

“IMAGINATIVE LOGIC”: THE ROLE OF IMAGES IN BRUNO’S ARTS OF INVENTION

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Abstract In this paper, I examine a number of exercises of invention in which images play a role, in an attempt to find out whether the function of the images within these exercises has any connection with the cognitive value of the different types of invention, and whether it can offer any indication about their position within Bruno’s art. I try to show that all these exercises correspond to different phases in Bruno’s project of improving the model of invention derived from the Lullist art by giving images a more important role in the various forms of information processing.

Keywords Giordano Bruno, invention, commonplacing, memory, image, imagination

Introduction

As W. J. Ong explains, the 16th century diffusion of the topical method is largely due to the influence of Agricola’s “*De invention dialectica libri tres*”. The topical method takes over the territory occupied by the other logical disciplines and, as Ong argues, “with Agricola, the topical tradition tends to forget its limited objective and to think of itself as somehow the adequate instrument for dealing with all knowledge whatsoever.”¹ According to L. Bolzoni, the topical method as devised by Agricola and developed by some of his disciples (Sturm, Ramus, Cornelius Auwater), together with the influence of Lullism and the impact of Camillo’s theatre and his other works on dialectic, make up the complex tradition behind the development and use of rhetorical machines. Such devices were both instruments for the analysis and the assimilation of texts, by facilitating the ordering and visualization of their content

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¹ Walter J. Ong, *Ramus, Method and the Decay of Dialogue* (Cambridge: Harvard University Press, 1983), 93–94, 104–105.

and structure, but in the same time they were “generative models”, facilitating the use of that material for the composition of new texts or of different versions of the same text.²

Among the multiple meanings taken on the term of “place” in the 16th century, Bolzoni underlines the association of topical places and places of memory, of which his 16th century commentators and writers on rhetoric and dialectic were very aware.³ She also points out that images, particularly mythological image, apart from having a mnemonic role, can also become (as a result of allegorical interpretation) topical places, “capable of setting into motion and enriching the process of invention”. “Allegory”, she argues, “plays an important role in the creation of a circular relationship between memory and invention and in a mirroring relationship between words and images”.⁴

In this paper, I want to discuss a number of exercises of invention from Bruno’s mnemonic and Lullist writings in which images play a role in the finding and composition of arguments. I want to examine the part images play and their importance in different forms of invention and to consider the place and value of these exercises within Bruno’s art and in the process of its development.

P. Rossi describes Bruno’s art as an “imaginative logic”, with a term that Bruno himself uses in reference to his art in *Cantus circaeus*⁵. Bruno’s suggestion is that in a more permissive understanding of logic, his method of combining images representing things and words could be considered a form of logic. According to Rossi, Bruno’s art “was conceived as a refutation of traditional logic and replaced *topica* and *analytica* with ‘images’ and ‘words’.”⁶ R. Sturlese points out the importance of images in Bruno’s art as “instruments for discovering new logical relations and new linguistic possibilities,”⁷ and in another article she tackles the role of images in the cognitive processes involved in the assimilation and transmission of information and in the practice of linguistic creativity and figurative discourse⁸. M. Matteoli discusses Bruno’s use of memory and invention devices that allow one to modify the meanings associated to images by recombining and modifying the images. With the help of such devices, by acting upon the images and introducing

² Lina Bolzoni, *The gallery of memory: literary and iconographic models in the age of the printing press*, trans. Jeremy Parzen (Toronto: University of Toronto Press, 2001), 48, 65–72.

³ *Ibid.*, 189.

⁴ *Ibid.*, 181.

⁵ Giordano Bruno, “*Cantus Circaeus*,” in *Iordani Bruni Nolani opera latine conscripta* II, eds. Vittorio Imbriani and Carlo Maria Tallarigo (Florence: Le Monnier, 1886), 234.

⁶ Paolo Rossi, *Logic and the art of memory: The quest for a universal language*, trans. Stephen Clucas (London: Continuum, 2006), 90.

⁷ Rita Sturlese, “Il ‘De imaginum, signorum et idearum compositione’ ed il significato filosofico dell’arte della memoria,” *Giornale critico della filosofia italiana* 69 (1990): 182–203, 201.

⁸ Rita Sturlese, “Arte della natura e arte della memoria in Giordano Bruno,” *Rinascimento* 40/2 (2000): 123–141, 128.

variations at this level, one is able to produce new contents and new meanings.⁹ S. Clucas noted that Bruno's use of images in the construction of arguments and his association of images with the principles of the Lullist art play an important part in his project of developing "an integrated logical method".¹⁰

My intention is to examine and compare some of the applications for invention pointed out by the aforementioned scholars as being relevant for Bruno's idea of "imaginative logic". In some of these devices, as I shall try to show, the images have a rather auxiliary, mnemonic role: they assist the process of invention by facilitating the retention, organization and accessibility of the sequence of places and eventually of the combinatory system. In other cases, the images play a part in the process of invention and in the composition of arguments, with an interesting result for the topical method. I want to consider whether the structure of such commonplaces and the role of images in their composition and functioning are significant for their cognitive value and representative for specific types of invention.

Imagines atque similitudines

Before I begin discussing the mentioned applications, a few observations are in order regarding the meaning of the term "image" in this context. Bruno often uses the term *imago* as a synonym for "representation". In *De imaginum compositione*, he explains the difference between twelve types of representation¹¹, however, in the next chapter¹² he points out the legitimacy of allowing the term image (*imago*) to replace either one of the more specific ones, as every kind of sensible representation can be reduced to visual representation, which can convey the objects of all cognitive and sensible faculties.

Among the 12 types of representation, the term *imago* is discussed together with *similitudo* and *proportio*, and is defined in relation to *similitudo*: *similitudo* is the type of representation formed by a picture, a statue, or a comparison of two terms, and is directly associated with the mental representation

⁹ Marco Matteoli, "Geometrie della memoria: schemi, ordini e figure della mnemotecnica di Giordano Bruno," in *Aspetti della geometria nell'opera di Giordano Bruno*, ed. Ornella Pompeo Faracovi (Lugano: Agora & Co., 2012), 129–170, 155–160. Marco Matteoli, "Nel laboratorio della fantasia: Giordano Bruno tra filosofia e arte della memoria," *Viator* 41 (2010): 393–406, 401–402. Matteoli's conclusions are based on the discussion of a number of devices from the 30 seals, some of which I shall also interpret in this article.

¹⁰ Stephen Clucas, "'Illa est mater, haec vero filia': reformed Lullism in Bruno's later works," in *Giordano Bruno in Wittenberg, 1586–1588. Aristoteles, Raimundus Lullus, Astronomie*, edited by Thomas Leinkauf, *Bruniana & Campanelliana* 6 (Pisa-Roma: Istituti Editoriali e Poligrafici Internazionali, 2004), 59–69, 66–77.

¹¹ Giordano Bruno, "De imaginum, signorum et idearum compositione," in *Iordani Bruni Nolani opera latine conscripta* II, 3, eds. Felice Tocco, Girolamo Vitelli (Florence: Le Monnier, 1889), 97–99.

