symbolic images that convey metaphysical truths. Some of them are related to astrological knowledge, and this paragraph focuses especially on those. The 2nd seal (*The Sky*) is introduced as a device that aids in the memorization of the constellations and cosmological structures.²² A further example is 3rd seal (*The Chain*), described as a tool for memorizing the sequential order of things; it is worth noting that Bruno recalls the chain of zodiacal signs as an example of its potential applications, even outside the astrological discourse.²³

²¹ See (Sturlese 1994).

²² See the following passage of the *Explicatio triginta sigillorum* in (Bruno 2009, 49): “Quo caeli imaginum series insculpatur et ordo, sphaera primum in quattuor circumferentiales angulos rectos duobus se circulis magnis intersecantibus divisa, totidem distinctas aequales offeret portiones, quarum quaeque perquisiti, inventi atque retinendi locum situmque ponit ob oculos.”

²³ See (Bruno 2009, 102): “Quod ibi typo retinendarum signiferi partium insinuavimus, dicens: // Dux gregis armenti primum, sublatus in iram / In geminosque pedes, impete fronte ferit. / Vindex, mente vacans, hinc Taurus concitus, ictu / Irruit in fratres impatiens Geminos.” The poem is structured as a conceptual chain: it continues with references to the other zodiacal signs. The seal of the *Chain* is also represented by a wood engraving.

Of course, the functionality of these seals must be understood in relation to Bruno's purpose to develop mnemotechnics through the introduction of new instruments. This aim which emerges in the description of the 12th seal (*Zeuxis the Painter*), which revisits aspects discussed earlier: Bruno mentions the ancient authority of Teucer of Babylon and encourages again the application of the zodiacal figures to the art of memory, emphasizing the interconnection of poetry, art, and philosophy.²⁴

In addition to examples examined above, the *Explication* includes further instances of continuity with the work *On the Shadows of Ideas*, specifically regarding the introduction of mnemonic diagrams. An example of this relation is the device associated with the 21st seal (*The Potter's Wheel*). The diagram of this seal is not significantly different from the mnemonic wheels introduced in previous mnemotechnical works. In fact, it is designed to elaborate scenes through combinations of two directional movements: more specifically, Bruno describes a vertical and a horizontal movement, each reminiscent of the gestures of the potter while shaping new vessels. Besides explaining the mechanism of the potter's wheel, Bruno clarifies that the device aids in memorizing the characteristics of stars and planetary dispositions. These details reflect the visual representation of the 21st seal, which includes stylized depictions of stars inscribed in a circular structure, inspired by the decans.²⁵ This association is confirmed by the later reintroduction of the potter's wheel in the *Cabala of Pegasus*, in which the device acquires a new meaning related to combinatorial arts: in the dialogue, the spinning of the potter's wheel represents the processes of generation and corruption, which also influences the disposition of the stars; the discourse is metaphorical and reflects the author's intention to use consistent expressions and recurring symbolism, even when addressing different philosophical issues.²⁶

²⁴ See (Bruno 2009, 56): "Sic mihi Teucris Babilonici imagines centum trium millium propositorum suppeditant lectionem."

²⁵ See (Bruno 2009, 140): "Rotae subiectum atrium, figulo figurator, luto subiecta intentio formabilis proportionantur. [...] Per quam quidem praxim si velis in mathematicis exerceri, ut si velis stellarum aspectus quad earum significationem et significationes dispositionum planetarum in signis retinere, [...]."

²⁶ See (Bruno 2002, 2, 1, 61): "[...] as the same mud in the hand of the same potter—that with the wheel of this dizziness of the stars comes to be composed and decomposed according to the vicissitudes of the generation and corruption of things—is now and honored vessel, now a contemptuous vessel of the same stuff."



Figure 3: 21st seal in (Bruno 1583, pl. folio Biii, microfilm m 10416/R 991889).