¹² *Ibid.*, 100.

received by the senses and retained by the imagination. *Imago* functions in the same way, but it involves a closer resemblance between the signified and the signifier (they have to belong to the same genus or species)¹³.

In both *De imaginum compositione* and *Cantus Circaeus* Bruno provides a list containing a variety of ways in which one thing can be used to represent another¹⁴: several of these can be easily assimilated to rhetorical tropes and figures: synecdoche (the things that follow from the things that come before, the parts standing for the whole, the species for the genus¹⁵) metonymy (the instrument standing for the user, the effect for the cause¹⁶), metaphor, antiphrasis¹⁷, analogy, irony¹⁸. In *Cantus*, Bruno refers to these as images¹⁹, and to the process of representation as *figuratio*. In *De imaginum compositione* he talks about “representing and signifying” (*figurandum et significandum*) in similar terms, as a process of dealing with images (*imagines et similitudines*).²⁰

Figuratio is described by Bruno as an activity of the imagination, and in one of the 30 seals²¹ from *Explicatio triginta sigillorum* it is specifically associated with the formation of images understood as figurative language.²² „The principle of the

¹³ Ibid., 99.

¹⁴ Ibid., 111: “rationes, quibus res quaedam per res alias figurantur et significantur.”

¹⁵ Bruno, “Cantus Circaeus,” 242 (vi-viii), 243 (xviii) 245 (xxvii). See also the discussion of synecdoche in Quintillian, *Institutio oratoria*, vol. III, trad. H. E. Butler (Cambridge, Massachusetts: Harvard University Press, 1959), VI, 6, 19, 310–311.

¹⁶ Ibid., 224 (xxv); Bruno, “De imaginum compositione,” 110 (xxx); see also the discussion of metonymy in [Cicero], *Rhetorica ad Herennium* (Cambridge, Massachusetts: Harvard University Press, 1954), IV, xxxii, 43, 335–336.

¹⁷ Bruno, “Cantus Circaeus,” 244 (xxiii), 245 (xxxix).

¹⁸ Bruno, “De imaginum compositione,” 108 (vi), 110 (xxxii).

¹⁹ Bruno, “Cantus Circaeus,” 241: “modi aliquot imaginum ad rerum figurationem atque vocum.”

²⁰ L. Bolzoni points out a tendency, discussing 16th century writings: “to perceive poetic images in visual terms, and vice versa, to translate visual images into words.” The art of memory uses images from both literary and iconographic sources, and it can be said to be “mediating between words and images, in creating bridges and modes of translation from one to the other.” See Bolzoni, *The Gallery*, 179–181, 184, 188.

²¹ On Bruno’s notion of “seal”, see Matteoli, “Geometrie della memoria”, 145; Mino Gabriele, *Giordano Bruno. Corpus iconographicum* (Milano: Adelphi Edizioni, 2001), 158–169; Frances A. Yates, *The art of memory* (London: Routledge, 1999), 243–265.

²² Giordano Bruno, “Explicatio triginta sigillorum” in *Iordani Bruni Nolani opera latine conscripta* II, 2, eds. Felice Tocco, Girolamo Vitelli (Florence: Le Monnier 1890), 136–137: “Hic locus est adducendi principii artis figurativae, in qua illud praeaccipiendum est, quod omnia per omnia possunt figurari; [...] tunc enim phantasia omnia in omnibus fingere et imaginatio omnia ex omnibus concipere valebit: concipere inquam aut per identitatis modum, si eadem genere, specie vel numero sint; adsimilabile et suum correlativum aut similitudine, si similia;

image-making art” („*principium artis figurativae*”), defined as the possibility „to make everything into everything and to form everything out of everything,” i.e. to derive any content from any other content, regardless of the abstract or concrete quality of the term, is described in terms of creating figurative representations by means of associations similar to the ones mentioned above, in the lists of images and representation techniques from *Cantus* and *De imaginum compositione*. But here Bruno puts forward more than just the idea of association: he insists on the necessity to modify one term in order to adequately represent another, which is the function of figurative language²³.

The context of this discussion on the meaning of *figuratio* is the seal *Phidias* or “The sculptor”, from *Explicatio triginta sigillorum*. “The sculptor” comes after another seal, named “The painter”, and they are both presented as metaphors of the imagination and its functions. „The painter” is mainly linked to the role imagination plays in helping natural and artificial memory - the fashioning of visual representations of abstract things²⁴ - but Bruno also alludes to the importance of this function in composition and argumentation (the art of the poet and that of the philosopher). Imagination as „The sculptor” is more obviously associated with the artifices of figurative language, and it is also more clearly linked not only to memory, but to mental operations involved in the assimilation and processing of information in general (invention, reading, contemplation, the ability to distinguish and to order information) - in other words, to learning.²⁵

For this reason, I believe, *figuratio* and the attributes of the imagination illustrated by „The sculptor” are relevant for the way Bruno understands the role of images and of imagination in the process of invention – the finding and formulation of arguments in the composition of a discourse. I also think it is this function of the imagination that allows Bruno to come up with an application for invention like the one in *Proteus*, based on a series of arbitrarily chosen words that function as places

aut proportione, si proportionabilia; aut ironia, si absona, ut cum 'poenarum divitias' 'thesauros' que 'irae' dixere [...].”

²³ Ibid., 137–138: “*In omnibus tandem eo insistendum, quo affabre et melius, vel traductione, vel transmutatione, vel transpositione, vel conversione, vel antiphrasi, allusione, illusione, delusioneve quadam proposito adcommoventur.*”

²⁴ Ibid., 134.

²⁵ Ibid., 135: “*Haec est statuarius ille, qui famosam Nabuchodonosoris statuam erexit, haec ordinatam fortunae regni successionem descripsit, haec tropologiarum fabricat discursus, haec formae conditiones in aliquo sensibili, circa quod et in quo pleraque metaphorice delineat, certo quodam ordine eademque qua meminisse volumus serie describit. Huius suffragio in Centum statuarum volumine conditiones virtutum atque vitiorum universas ita quandoque descripsimus, ut earum lectio delectabilior, contemplatio iucundior, distributio ordinatior, series distinctior, similitudinum comparationumque consequenter concatenabilium inventio promptior et memoria tenacior haberetur.*”

of invention (“verbal places”)²⁶. As L. Vianello points out, in *De lampade combinatoria lulliana* Bruno himself links *Phidias* with the method of invention by means of “verbal places”²⁷.

Proteus

Proteus is one of the 30 seals presented in the third book of Bruno’s *De imaginum compositione*. It is made up of two parts: a mnemonic exercise, entitled *Proteus in the house of Menemosyne*, and an application for invention, entitled *Proteus in the house of Pallas, where Gorgias is*²⁸. Bruno uses the same system of randomly chosen “verbal places”, first in the mnemonic application, then in an application for invention. The verbal places are a sequence of words from a well-known poem: the first three verses of the *Aeneid* provide us with the following sequence of places: „*Armatus, Vir, Cantans, Primus et Orans, Italicus, Fatum, Profugus, Lavinia, Ventus, Littoreum, Multum, E terra, lactatus et Altus.*” According to Bruno, the words of the *Aeneid* behave like the matter, symbolised by the god Proteus, that can transform itself “into all images and similitudes, by means of which everything can be disposed, ordered, recovered and examined.”²⁹

In the mnemonic application, the use of images is closer to the operation of the imagination that is expressed metaphorically by the „The painter”: imagination as a painter that depicts sensible representations of abstract content: every word is linked to an abstract content, and Bruno attempts to create a connection between the word and the abstract concept by using an image. The first term, *armatus*, is linked to the concept of “matter”, through the image of a battalion of men armed with swords (presumably the word *ferro*, that can mean both swords and *iron*, should help one relate to *matter*). The word “man” corresponds to “form”, through the image of a painter painting *the shape* of man on a white surface; “oris” (shores) has become, through a phonetic associations, “orans” (praying), and is linked with the “end” (*finis*) through the image of a man who gets up and leaves *after having finished his prayer*.³⁰

In the second part of the seal, Bruno will show how the same sequence of words can be used to compose an argumentation to prove that the world (as

See also Sturlese, “Arte della natura,” 137, where she links “the principle of the image-making art” with the application for invention in Proteus.²⁶ For an explanation of “verbal places,” see, for example, Bruno, “*Explicatio triginta sigillorum*,” 143.

²⁷ See Lucia Vianello, *Una lampada nella notte. L’ars inventiva per triginta statuas’ di Giordano Bruno* (doctoral dissertation defended at the University of Padua, 2014), 106–107; See Giordano Bruno, “*De lampade combinatoria lulliana*,” in *Iordani Bruni Nolani opera latine conscripta* II, 2, 303–304.

²⁸ All English translations used in the text of the article are mine, unless otherwise specified.

²⁹ Bruno, “*De imaginum compositione*,” 289. See also Giordano Bruno, *On the Composition of Images, Signs and Ideas*, trans. Charles Doria (New York: Willis, Locker & Owens, 1991), 238.

³⁰ *Ibid.*, 287.

universe) is eternal, or that the world (as a planet) is not eternal. This time he uses the words of the poem not as mnemonic places, as in the previous application, but as places of invention, from which one can derive arguments for either one of the chosen theses. The way images are used in the application for invention can be related to the operations of the imagination as “The sculptor” – the imagination that deals not only with the association of an abstract with a concrete term, but with two terms, regardless of their quality, in which one is expressed or represented by the other, or in which one is derived from the other. The result of this composition exercise is an argumentation on the chosen topic in the form of a philosophical poem, as the arguments come to be expressed in a figurative form.

Thus, the fact that the world is eternal is shown by I. the WEAPONS
Wielded by a powerful hand, II. and by the POWERS of their keeper, and by
that III. wonderful order of the HARMONY, IV. And the SONG of the poets
V. And because there is no CIVIL rebellion of any size threatening
To destroy the eternal peace.

[...]

VIII. Furthermore, not everything is subject to FATE,
And yet each thing <comes about> from foreign elements, not from that
which belongs to itself

IX. Moreover, anything that perishes is made of FLEEING
Elements, that, for this reason, glide to other SHORES.

But who would speak of other SHORES outside the whole?

Where will the parts and the whole spread out, because that which is born
here

Flows out of it and what is alien flown into it?

The opposites need to remain eternally in it,

Because only the nothing or the void is opposed to the whole.³¹

The argumentation expressed in the verses above is consistent with Bruno’s philosophical position regarding this subject, as expressed in other works³², and it

³¹ Ibid., 287–288: “*Sic mundum aeternum demonstrant I. ARMA, potenti / Exagitata manu, II. et VIREs servantis, et illa / III. HARMONIA series mira, IV. CANTUSQUE poetae, / V. Et quia dissidium tanti CIVILE perennem / Disturbans pacem prorsus non imminet ullum. / [...] / VIII. Praeterea totum FATO non subditur, atqui/ Quodcumque haud proprio, at peregrinis est elementis./ IX. Quin etiam quodcumque perit PROFUGIS elementis / Constiterat, quae alias ideo labuntur in ORAS. / Porro alias extra totum quis dixerit ORAS? / Quo se proripiet totum partesve quia extra hinc / Nativum effluet, peregrinumque influat illinc? / Perpetuo remanere decet contraria in ipso, / Plenum namque aliunde nihil contra est vel inane.*” I chose to attempt my own translation as I don’t always agree with the interpretation of the Latin text proposed by C. Doria. See Bruno, *On the composition of images*, 235–236.

can be summarised as follows: an eternal cause necessarily has an eternal effect; the things that are contrary to each other within the whole are not contrary to the whole; contraries destroy each other, but since the universe, as a totality, has no contrary, it cannot be destroyed; only the unstable things perish (i.e. things that move from one place to another) but the universe and its parts cannot move to another place because there is no other place outside the whole.³³

At a first glance, this application appears to be no more than an exercise of composition, requiring the student to put together a discourse on a specific theme, while integrating an arbitrarily chosen list of words. The words of the Aeneid, far from being an aid in composition, seem to require more effort and more skill from the part of the student who has to integrate them in their discourse. On the other hand, an obvious result is that they help and in the same time compel the student to adopt an indirect and figurative mode of expression.

In the second part of this application, Bruno explains how the poem was composed with the aid of his method.

Firstly I conclude the world is eternal from the weapons signifying the potency and the eternal instruments. [...]

IV. From the city, which signifies the republic of the world; for nothing opposes it, <as to lead> to degradation and destruction; nor, indeed, are contrary to the world the things that are contrary <to each other> in the world, because they are parts and members of the world. [...]

VIII. Eight, from the fate, because above the universe, which is the whole body of nature, there is no necessity, but nature itself is necessity itself.³⁴

The words of the poem, Bruno tells us, are “transformed” into the middle terms necessary to connect the two terms of the examined thesis – the subject “world” and the predicate “eternity”.³⁵ The middle term serves to establish the agreement or the disagreement between the two terms of the thesis in relation to a

³² Mostly *On the Infinite Universe and Worlds*; see the references in the Italian critical edition: Giordano Bruno, *Opere mnemotecniche II*, eds. Marco Matteoli, Rita Sturlese, Nicoletta Tirinnanzi (Milano: Adelphi, 2009), 820–831.

³³ On Bruno’s discussions on the topic of the eternity of the world, see Maurizio Cambi, *La machina del discorso. Lullismo e retorica negli scritti latini di Giordano Bruno* (Napoli: Liguori 2002), 71–81.