Following the cases just mentioned, the *Explication of Thirty Seals* introduces yet another example of the reinvention of astrological symbolism. The 18th seal (*The Encompassing Square*) shows Bruno's capacity to reinvent magical themes within a mnemotechnical and gnoseological discourse. The 18th seal is a geometric composition of perpendicular lines, which form squares of different shapes inscribed within one another. This geometric arrangement evokes astral imagery: four six-rayed stars are in fact positioned at the corners of the largest square, each of which is surrounded by four additional eight-rayed stars. Bruno does not explain how the device works, but leaves some hints: he indicates two numeric values—48 and 192—which are obtainable by multiplying the number of rays at the corners of the squares.²⁷ It can be therefore inferred that the twenty stars work together as gears of a single mnemonic device, with the rotation of the squares enabling multiple combinations of rays. The system is not significantly different from that of the wheels of memory, although it is grounded on the arrangements of lines, rather than circles. The perpendicular disposition of those lines is a relevant detail, as it suggests a relation to a figure of spirituality and ceremonial magic: the cross. As underlined by scholars, the intersection of perpendicular lines forming a cross is (also) a hermetic motif. It reappears in Arabic

²⁷ See the following passage of the *Explicatio triginta sigillorum* in (Bruno 2009, 62): “*De quadrato enciclio. XVIII sigillus // Quandoque dum ad latera quattuor stellarum primae magnitudinis, aliis secundae magnitudinis quattuor appositis, eadem forma tertiae magnitudinis quattuor accessissent, quaternarium mihi primo migrabat in duodenarium, secundo duodenarium in 48narium extendebatur, tertio, ni 48narium in 192narium amplificatum universae descriptioni deservisset, ulteriora pari adtentassem serie.*”

sources on occultism, some of which circulated in Latin Europe.²⁸ An example is the book *On Stellar Rays* attributed to al-Kindi: this work refers to the perpendicular disposition of stellar rays as a pre-condition of the most powerful spells.²⁹ In the *Picatrix*, a compendium of occultism composed in medieval Andalusia, the cross is reintroduced as a universal tool of magic, essential to summon planetary spirits and harness their power.³⁰ The mentioned sources were both available in Latin translation in the sixteenth century, even though they were never printed. There is no concrete evidence that Bruno read them, but his appropriation of the theory of stellar rays can be better understood in the context of a wider relation of influences. Bruno was familiar with texts of intellectuals who previously showed their interest in the occult sciences: such is the case of the medieval necromancer Cecco d'Ascoli, who reported that mages are accustomed to performing ceremonies at crossroads to summon demons;³¹ implicitly referring to *Picatrix*, Marsilio Ficino claimed that “ancient authorities [...] in a certain Arabic miscellany, used to prefer above all other figures that of a cross, [...] it therefore possesses the greatest power among images and receives the forces and spirits of the planets” (Ficino 1989, 3, 18, 335); Agrippa similarly stated that “The Egyptians, and Arabians confirmed that the figure of the cross hath very great power, and that is the most firm receptacle of all celestial powers, and intelligences, because it is the rightest figure of all, containing four right angles, [...] and stars are then most potent when they possess four corners in the figure of the heaven, and make a cross [...]” (Agrippa of Nettesheim, Henry Cornelius 2004, 2, 23, 330). Bruno’s allusions to the magical power of stellar rays can be explained considering these accounts. Unlike his Latin predecessors, though, he applied the principle of the cross to a discourse

²⁸ See the remarks of Mino Gabriele in (Bruno 2001, 168–182), (Albanese 2001) and (Ben-Zaken 2019).

²⁹ See the following passage of al-Kindi (1974, 2, 219): “Nam radius qui a centro stelle ad centrum terre descendit fortissimus esse probatur in operationis sue specie. Qui autem a centro terre obliquantur secundum proportionem obliquationis in effectu debilitantur, nisi in quantum aliarum stellarum radiis concurrentibus in eisdem locis confortantur.”