³⁴ Bruno, “De imaginum compositione”, 298–290: “*Primo ex armis significantibus potentiam et instrumenta infinite durantia concludo mundum aeternum / [...] / IV. Ex civitate, quae notat mundi rempublicam (nam nihil adversatur) ad corruptionem et interitum; non / enim mundo sunt contraria quae in mundo sunt contraria, quia mundi sunt partes et membra. [...] VIII. Octavus ex fato, quoniam super universum, quod est totum naturae corpus, non est necessitas, sed ipsa natura est ipsa necessitas.*” See Bruno, *On the composition of images*, 238–239.

³⁵ *Ibid.*, 289.

specific commonplace. Invention, as a stage in the process of composition, is the search for the middle terms. The commonplaces serve as “headings or key notions to which one turns to find out what is available in one’s store of knowledge for discourse on any given subject”.³⁶ Generally speaking, the determination of a middle term with the aid of a commonplace means particularising (applying) the respective commonplace to the chosen subject matter.

In this application, the function of the sequence of words from the Aeneid, which Bruno assimilates to Proteus and to “the matter which can be transformed into all images and similitudes” is similar to that of a system of commonplaces: to organise and generate the arguments or the content of a discourse. Moreover, this process is mediated by images: each of the words is integrated or developed into a metaphor or another figure of speech that conveys an idea or an argument relevant to the theme in question: the word “Troiae”, or “civitas” brings up the idea of the “city of the world”, which is, here, is a symbol of the world as a totality that contains everything and to which nothing can be contrary; the “shores” are immediately associated with the movement of the waves, that suggest the constant return and regeneration of individual structures within the infinite universe etc. L. Vianello, describes this method of inventions based on “verbal places” as a series of reflections (associations) linked to a specific topic and brought to mind by the words of the texts.³⁷

Bruno combines the mnemonic notion of place and its functions – the ordering of information while associating it with images – with the function of places in invention – the finding, the development and the ordering of arguments. The discovery and the elaboration of the argumentative content is simultaneous with the association of the abstract content with images, and the list of places, which is the source of the figurative form of the discourse, is also, although indirectly, the source of the content.

Considering the observations Bruno makes in *The sculptor* regarding “the principle of the image-making art”, it would be justified for imagination to play a very important role in a form of invention in which arbitrarily chosen words act as commonplaces and arguments are derived from them through the mediation of images or figurative language. But, within Bruno’s art, what would be the cognitive value of a form of invention based mainly on a function of the imagination?

³⁶ See Ong, *Ramus, Method*, 104-106, 116-123; J. R. McNally, “Rudolph Agricola’s *De inventione dialectica libri tres*: a translation of selected chapters,” *Speech Monographs* 34/ 4 (1967): 393-422, 396-397; J. R. McNally, “*Dux illa directrixque artium*: Rudolph Agricola’s dialectical system,” *Quarterly Journal of Speech* 52/4 (1966): 337-347, 340-342. Eleonore Stump, “Dialectic in ancient and medieval logic,” in *Boethius’s “De topicis differentiis”* (London: Ithaca and Cornell University Press, 2004), 195.

³⁷ Vianello, *Una lampada*, 106-107.

In a very similar seal from *Explicatio triginta sigillorum*, published eight years before *De imaginum compositione*, Bruno gives an indication about the limited value of such a method by specifying that it is only useful for the invention of the kind of discourses that seeks to persuade, and distinguishing it from a method that he presents as useful for all types of invention, but in which images play a much less significant role. This seal, the 20th presented in *Explicatio*, is also mentioned by Bruno in the context mentioned above from *De lampade combinatoria lulliana*, in association with *Phidias* and as an example of invention by means of verbal places. Moreover, here too Bruno recommends this method for rhetoricians, poets and prophets, as a means of adding a metaphorical or figurative dimension to the discourse.³⁸

Just like *Proteus*, this seal³⁹ has one application for memory and one for invention, both based on a sequence of words from a poem, this time from Horatio: "*Odi profanum vulgus et arceo*". They both function a lot like *Proteus*. For the purposes of the mnemonic application, each verbal place is first "made visible" by association with a character who performs the action expressed by the word from the poem. We have a character who hates for *odi*, for *profanum*, one who performs an act of blasphemy or something that has been desecrated, etc.

The application for invention is based on the same principle symbolised by *Proteus*: that from any word one can derive any meaning, and from any meaning, any other meaning.⁴⁰ The topic he chooses in order to exemplify how this works is that of generosity: from the first term, *odere*, we can derive the idea that generous people hate ignoble acts; from *profanum* – that they keep away from impious acts that could disgrace them, etc. However, used in this manner, this seal is "not useful for all types of invention [...] but for those that persuade".⁴¹

In order to use this seal for "invention in general" ("*ad inventionem universaliter dictam*"), Bruno advises us not to use the words of the poem as images (*pro formis*), like in the example above and like they are used in the second application of *Proteus*, but as places for images (*pro formarum subiectis*). This means that the words of the poem and images derived from them in the mnemonic application would have to be used only as mnemonic devices, meant to help

³⁸ Bruno, "*De lampade combinatoria lulliana*," 303: "*Si rhetoricus es vel poeta vel propheta, adde ex omnibus terminis qualiacunque occurrunt, assumptas metaphoras seu translationes, quas per similitudines, proportiones vel per negationes vel aliis modis qui in sigillis Apellis atque Phidiae a nobis aperiuntur, accomodes.*"

³⁹ Bruno, "*Explicatio triginta sigillorum*," 143–145: *Compositi et Elementi, quod vicesimus est sigillus, explicatio.*

⁴⁰ *Ibid.*, 143: "*Ad inveniendum etiam confert, quoniam ex vocibus omnibus omnes revocare possumus intentiones, exque intentionibus omnibus et quibuscumque omnes et quaecumque aliae intentiones exuscitantur et exurgunt.*"

⁴¹ *Ibid.*, 144: "*Ad omnes inventionis species non utilis est iste modus, sed ad eas tantum, quae persuasionem faciunt.*"

organise and retain the actual set of commonplaces that will serve as the basis for invention: the hater will stand for “essence”, the defiler for “potency”, the next character for “operation”, and so on. However, in this kind of invention the individual words and images would play no part in the process of composition as such.

Persuasion vs. demonstration

How does Bruno situate this application within his art when he classifies it as only being suitable for the invention of discourses that seek to persuade? And more importantly, what does this say about the cognitive value Bruno attributes to this method of invention by means of verbal places, and, by extension, to a seal like *Proteus*?

According to Aristotle, persuasion is the function of the rhetorical discourse⁴². As M. Cambi shows, Bruno generally has a critical attitude in regard to rhetoric. He associates it with opinion and probability, a discourse that dwells on accidental and the apparent, vague or imprecise argumentation, favouring persuasion in the detriment of truth. However, M. Cambi points out, it is not persuasion as such that is condemned by Bruno, as it can also be an instrument put in the service of knowledge and teaching - but the end to which it is often used.⁴³

But, even when they are used in the service of knowledge, the cognitive value of the instruments of rhetoric remains limited. In his *Artificium perorandi*, a commentary on the pseudo-Aristotelian *Rhetoric to Alexander*, Bruno discusses rhetoric as dealing mainly with issues related to state and public affairs and associates it with the subjects and style Cicero’s discourses.⁴⁴ In *De lampade combinatoria lulliana*, Bruno suggests that Cicero’s eloquence and ornate discourses, adequate for the public and judicial arena, would be useless in the discussion of philosophical matters⁴⁵. In several places, both in the Italian and the Latin works, Bruno contrasts persuasion with demonstration,⁴⁶ authentic knowledge⁴⁷ and the search for truth.⁴⁸

⁴² Aristotle, “De rhetorica” in *Aristotelis opera cum Averrois commentariis*, vol. II (Venetiis [Venice]: Iunctas, 1562), 3.

⁴³ Maurizio Cambi, “Rhetorica,” in *Giordano Bruno. Parole, concetti, immagini*, ed. Michele Ciliberto (Pisa: Edizioni della Normale Superiore di Pisa, 2014): 1652-1654; Id., *La machina*, 3-12; Id. “Giordano Bruno et la rhétorique,” in *Art du comprendre* 11–12 (2003): 110–133, 110–116.

⁴⁴ Giordano Bruno, “*Artificium perorandi*,” in *Iordani Brunii Nolani opera latine conscripta* II, 3, 339, 342.

⁴⁵ Bruno, “De lampade combinatoria lulliana,” 243.

⁴⁶ Giordano Bruno, “Cabala del cavallo Pegaseo con l'aggiunta dell'Asino Cillenico,” in *Dialoghi italiani*, ed. Giovanni Aquilecchia (Florence: Sansoni, 1985), 876, http://bibliotecaideale.filosofia.sns.it/gb1PageNavigation.php?workTitleSign=08CabalaGA&indexName=gb1_OO&hideFonsStyle=yes&showNamesStyle=no&pbNumber=876 (last accessed

In the *Artificium perorandi*, Bruno focuses on *elocutio* and *dispositio*, the phases in the composition of a discourse that deal with the ordering of information and with the form of its' presentation. His aim is to provide his reader with instruments that would allow him to produce as many variations as possible of the same discourse, to express the same content or the same meaning with numerous stylistic variations⁴⁹. As M.P. Ellero explains, such variations are not meant to bring anything new in terms of informational content or cognitive value. What they do bring is a higher possibility to adapt the discourse to different kinds of listeners and to produce a more powerful effect on them. According to Ellero, Bruno reinterprets Aristotle's distinction between rhetoric and dialectic in that dialectic addresses a universal or generic public, while the rhetoric takes into account the individual differences and receptivity.⁵⁰

For Bruno, therefore, the instruments of rhetoric are mainly linked to the practice of stylistic variations that are meant to increase the emotional impact and the power of persuasion. From what we have seen in *Proteus* and the other devices using verbal places for invention, this method has obvious consequences in the formal and stylistic aspect of the discourse, which explains why Bruno links it with rhetoric. The question that remains is whether this method is also meant to have an effect on the actual content and cognitive value of the discourse, or is simply a means of stylistic variation, like many of the devices in *Artificium perorandi*.

In *De progressu et lampade venatoria logicorum*, a commentary on Aristotle's *Topics* written in Wittenberg in about the same period as the *Artificium perorandi*, Bruno discusses the difference between the way the tools of topics are used by the demonstrator (*demonstrator*), that of the dialectician (*dialecticus*) and that of the rhetorician: the first distinguishes truth from falsity and defends the truth⁵¹, the second discusses both parts of a thesis, having a neutral position in regard to them (just like Bruno does in the second application of *Proteus*) and the activity of

04.11.2016); Bruno, "*De immenso et innumerabilibus*," in *Iordani Bruni Nolani opera latine conscripta* I, 2, ed. Francesco Fiorentino (Florence: Le Monnier, 1884), 278.

⁴⁷ Giordano Bruno, "*Summa terminorum metaphisicorum*," in *Iordani Bruni Nolani opera latine conscripta* I, 4, eds. Felice Tocco, Girolamo Vitelli, (Florence: Le Monnier 1889), 72; Giordano Bruno, "*Lampas triginta statuarum*," in *Iordani Bruni Nolani opera latine conscripta* III, eds. Felice Tocco, Girolamo Vitelli (Florence: Le Monnier, 1891), 149; See also Aristoteles "*Libri posteriorum analiticorum*," in *Aristotelis opera cum Averrois commentariis*, vol., I pars 2 (Venetiis: lunctas, 1562), 47r.

⁴⁸ Bruno, "*Lampas triginta statuarum*," 148; Bruno, "*Summa terminorum metaphisicorum*," 15; Giordano Bruno, "*De progressu et lampade venatoria logicorum*," in *Iordani Bruni Nolani opera latine conscripta* II, 3, 19, 28.

⁴⁹ See Cambi, *La machina*, 123–158; Maria Pia Ellero, *Lo specchio della phantasia. Retorica, magia e scrittura in Giordano Bruno* (Lucca: Maria Pacini Fazzi Editore, 2005), 53–72.

⁵⁰ Ellero, *Lo specchio*, 60–63; 71.

⁵¹ Bruno, "*De progressu*," 19; 44.

the third is associated with the epideictic discourse and the use of polished language⁵². In the same text he distinguishes the *demonstrator* as the one who picks a specific side in a debate from the *topicus*, as the one who looks for arguments in support of both sides, and Bruno mentions that the first of these uses the weapons of dialectic to defend the truth, while the second uses them for whatever end the situation requires.⁵³ Moreover, the *topicus* or *dialectic* is associated with the figure of Gorgias the sophist, whose eloquence is compared to poison, as opposed to the *demonstrator* associated with the figure of Socrates.⁵⁴

As M. Cambi has pointed out, Bruno regards the instruments of logic, like those of rhetoric, as neutral in themselves: they can be used as tools in the search for truth, but they can also be used to other ends.⁵⁵ But, unlike rhetoric, the instruments of which are associated mainly with the form of the discourse, the tools of dialectic are meant to produce content and information, which is why Bruno attributes to them a higher usefulness in the process of knowledge.⁵⁶

The reference to Gorgias from the title of the second part of *Proteus*, as well as Bruno's demonstration of how to use this device to find arguments in regard to both sides of a debate, link it to the dialectic or topical approach as described above⁵⁷. Even though the method of invention in *Proteus* is practically the same as the one in the 20th seal from *Explicatio*, the latter is linked to persuasion, while that of the former seems to have been upgraded from rhetoric to dialectic, to which Bruno attributes higher cognitive value and a higher usefulness for philosophy. This is also reflected in the subject matter chosen to illustrate the method in each case (an ethical issue for the seal in *Explicatio*, a philosophical one for *Proteus*). It is possible that the "upgrade" of this method from rhetoric in *Explicatio* to dialectic in *Proteus* is the result of an evolution in Bruno's view on invention and on the possibilities that images have to offer in this context (*Explicatio* was published in 1583 and *De imaginum compositione* in 1591). But, on the other hand, this also speaks to the versatility of this invention device, which is able to integrate both the tools of rhetoric (the stylistic variations afforded by figurative language) and that of dialectic (the production of content for arguments).