³⁰ See (*Picatrix*, 3, 148–149): “[...] this image is the universal tool in these rituals and the receptacle of the planetary spirits’ powers because they work well with other images. This is one of the secrets of this art. Furthermore, all humans have a place beneath the seven circles of the planets. When the power of a planetary spirit is joined with the shape of a cross, then the ritual has strength and power over whatever other image is with it.” On the theory of stellar rays in Arabic sources and its Latin reception, see chapter 2 in (Saif 2015).

³¹ See the following passage from the commentary on *Sphere* in (Cecco d’Ascoli 2022, 53): “Nam cum signa quatuor supradicta dicantur cardinalia sive angularia, idcirco velut loca digniora sub ipsis tenent aliqui de hierarchia maiori, et cum ipsi coluri intersecant cruciatim solstitia, ideo illi qui invocant demones semper in triviis sive in cruciatis viis stant ad invocandum.”

distinct from that of ceremonial magic: in the 18th seal of the *Explication*, the cross is integral to the gnoseological operations of the individual, who “performs” a different kind of magic, related to the act of intellection.

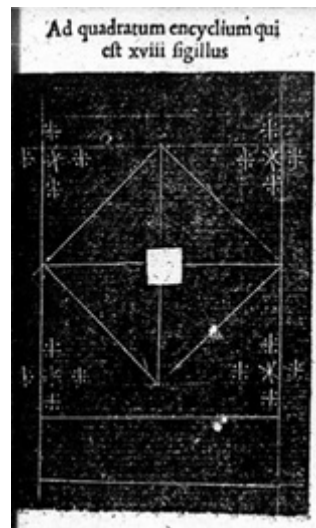


Figure 4: 18th seal in (Bruno 1583, pl. folio Bii, microfilm m 14616/R 991889).

5. Astral images, signs and ideas

The last of Bruno's mnemotechnical works involving the use of astrological imagery is the Latin treatise *On the Composition of Images, Signs, and Ideas*, published in 1591 in Frankfurt by Johann Wechel and Petrus Fischer. This work goes beyond the concepts of epistemology, as it represents Bruno's last effort to develop an art for the inner development of the individual.³² The treatise contains allegorical figures of planetary triumphs, which are not new in the Brunian production: as anticipated, the triumphs were previously introduced in *On the Shadows*. The recurrence of a common iconography in these two works, printed in distinct places and periods, implies that their inclusion is not simply due to the aesthetic choices of their respective printers, but rather to Bruno's request to maintain the same kind of iconography to make his argumentations comprehensible and captivating. It should not be overlooked that the illustrations in the *On the Shadows* do not exactly correspond with those of *On the Composition*, despite sharing analogous subjects. This subtle difference seems due to the circulation of different wood engravings in the French and German environments, where the two mentioned works were printed, respectively. A precious hint on this matter is the following reference to an illustration seen in the Protestant countries:

³² See (Sturlese 1990) and (Clucas 1999; 2001).

In Germany I came upon this not inappropriate illustration. Two young women draw a chariot that stands on the clouds. Its tongue pole is in the image of a long-eared dragon, but next its tail has been twisted back to form a ship's stern in such a way that the dragon's hollowed back forms the chariot's hull. (Bruno 1991, 2, 12, 198)

This passage is not specific, but the representation of two women on a chariot's hull corresponds with the triumph of the Moon, which is also printed in the work *On the Composition*. Scholars attempted to identify secondary sources including the same planetary triumph and other astrological images corresponding to those printed in *On the Composition*. According to David Higgins, the illustrations in Bruno's work reproduce those of Bede the Venerable's *Sphere of the World*.³³ This hypothesis is convincing, especially given that Bruno cites Bede, showing his familiarity with his oeuvre.³⁴ A different answer was later given in an article of Francesca dell'Omodarme and Francesca di Dio, who identified correspondences between the planetary triumphs printed in *On the Composition* and analogous figures in Hyginus' *Poetics of Astronomy*, particularly the edition printed in 1535 in Basel by the printer Johannes Herwagen.³⁵ Of course, Higgins' solution does not exclude the second interpretation: in fact, it may be concluded that the engravings used by Wechel and Fischer to print Bruno's *On the Composition* are identical to those found in the editions of Bede and Hyginus, offering a synthesis of both readings.



Figure 5: *Triumph of the Moon* in (Hyginus 1535, 4, 110).

³³ See (Beda 1563, 403 (i.e., 437) and 439).

³⁴ See (Bruno 1991, 272): “Bede made known the reason, which explicates all differences of the numbers by the fingers and the joints.” Bruno refers to (Beda 1980, 669–672).

³⁵ See (Dell’Omodarme and Di Dio 2005) and, about the reception of Hyginus in the early modern period and the relevance of this author for Bruno, see (Tozzini 2014).



Figure 6: *Triumph of the Moon* in (Beda 1563, 439).



Figure 7: *Triumph of the Moon* in (Bruno 1591, 156).

6. Hermeticism and astrology

The presence of astrological elements in the works of Bruno is not limited to the mnemotechnical discourse and manifests itself even in the absence of printed illustrations. As anticipated in the introduction of this study, zodiacal allegories play an important role also in the Italian dialogue of *The Expulsion of the Triumphant Beast*, which presents the author's sketches for an ethical-political reform. In his correspondence with Aby Warburg, Ernst Cassirer rightfully argued that Bruno's thought cannot be interpreted based exclusively on philosophical matters: the true meanings of the *Expulsion* can be clarified only on the basis of a history of images and astrological symbolism.³⁶ The entire work is built on allegories and mythological themes: its characters constantly recall figures of pagan culture associated to the con-

³⁶ See the statements of Cassirer in his letter to Warburg dated 29/12/1928 in (Warburg and Cassirer 2008, 73–74). “Die zünftige Historie der Philosophie ist eigentlich ihm gegenüber bis auf den heutigen Tag ziemlich ratlos gewesen; sie schwankt zwischen kritikloser Verehrung und einer absprechenden Hyperkritik, die Bruno mit gänzlich falschen Maßen mißt. [...] Der „Spaccio della bestia trionfante“ verlangt einen Kommentar, der nicht aus der philosophischen Problemgeschichte allein, sondern nur aus der Bildgeschichte und aus der Geschichte der Astrologie gegeben werden kann.” On this topic, see (Carannante 2019), (Canone 2014), and (Raio 2008–2009).

stellations, as they were depicted by ancient thinkers like the aforementioned Hyginus.³⁷ The intentions of Bruno are conveyed primarily through the words of Sophia, a fictional character introduced as daughter of Jupiter and personification of wisdom: in the *Expulsion*, Sophia's discourses announce a reform of morality as an antidote to the "triumphant beast", the very embodiment of vices. More specifically, Bruno targets the values brought by the Protestant Reformation: he despises the Lutheran interpretation of Christianity and warns about the moral implications of the doctrine of grace and predestination, as it was intended by the theologians of Protestantism.³⁸ Sophia announces the imminent fall of the triumphant beast and the rise of new constellations to the night sky, as an alternative to immorality and social decay. In this allegorical discourse, the configuration of the stars would represent the highest form of truth, and the values required to illuminate the path to peace and stability:

The constellations and the influxes will be renewed, and new symbols will lead to renewed fortunes, because everything depends on this superior world, and contrary effects are the result of contrary causes. Oh, how happy we will be, and truly fortunate, if we learn how to occupy well our spirits and our thoughts. (Bruno 2024, 77)³⁹

In this context, the association of the stars with the divine truth and the concept of astral influxes are obviously inspired by astrological culture, and these narrative elements serve as a backdrop for the plot of the dialogue: the superior world and the influxes recalled in the quoted passage do not literally correspond to the heavens and the occult virtues of the stars. Rather, the philosopher had in mind the inner dimension of the self, intended as the true place of virtues. Metaphors are central to the discourse of Sophia, which is at times indirect and based on the statements of her father Jupiter, also encouraging the banish of vices: "Let Dishonesty, Derision, Disdain, Loquacity, and Deceit go with it, and its place to be taken by Magic, Prophecy, and every kind of Foresight and Prognostication that has good and useful effect" (Bruno 2024, 305). This should not be interpreted as an apology of

³⁷ See (Catana 2000). It is difficult to determine which version of Hyginus's work was consulted by Bruno when he was writing the *Expulsion*. Though, it is unlikely that he had the *Editio Mycilli* at his disposal at that time: in fact, his reference to the triumph of the Moon in the treatise *On the Composition* refers to the German period of his wanderings.