⁵² Ibid., 28.

⁵³ Ibid., 19.

⁵⁴ Bruno, "De progressu," 21.

⁵⁵ Cambi, *La machina*, 107–109.

⁵⁶ Ibid., 17, where Bruno, commenting on Aristotle, Topics I, 2, talks about the usefulness of dialectic for scientific knowledge. See also Maurizio Cambi, "Dialectic" in *Giordano Bruno. Parole, concetti, immagini*, 502–505, where he discusses Bruno's attitude towards dialectic and its cognitive value, but also the limitations he sees in Aristotelian and humanist dialectic, and his own concept of art and method.

⁵⁷ Ibid.

Imaginative logic and the Lullist art

In the next section I want to discuss the possible connections between the model of invention presented in Proteus and some of Bruno's Lullist models of invention⁵⁸. In Proteus, Bruno mentions such a connection, as he points out that this seal could be used to improve and assist the Lullist art:⁵⁹ "[...] with this seal and art we have also assisted the Lullist (art), and we have delivered from contempt the other divine type of invention that flies with the wings of nature."⁶⁰

S. Clucas argues that the improvement brought by the methods described in Proteus to the Lullist art consists in "Bruno's use of the Lullist rotæ to combine images representing arguments."⁶¹ He also points out an application for invention, from Bruno's "Animadversiones circa lampadem lullianam",⁶² that may give an indication about how Proteus was meant to be used in connection with a method of invention derived from the art of Lull.

In the application indicated by Clucas, Bruno uses Lull's first figure, that of the absolute predicates, to develop an argumentation on the eternity of the world. Lull himself presents the first figure as useful for the finding of arguments or middle terms.⁶³ In Bruno's application, the arguments are derived from Lull's absolute predicates in a combinatorial exercise using the first figure of the art,⁶⁴ and the resulted arguments express Bruno's own view on the eternity of the world, which is

⁵⁸ The texts I shall consider have all been written and published in the period of 1587–1588, during Bruno's stay at Wittenberg and upon his arrival in Prague: *De lampade combinatoria lulliana*, *Animadversiones circa lampadem lullianam* and *De specierum scrutinium*. The first is a commentary on Lull's *Ars magna*; the second one is a text that was never published and that, M. Cambi assumes, was either meant to be introduced in another work or was made up of Bruno's teaching notes (Cambi, *La machina*, 59); the third was published as an introduction to the republication of *De lampade combinatoria lulliana* a year later (1588) in Prague. These have been written and published in the same period and in the same context as the *Artificium perorandi* and *De progressu et lampade venatoria logicorum*, discussed above. See Vincenzo Spampinato, *Vita di Giordano Bruno con documenti editi e inediti* (Messina: G. Principato, 1921), 425–426, 431; Felice Tocco, *Le opere latine di Giordano Bruno esposte e confrontate con le italiane* (Florence: Le Monnier, 1889), 8–19.

⁵⁹ See Clucas, "Illa est mater", 59; 62–63; 67, on Bruno referring to his art as the descendent of the art of Lull and on his ideas concerning the improvements he brought to it.

⁶⁰ Bruno, "De imaginum compositione," 293: "[...] hoc sigillo et arte Lullianam adiuvimus, et a contemptu divinum naturaeque alis supervolitans illud alius inventionis genus liberavimus."

⁶¹ Clucas, "Illa est mater", 67.

⁶² On this text and its use in connection with *De lampade combinatoria lulliana*, see Cambi, *La machina*, 59–90.

⁶³ Raimundus Lullus, *Ars brevis* (Hamburg: Felix Meiner Verlag, 1999), 8.

⁶⁴ Bruno, "Animadversiones in Lampadem Lullianam ex codice Augustano nunc primum editae," in *Iordani Bruni Nolani opera latine conscripta* II, 2, 364: "Posito D in centro, quod significat coelum et mundum, primo fiat deductio per novem principia simpliciter." See Cambi's discussion on this device in *La machina*, 81–90.

consistent with the one he expresses in the poem elaborated in *Proteus* from the words of the *Aeneid*. For example, the argument derived from the absolute predicate corresponding to G – *Voluntas*, goes as follows: “in the world there is the desire and the drive to be forever; however, the material things’ desire to preserve their being is foolish, because, indeed, if that desire is cheated in the individual things, it doesn’t have to be cheated in nature as a whole, in which we find the most excellent movement”⁶⁵. The individual things perish while the whole is preserved – it is the same idea expressed in the poem discussed above through the image of the sea, suggested by terms like “to wander” and “shores”.

The images are introduced as Bruno adds a mnemonic technique⁶⁶ meant to help one memorise the first four meanings corresponding to each of the nine letters of the Lullian alphabet⁶⁷, by associating them with images. For example, the 9 subjects of the art will each be represented by a well-known male character, whose name begins with that letter and who is depicted in a posture that reminds one of that subject. For instance, the subject angel, corresponding to the letter C is represented by a character named Cesar depicted as an angel. The purpose of this artifice is to help the practitioners of the art have all meanings ready at hand so they can use them to form arguments swiftly and promptly⁶⁸. In *De specierum scrutinio*⁶⁹, Bruno suggests an alternative method for the retention of the subjects of the art and their related meanings. The four meanings corresponding to each letter of the alphabet are memorised by means of a complex picture composed of: a male character and his office (standing for the subjects), an instrument belonging to or related to the male character (for the absolute predicates), an action that he performs (for the relative predicates) and an object placed near him (for the questions).

Bruno doesn’t give any direct indication about what part, if any, these images might play in the process of invention described above, but if they do have a role, as S. Clucas suggests, I don’t think it can be more than a mnemonic one, similar to the one words and images play in the application for “invention in general” from the 20th seal in *Explicatio*. In Bruno’s demonstration of how the first figure can be used in the invention of arguments on the eternity of the world, these images play

⁶⁵ Bruno, “*Animadversiones*,” 365.

⁶⁶ *Ibid.*, 363–364.

⁶⁷ Lullus, *Ars brevis*, 4.

⁶⁸ Bruno, “*Animadversiones*,” 363 : “*Iam quia pro usu praesentis artis haec non solum debent memoria teneri, sed illi etiam promptissima esse, ut promptissima desideratur ab eo, qui artem exercet, conceptionum et argumentationum executio; ideo brevem hanc rationem instituimus, qua quisque promptissime perquisita concipere possit, quia promte oportet habere alphabetum [...].*”

⁶⁹ Giordano Bruno, “*De specierum scrutinio*,” in *Iordani Bruni Nolani opera latine conscripta* II, 2, 354–355.

no part in the finding or in the elaboration of arguments; they influence neither the content nor the form of the discourse in any way. It appears that, at least in these cases, Bruno's association of the Lullist categories with images is meant to be useful in the practice of invention, but only to help one memorise and access the categories of the Lullist art with ease. We can conclude that the use of images in these exercises is more similar to their use in the application for "invention in general" from the 20th seal of *Explicatio*, than to the model of invention corresponding to Proteus.