³⁸ See (Russo 2023) and (Ricci 2007).

³⁹ See also (Bruno 2024, 115): "Saulino. Before you take your story any further, Sophia, would you please explain to me this new order and disposition of heavenly powers that Jupiter is creating in the skies. And first of all, I would like to know why he has placed the goddess Truth in the very highest seat (or so it is usually considered). / Sophia. That is easy enough, Saulino. Truth is situated above everything because she is the unity that dominates everything."

astrology, but rather as a praise of wisdom in its true form. In this dialogue, magic and the divinatory arts should be regarded as synonyms for philosophical speculation, opposed to ignorance and barbarism. Remembering the lost Egyptian civilization, Sophia praises the ancient disciples of Hermes Trismegistus, depicting them as able magicians and keepers of wisdom. In some cases, her words are based on passages of the *Asclepius*, a source presenting a dialogue between Hermes and his pupil:

So do you see, Asclepius, how it is that these animated statues, that are full of spirit and sense, are able to operate such things in so many ways? These statues, I say, that prophesy future things such as infirmities and their treatments, happiness and sadness, to the merits of the emotions, or of the human body? Do you not see, Asclepius, how Egypt is the image of the heavens or, to express it better, the colony of all the things that are governed and activated in the sky? (Bruno 2024, 269)⁴⁰

In this quotation, Egypt is depicted as a marvellous land of wonders and miracles, with reference to the art of talismans and the practices of magic mastered by its ancient inhabitants. According to the Hermetic sources, the Egyptians were capable of animating statues to obtain predictions of the future. Captivated by these accounts, Renaissance intellectuals such as Ficino, Agrippa, and Bruno referred them in their works. In the fictional context of the *Expulsion*, those Hermetic motifs are well aligned with the “astrological” narrative of the dialogue. The rise of the triumphant beast is presented as a direct consequence of the crumble of Egyptian civilization. This perspective of intellectual history suggests the author's familiarity with eschatological themes and Hermetic sources.

Themes related to eschatology and Hermeticism recur in the latest of Bruno's Italian dialogues, the poetic *On the Heroic Frenzies*. Once again, the

⁴⁰ Similar aspects are recalled in (Bruno 2013, 213): “Cesarino: [...] And as for the state of the world, when we find ourselves in darkness and evil, then we can safely predict a future of light and prosperity; when we are happy and wise, we may anticipate that ignorance and trouble will follow without a doubt. This happened to Hermes Trismegistus, when he saw Egypt in such a splendour of wisdom and skill at divination that he thought of mortals as the consorts of demons and gods, and consequently highly religious. He complained to Asclepius, predicting that the darkness of new religions and cults was bound to follow, and that the things of the present would not survive except as tales and matters to be condemned.” Both quotes refer to the *Asclepius* in (*Hermetica*, 81): “Are you talking about statues, Trismegistus? / ‘Statues, Asclepius, yes. See how little trust you have! I mean statues ensouled and conscious, filled with spirit and doing great deeds; statues that foreknow the future and predict it by lots, by prophecy, by dreams and by many other means; statues that make people ill and cure them, bringing them pain and pleasure as each deserves.’ / ‘Do you not know, Asclepius, that Egypt is an image of heaven or, to be more precise, that everything governed and moved in heaven came down to Egypt and was transferred there? If truth were told, our land is the temple of the whole world.’”

author refers to the return to conditions of morality and prosperity after an era of decadence and cultural stagnation, implicitly referring to the ethical reform announced in the *Expulsion*. The circumstances of a transformation that would restore harmony to the cosmos are explicated through allegories and references to astrological beliefs, as those in the following exchange between Cesarino and Maricondo:

Cesarino: And thus, they say that the best and most excellent things come into the world when every part of the entire universe is in greatest harmony; this occurs, they think, when all the planets are in Aries, for Aries in the eight sphere occupies the same house as the Aries that belongs to the Zodiac of the invisible upper heaven. The worst and basest things, they believe, take place under the opposite conditions, and this power of alternation creates the radical changes that we see from like to unlike, from one extreme to the other. The Revolution of the Great Year is that span of time within which the world, having passed through the most diverse conditions, returns, along divergent and contrasting paths, to the state from which it began. We can see this happening with individual years, like the solar year, where the beginning of one alignment marks the end of the opposite, and the end of the former is the beginning of the latter. But [in our won time], now that we have wallowed in the dregs of knowledge, which have produced the dregs of opinion, which have caused the dregs of morals and actions, we can certainly expect to return to better conditions.

Maricondo: Know well, brother, that this cycle and sequence of things is as true and as certain as can be; but from our point of view, always, in any ordinary state whatsoever, the present pains us more than the past, and both together can hardly satisfy us as much as the future, which is always a matter of expectation and hope, as this figure well shows, taken from the antiquities of the Egyptians. (Bruno 2013, 209)⁴¹

This part of the *Heroic Frenzies* reveals the Bruno's familiarity with some established astrological concepts, which he did not necessarily share: more specifically, Cesarino refers to astrologers who—in accordance with Albusmar's determinism—attributed significance to the planetary conjunction

⁴¹ See similar references to the Great Year and prognostication in (Bruno 2013, 42): "He has in mind his day of judgement, because the end of the more or less, or more precisely (as published), 36,000 years, is now in sight. This revolution of the year of the world threatens to bring in another Caelus to claim his dominion. Such a change, brought about by the motion of trepidation depending on the varying and no longer seen or heard relation and behaviour of the planets, makes him fear that fate is disposing a change in hereditary succession. This will no longer be like the former great revolution of the world but very different and dissimilar, in spite of all the prognostications of the astrologers and other divinatory announcements." On apocalypticism in the *Expulsion* and the *Heroic Frenzies*, see (Ingegno 1978), (Canone 2004), (Ciliberto 2002).

with Aries; the same character evokes the Revolution of the Great Year, a cosmogonical conception which signifies the cyclical return of all the fixed stars to their initial position and thus, the renewal of the universe.⁴² The answer of Maricondo emphasizes the close connection of astrological themes to the “antiquities of Egypt”, highlighting the connection of astrology and hermetic wisdom—basically, the same relationship which was revealed in the *Expulsion*. In the pages of the *Frenzies*, Bruno combines these allegorical themes to briefly reintroduce his moral reform. This detail is a clear sign of continuity between his two Italian dialogues.

In the *Heroic Frenzies*, astrological conceptions are also recalled in the author's epistemological discourse. In this regard, in the second part of the dialogue, Maricondo is asked whether the divine truth can be attained by observing the sky in the manner of the astrologers. The character immediately responds in the negative, stating that the ideal figure of the philosopher—“frenzied hero”, as portrayed in the *Frenzies*—attains knowledge of the divine through an active process of intellection:

Cesarino: What do you mean by saying that the mind aims high? Does it look towards the stars, for example? Towards the empyrean sky? Beyond the crystalline sphere? Maricondo: Certainly not, but by proceeding into the depths of the mind. Hence, there should be no need [for the frenzied hero] to open his eyes to the heavens, raise his hands, enter the temple, shout into the ears of idols the better to be heard; instead, he should withdraw into the most intimate part of himself in the belief that God is near, with him and in him, more than he himself can be: as it were, the soul of souls, the life of lives, the essence of essences. And bearing in mind that what you see above, below, and all around the stars (as you would say) are bodies, formations like this globe, on which we stand, and in which divinity is no more or less present than in our own [orb], or in multitude into himself. (Bruno 2013, 231)

The message conveyed in this dialogue is pantheistic: truth is not hidden in the distant heavens, but is rather close to the individuum, capable of perceiving the omnipresence of God. According to the Nolan, the cosmos is alive, insofar as “many great animals called stars” (Bruno 2013, 139) are animated by the world-soul. This magico-vitalistic concept also emerges in other Brunian works, including the dialogue on the *Cause, Principle and Unity*, which introduces the concept of “the particular formal cause, multipliable and multiplied to infinity, [...] so that the great animals such as the stars must be fully considered as being more divine” (Bruno 1998, 6). While influenced by the Neoplatonic views of Plotinus and Ficino, Bruno's concept

⁴² See (De Callataj 1996).

of the world-soul resonates with the most common conceptions of the astrologers, who envisioned the cosmos as animated and interconnected as a living organism which evolves according to specific celestial cycles.⁴³

7. Bruno and the cosmos of the astrologers

In the Bruno's vision of the cosmos, heavenly bodies are regarded as great animals. This depiction of the stars is reminiscent of astrological vitalism. Despite this consonance of ideas, the Italian philosopher openly displayed scepticism towards astrological determinism. His doubts also emerge in his works about cosmology and natural philosophy, for example the dialogue *Ash Wednesday Supper*. Beside addressing problems of early modern astronomy and defending the heliocentric model of Copernicus, Bruno leaves room a brief—yet meaningful—reflection on the virtues of the stars. In open contrast to astrological beliefs, which define the stars as causes of the natural vicissitudes in the sublunar world, Bruno denies their causal influence, denying that astral movements directly affect earthly vicissitudes. According to Bruno, natural phenomena such as the rising of the tides, the alteration of humours in animal bodies, and the fertilization of marine life should not be regarded as consequences of celestial influxes. Natural changes should rather be considered as the outcome of multiple interactions and dispositions of things. These points emerge in the discourse of Teofilo, a literary incarnation of the author:

Upon the consideration that nothing moves in space on account of an extrinsic principle, without a contact more forceful than the resistance of the medium, depends the further consideration that it is solemn foolishness and an impossible thing to persuade an orderly mind that the moon moves the waters of the sea (causing the tides), makes humors flow, fecundates fish, replenishes oysters and produces other effects, since for all these things it is properly a sign and not a cause. It is a sign and indication, I say, because the observation of these things [together] with certain dispositions of the moon, and other opposite and different things with opposite and contrary dispositions, proceeds from the order and correspondence of things, and from the laws of one mutation which are in conformity and correspondence with the laws of another. (Bruno 1995, 207)

This character argues that the stars are not causes of vicissitude but rather signs and indications. In other words, Bruno rejects the fatalistic perspective commonly embraced by the astrologers, although he does not deny the

⁴³ See (Pompeo Faracovi 2002; Pompeo Faracovi 2012, especially the chapters 4 and 9). Bruno's concept of the world-soul is deeply influenced by Neoplatonism, as highlighted for example in the recent article of (Carannante 2024).

role of the stars as archetypes for understanding the universe and the microcosmic dimension of the individual. This discourse is related to a debate involving two differing views on the stars—regarded by some as *signs* and by others as *causes*.⁴⁴ Notably, the case of the rising of the tides was previously considered by Giovanni Pico della Mirandola in his *Disputations against Judicial Astrology*: he explained that phenomenon as a consequence of the heat, light, and movement of the Moon.⁴⁵ This interpretation suggests that, although Giovanni Pico rejected determinism and the concept of occult influxes with effect at a distance, he still regarded the stars as physical causes of natural phenomena. In contrast, Bruno entirely dismissed the idea that the stars could play any causal role. His opinion aligns to that of Plotinus, who rejected the stars-causes association: this Neoplatonist embraced the vision of a harmonious universe and refused astrological determinism; according to him, “all the stars are serviceable to the Universe, and therefore can stand to each other only as the service of the Universe demands, in a harmony like that observed in the members of any one animal form. [...] all the members will be in sympathy with the entire animal frame to which they belong. Only so can there be a unity and a total harmony” (Plotinus 1949, 164). Bruno surely found these arguments in the *Enneads* mediated by Ficino's translation.