Both *Animadversiones* and *De specierum scrutinio* treat, among other issues, mnemonic instruments that are to be used to facilitate the learning and use of the Lullian art as presented by Bruno in his commentaries.⁷⁰ According to M. Cambi, what most attracted Bruno in the Lullian art was the possibility of generating and multiplying information and infinitely increasing one's capacity for learning, the encyclopaedism and the promise of an all-encompassing knowledge⁷¹. Another important benefit that Bruno saw in the Lullian art is, I believe, is the promise of certitude. For Bruno, the art of Lull, due to the universal value of its principles⁷² (and to their correspondence to the structure of reality⁷³) is capable of generating *certain* knowledge about any subject. For him, this art has a cognitive value similar to the one Aristotle attributes to scientific demonstration – the most certain way of acquiring the truth⁷⁴.

As we can see, there is a significant difference in the role attributed to images these exercises of invention based on a method that has, for Bruno, the highest cognitive value, as compared to the "imaginative logic" in *Proteus* or the 20th seal in *Explicatio*, where images are central to the process of invention, but which Bruno assimilates to the arts of probable argumentation – rhetoric and dialectic. It is

⁷⁰ Cambi, *La machina*, 59–62.

⁷¹ *Ibid.*, 38–40.

⁷² Giordano Bruno, "*De lampade combinatoria lulliana*," 242: "*Quoniam vulgatum satis est in arte Lullii eiuscemodi universalia principia contineri, ut iis iactis veluti fundamentis, de quolibet scibili omnibus numeris examinando, confirmando et defendendo, apte inquirere, copiose invenire, maiorique certitudine iudicare possimus.*"

⁷³ Giordano Bruno, "*De compendiosa architectura et complemento artis Lullii*," in *Iordani Bruni Nolani opera latine conscripta* II, 2, 7–8: "*Subiectum considerationis est universum, quod veri, intelligibilis rationabilisque rationem subire valet; adeo quippe generalia vera, necessaria atque primitiva principia praetenduntur [...]. Conveniens nimirum est atque possibile, ut eum in modum, quo metaphysica universum ens, quod in substantiam dividitur et accidens, sibi proponit obiectum, quaedam unica generaliorque ens rationis cum ente reali [...] complectatur.*"

⁷⁴ In fact, Bruno attributes to the principle of the Lullist art a higher value than to those of Aristotelian logic: *Ibid.*, 61: "*Veruntamen profuit Lullii observantia, quia notitia categoriarum, ut ad nos per manus Aristotelis devenit, est admodum confusa, ut ad nullum finem esse videatur.*"

understandable that a method of invention using words and images alone as places cannot have the same cognitive value as one in which the places are universal principles similar to those of the art of Lull.

If we consider all the devices discussed so far, we can see different degrees to which images are integrated and given a role in the process of composition. The mnemonic role is the most superficial one, in that it doesn't actually allow images to influence in any way the form or content of the text composed. However, this use of images is also linked with the method of invention that has the highest degree of certainty, the one presented in the Lullist commentaries. The method using images or "verbal places" as places of invention allow images an obvious effect at least on the form of the discourse, but is associated with dialectic and rhetoric, forms of discourse with a lower cognitive value but with an added persuasive effect. In the applications discussed up to this point, the ones with a higher cognitive value seem to coincide with a lower involvement of images.

But how about Bruno's claim that the method of invention from Proteus, using images and verbal places as places of invention, could be used to improve the Lullist art? I believe that this upgrade has not yet been accomplished in the rather superficial use of mnemonic images in relation to Lullian devices described in the *Animadversiones* or *De specierum scrutinium* – or at least not to the full extent. However, it will be realised in the more complex system of places based on the 30 statues in *Lampas triginta statuarum*. It is possible that this is the art that Bruno alludes to in the passage quoted above, as "the other divine type of invention that flies with the wings of nature."

An application for invention of the thirty statues

As both M. Cambi and L. Vianello point out, Bruno presents his "Lampas triginta statuarum" as bringing improvements to all of the other aspects of his art treated in different works, including the Lullian commentaries, the 30 seals and his works on the topics and rhetoric.⁷⁵ The method of the 30 statues is presented by Bruno as an *ars inventiva*,⁷⁶ conceived to "define all things according to general and in the same time proximate reasons, and to verify and demonstrate everything according to the same reasons".⁷⁷ The thirty statues illustrate and explain thirty general principles that have a cognitive value comparable to that of the principles of the Lullian art.⁷⁸

⁷⁵ Bruno, "Lampas triginta statuarum," 217–218; See Cambi, *La machina*, 163–168; Vianello, *Una lampada*, 65, 106.

⁷⁶ Bruno, "Lampas triginta statuarum," 216; 258.

⁷⁷ *Ibid.*, 224: "Praepositis ita se se habentibus, nunc deveniendum est ad ultimum totius apparatus scopum, qui est triplex: definiendi omnia sub generalibus, proximis tamen rationibus, verificandi omnia, et demonstrandi omnia iisdem rationibus."

⁷⁸ *Ibid.*, 7: "Haec quidem constat triginta statuis, in quibus triginta intentiones continentur, et quo videbitur modo explicandae. Sunt quidem generales ut esse debent,

Bruno explains that this art contains, in a more detailed and developed form, the same subjects and predicates of the Lullist art discussed in *De lampade combinatoria lulliana*, and suggest that the thirty statues are the “proper reasons” (*rationes propriae*) of the relative and absolute predicates.⁷⁹

The system of the thirty statues is structured as a complete “ladder of nature”, that includes all the levels of being: the first six statues represent the absolute simple realities, absolute matter and absolute form, that cannot be represented in images. The statues in the next class correspond to the causes and principles of natural things, and those in the last class, to all the realities that depend on a cause.

Each statue is composed of thirty meanings (*intentiones / rationes / conditiones*) of the central principle, and each of these is associated to one of the elements that make up the statue: different scenes or images involving a central god – his attributes, his physical appearance, his vehicle, his emblematic animals, other characters that have some relation to him, from the mythology or literature familiar to Bruno’ readers.

Bruno explains that the role of the images in the description of the statues is to help expose and organise the material so that it can be more easily retained, to facilitate understanding, to help reveal the meaning of a content otherwise difficult to grasp. These “images” are characters (*typis*) and similitudes (*similitudines*), “sensible, visible and imaginable statues”, but also stories (*fabulas*).⁸⁰

The statues are first described in detail, after which Bruno proceeds to showing their different applications. Compared to the basic mnemonic use of images in the *Animadversiones*, in the exposition of the thirty statues they play a more significant role in explaining and clarifying the content, by presenting it in a figurative

speciebus autem specialissimis magis applicabiles quam principia (Architica) Aristotelica et Lulliana; [...] Existimamus nullam esse proponibilem quaestionem, quae subterfugere possit unam saltem ex istis ideis [...].” For a detailed treatment of the order and composition of statues, their literary and iconographic sources, their conceptual content, aspects that I shall only be touching upon in the discussion bellow, see Vianello, *Una lampada*.