Besides criticizing the theoretical aspects explained above, Bruno's cosmological works undermine the foundations of the system of the world which was commonly embraced by the astrologers: the Nolan maintains the Zodiac as an allegory to express his ideas—especially in the *Expulsion*—but his vision of the cosmos is radically different from the geocentric model of the astrologers, based on Ptolemaic cosmology. In the Italian dialogue *On the Infinite, Universe and Worlds* he refers to “astrological suppositions and conceits” (Bruno 1950, 298), which sharply contrast with his cosmology of infinity. In rejecting the hierarchical order of the universe, geocentrism, and the enclosed world, he embraces the vision of an infinite universe without any absolute centre or circumference, an unending space filled with infinite worlds placed beyond the sphere of the visible. The following passage exemplifies this general perspective, while offering a critique of the astrologers from Aristotle's era as well as those who inherited their vision of the cosmos:

I believe and understand that beyond this imagined edge of the heaven there is always a [further] ethereal region with worlds, stars, earths, suns, all perceptible one to another, that is each to those which are within or near; though owing to the extreme distance they are not

⁴⁴ See (Pompeo Faracovi 1996, chapter 6).

⁴⁵ See the discourse on tides in (Giovanni Pico della Mirandola 1946, 304–321) and the article of (Akopyan 2018a).

perceptible to us. And in this matter, consider what foundation hath this man who maintaineth that because there are no bodies perceptible to us beyond our supposed circumference, therefore no such bodies exist. Wherefore he persuadeth himself that there is naught but the eighth sphere beyond which the astrologers of his time believed no heaven to exist. And because they referred the apparent circular movement of the world around our earth always to one *primum mobile*, supreme above all others, therefore they established [a system with] such foundations that they continued even further, endlessly adding sphere to sphere, and they believed that some contained no stars, and therefore no perceptible bodies. (Bruno 1950, 298)⁴⁶

This passage underscores the limit of the closed world described by the Aristotelians and Ptolemaics, suggesting that space is not confined to the circumference of the cosmos, and that the spheres are parts of an abstract structure, which finds no correspondence in physical reality. In conclusion, Bruno did not share the beliefs of astrologers, mostly because of the underlying worldview they presupposed—one of a closed universe, confined within its own boundaries and governed by causal laws. His effort to preserve astrological knowledge and iconography focuses primarily on the symbolic dimension of that discipline and its applications, rather than the role ascribed to the stars which defines its fatalistic aspect. By reimagining astrology as a tool for intellectual and moral development, rather than a means of predicting events, Bruno's works challenge the foundations of astrological determinism, while opening the door to a broader understanding of the universe—one viewed as a dynamic, open system, rather than a fixed, predetermined structure.

The case examined in these paragraphs is emblematic, demonstrating the capacity of a Renaissance thinker to reinterpret the culture of his time to promote a new vision of both the individuum and the cosmos. However, Bruno is by no means the sole thinker to have critically reformulated astrological knowledge, as anticipated in the introduction. Research can therefore proceed with the analysis of similar cases, shedding more light on how the development of Renaissance thought was also shaped by the integration of judicial astrology and other occult sciences. On this conceptual level, the lesson of Paolo Rossi remains profoundly relevant: the incorporation of magico-esoteric knowledge into scientific and philosophical thought played a fundamental role in the gradual development of new paradigms of knowledge, especially in early modernity.⁴⁷ This study aims to encourage further research in this area of interest, as much work remains to be done

⁴⁶ On Bruno's cosmology of infinity, see (Koyré 1957, chapter 3) and (Michel 1973).

⁴⁷ See (Rossi 2001, chapter 2; Rossi 2006, chapters 2–4).

in exploring the intricate network of influences that shaped this intellectual transformation.

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