⁷⁹ *Ibid.*, 217–218: “*Utilitas huius Lampadis ad alias. [...] Perficit Lampadem Lullii eadem ratione, quia definita, formata et distincta dat subiecta et praedicata, quae illa indefinita dedit. [...] Habetur etiam hic non modo series absolutorum praedicatorum et respectivorum, verum etiam eorundem per singula triginta rationes [...].*”

⁸⁰ *Ibid.*, 8: “[...] *arcana naturae eiuscemodi typis et similitudinibus velare consueverunt non tantum, quantum declarare, explicare, in seriem digerere et faciliori memoriae accommodare. Statuam quippe sensibilem, visibilem, imaginabilem, cum eadem ratione sensibilibus appositis facillime retinemus, fabulas effictas levissimo negotio memoriae commendamus, mysteria consequenter, doctrinas et disciplinales intentiones per easdem significabiles istorum suffragio [consequenter] considerare et retinere omnem citra difficultatem valebimus.*”

manner or in association with a representative image. For example, in the case of Apollo, which is the statue corresponding to the principle of “unity”, “the continuity of Apollo’s light” denotes (*designat*) the invariable nature of unity; the choir of the Muses lead by Apollo, dancing around his cart, indicates (*notat*) unity understood as the unity of a community.⁸¹

L. Vianello argues that the statues are “verbal places”, composed in a manner that illustrates the techniques and mental operations described in the seal of *Phidias*: taking over conceptual and iconographic materials from other authors, and recombining them into a new system expressing Bruno’s own philosophy.⁸² The statues appear indeed to have been “constructed” in a manner similar to the one exemplified in *Proteus*, in which the content is derived from the images, or conceived in relation to them, in terms of “modifying one term in order for it to adequately represent another”. As a consequence, in the exercise of invention it will not be easy to separate the conceptual content from the images or myths that convey and explain it. Although in many cases the arguments derived refer to the conceptual content without being in any way modified by the images, there are also cases when the image proves more useful, or when the whole construction is used – the image and the content it conveys.

The applications of the 30 statues are many and much more complex than the one I chose to discuss, which is the last application in the book, and is similar to the ones I have discussed so far: using the 30 statues and each of their meanings as places in the composition of an argumentation. The thesis Bruno chooses to prove is “The soul is not an accident”.⁸³

He derives arguments relevant for this issue from each of the statues, therefore from each of the different meanings that make up each statue. Let us take as an example the statue named “The workshop of Vulcanus”, that contains the different meanings of the concept of “form”. The second of these meanings is the form understood as the essence of a thing, that which makes a thing what it is. In the description of this statue, form as essence is represented by the instruments placed around the table in the workshop of Vulcanus, used for painting or sculpting the images (*simulachra*) of the ideas in the eternal mind. In the exercise of invention, when he has to derive from this part an argument for proving the thesis that “the soul is not an accident”, Bruno finds it more useful to refer to the notion of instrument, which is related to the image rather than to the meaning it is supposed to convey, that of essence. Bruno derives his argument in the following way: an accident is like an instrument in relation to its substrate, but the soul is not an instrument of the body; rather, the soul is the one that acts using the body as an instrument. In other words, his argument does not refer at all to the concept of form

⁸¹ *Ibid.*, 63, 65.

⁸² Vianello, *Una lampada*, 93–94, 103–107.

⁸³ Bruno, “*Lampas triginta statuarum*,” 238.

as essence, but only to an aspect of the image used to illustrate it. For the next argument, derived from the third term of the statue of Vulcanus, Bruno uses both the abstract concept – the fact that the form is generated from within matter – and the part of the myth associated with it – Vulcanus being born without a father – which allows him to talk about “parents” or causes in relation to the soul.⁸⁴

Although, as I have mentioned, in many cases the arguments are derived exclusively from the conceptual content, examples like the ones above can show the similarity between the way Proteus works as an exercise of invention and this particular application of the thirty statues. Moreover, in regard to the application for invention just described, Bruno mentions that it can also be used to construct false arguments, “in the manner of the sophists”,⁸⁵ which brings it even closer to Proteus, that was also used to construct arguments both for and against a given thesis.

While the “exemplaristic”⁸⁶ value of the Lullist principles might work as a guarantee for validity of this art, and of those derived from it, as instruments of generating true and certain knowledge, their generality, praised by Bruno even above the exemplaristic value, has an even more interesting effect. Allowing one to consider all the aspects of reality in all possible relations and from all possible perspectives definitely adds to the value of these arts as instruments of learning. But it also has a secondary effect in expanding its possibilities outside the boundaries of the truth, into the realm of the counterfactual.

Bruno argues that the thirty statues can be used to improve many of his other methods concerned with invention, either logical, rhetorical or Lullist: he alludes to *De lampade venatoria logicorum*, *Artificium perorandi*, *De lampade combinatoria lulliana*, and also to *Explicatio triginta sigillorum*. An art based on both images and general principles comparable to those of the Lullist art encompasses both the characteristics of an art of knowledge and those of an art of invention opened to all possibilities and applicable to all forms of discourse.

Conclusions

The model of invention in Proteus is representative for the possibilities of the imagination to play a part in the operations involved in the processing of information. On the other hand, this „imaginative logic” as a form of invention that derives the arguments from words and images alone seems to be limited to the forms of probable argumentation of rhetoric and dialectic, and I believe this is

⁸⁴ Ibid., 242–243.

⁸⁵ Ibid., 239.

⁸⁶ See Rossi, *Logic*, 83; also Stephen Clucas, “Simulacra et Signacula: Memory, Magic and Metaphysics in Brunian Mnemonics,” in *Giordano Bruno, Philosopher of the Renaissance*, ed. H. Gatti (Aldershot: Ashgate, 2000), 259–272, on the metaphysical substrate of the “higher and more general form” of Bruno’s art.

precisely because it is a method of inventions mainly based on the imagination's power of representation.

In the seal from *Explicatio*, Bruno points out the difference between the limited value of the invention based on words and images and a "more general" type of invention that only uses images as mnemonic. As we have seen in Lampas, the general character of this *ars inventiva* based on principles described by Bruno as his own development of the Lullist ones, is reflected both in its value as an art of learning and as an art of invention that covers all forms of discourse.

While on its own the model of invention in Proteus might have a limited cognitive value, Bruno points out its importance in his project of improving the Lullist art. While in exercises of invention form the Lullist commentaries, in which arguments are derived from the universal principles of the Lullist art, images are used only as mnemonic devices, without any indication about allowing them a role in the development of the argumentation, in Lampas Bruno finds a way to integrate the method of invention from Proteus in a form of invention using general principles with a similar value to those of the Lullist art.