THE CONCEPT OF CONTRACTION
IN BRUNO’S PHILOSOPHY

Dissertation submitted to the University of London
in fulfilment of the requirements
of the degree of Doctor of Philosophy

By Leo Catana

Italian Department
University College London

2002
The first part of this thesis describes the concept of contraction, in its ontological and noetic interpretations, as it is used in the philosophy of Giordano Bruno (1548-1600). Bruno denied the efficacy of the several psychical, psychological and medical states traditionally thought to aid contemplation and noetic ascent. The only means in his view was philosophical contemplation. Philosophical contemplation elevated the mind from the fragmented multiplicity of sense impressions to an understanding of the principles governing the sensible world. He denied that the human mind could attain ecstasy and transcend the plurality of the Mind or World Soul in the senses in which he understood those terms.

Noetic ascent followed in reverse order the ontological descent from the intelligible to the sensible realm. The multiplicity of the intelligible and sensible universe occurred by virtue of the contraction of the infinite, universal, substance. The two principles of the universe, form and matter, were 'contracted’ to produce sensible multiplicity. Matter was individuated or contracted through form, and form through matter. In this ontological sense of the term, 'contraction’ is an integral part of Bruno’s principle of individuation.

In Bruno’s philosophy, contraction in the noetic interpretation denotes a concatenating function of the human mind. The objects of this concatenation are concepts and intentions, which are likenesses of the sensible world as perceived via the senses or summoned by memory. In both instances intentionality is important. One of the most important methods of noetic ascent was memory. Bruno’s memory theory derives largely from Plotinus (ca. 205-270) and the interpretation of Plotinus given by Marsilio Ficino (1433-1499). His account of contraction in relation to memory reflects these sources.
The second part of this thesis discusses the sources for Bruno's ideas of contraction. Frances Yates, Alfonso Ingegno and other scholars have suggested various sources for Bruno's concept of contraction as a method of noetic ascent, notably, in relation to physiological contractions of humours and spiritus. This interpretation does not, however, take into account Bruno's reservations towards noetic ascent facilitated through medical contractions, and it ignores his insistence on defining contraction in the noetic interpretation in parallel with the ontological interpretation of the term.

More persuasive is the argument proposed by Franz Clemens, Sandro Mancini and Filippo Mignini, who propose that Bruno derived his concept of contraction, in its ontological sense, from Nicholas of Cusa (1401-1464). Contraction was an important concept in Cusanus' philosophy and theology. Bruno certainly knew the works, notably the De docta ignorantia, in which Cusanus uses 'contraction'. But this interpretation ignores the possibility that Bruno and Cusanus might have drawn on common sources, namely, medieval scholastic commentaries on the Liber de causis. One probable common source is Giles of Rome, also called Aegidio Romano or Aegidio Colonna (ca. 1243-1316). Several features of Bruno's discussion of 'contraction' suggest strongly that he drew on these medieval sources, in particular Giles. Bruno adapted the interpretations of contraction that he found in Cusanus and these medieval commentaries to the needs of his unorthodox philosophy.
PART ONE
BRUNO’S CONCEPT OF CONTRACTION

Ch. 1. Methods facilitating noetic ascent

1. Bruno on heroic ascent 15

2. The fifteen contractions in the Sigillus sigillorum 17
   (i) Contraction produced by solitude 17
   (ii) Contraction produced by restricting imagination to a place 19
   (iii) Contraction of the horizon into the centre 19
   (iv) Contraction producing divine dreams, visions and revelations 24
   (v) Contraction produced by faith 26
   (vi) Contraction produced by filial piety 30
   (vii) Contraction produced by fear 30
   (viii) Contraction of spiritus produced by fear 31
   (ix) Contraction produced by an intensity of desire 32
   (x) Contraction produced by restriction of number of sense organs used 33
(xi) Contraction produced by melancholy 33
(xii) Contraction produced by starvation 34
(xiii) Contraction producing levitation 36
(xiv) Contraction produced by malnutrition 38
(xv) Contraction practised by philosophers 39

3. Heroic practice in the fifteen contractions and its theory 39
4. The double contraction 41

Ch. 2. Contraction as an ontological concept

1. Bruno’s discussion of ontological contraction 47
2. The metaphysical context of contraction 49
3. The World Soul 56
4. Matter 62
   (i) Sources for Bruno’s concept of matter 63
   (ii) Contraction produced by matter 70
   (iii) The cosmological role of contraction produced by matter 72
5. Coincidence of opposites 74

Ch. 3. Contraction and noesis

1. What is contraction produced by noetic ascent? 78
2. Philosophical anthropology and contraction by noetic ascent 81
3. Abstraction and intention 84
   (i) Abstraction through “ten or twelve determinata” 85
   (ii) Intention 89
4. Contraction in the Eroici furori 93
5. Bruno's criticism of noesis induced by melancholy: its consequences for love poetry and theology 98

Ch. 4. Contraction and memory

1. Interpretations of Bruno's idea of memory 106
2. Plotinus' discussion of Aristotle's doctrine on memory 109
3. Plotinus on the twofold memory 113
4. Bruno's stance towards Aristotle's and Plotinus' theories of memory 118
5. Bruno's use of Plotinus' idea on noetic ascent through memory 123

PART TWO

SOURCES OF BRUNO'S CONCEPT OF CONTRACTION

Ch. 5. Physiologically induced contraction

1. Ficino's notion of physiologically induced contraction 135
2. Bruno's criticism of physiologically induced contraction 141
3. Interpretations of Bruno's fifteen contractions in the Sigillus sigillorum 149

Ch. 6. The scholastic tradition of contraction

1. The historical background of the Liber de causis 155
2. Contraction and the doctrines of the Liber de causis 162
ABBREVIATIONS

B&C  Bruniana & Campanelliana.


COO  Nicholas of Cusa, Opera omnia, eds E. Hoffmann, R. Klibansky et al., vol. 1-. F. Meiner: Leipzig and Hamburg, 1932-.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS</td>
<td><em>Dictionnaire de spiritualité, ascétique et mystique, doctrine et histoire</em>, ed M. Viller et al., vol. 1-. Beauchesne: Paris, 1937-..</td>
</tr>
<tr>
<td>GCFI</td>
<td><em>Giornale critico della filosofia italiana.</em></td>
</tr>
<tr>
<td>JWCI</td>
<td><em>Journal of the Warburg and Courtauld Institutes.</em></td>
</tr>
<tr>
<td>MFCG</td>
<td><em>Mitteilungen und Forschungsbeiträge der Cusanus-Gesellschaft.</em></td>
</tr>
<tr>
<td>NRL</td>
<td><em>Nouvelles de la République des Lettres.</em></td>
</tr>
<tr>
<td>RCSF</td>
<td><em>Rivista critica di storia della filosofia.</em></td>
</tr>
</tbody>
</table>
CITATIONS

In quotations from fifteenth- and sixteenth-century Latin texts, I have expanded abbreviations, changed ‘&’ to ‘et’, ‘u’ to ‘v’ and vice versa to distinguish respectively vocalic and consonantal ‘u’, omitted accents, and changed ‘j’ uniformly to ‘i’. Otherwise I have retained the orthography and punctuation of the editions I have used. I have modernised the capitalisation and accents in quotations from Greek. All translations into English are mine, unless otherwise indicated. A number immediately following a full stop denotes a line number, e.g. p. 277.73 denotes line 73 of page 277 and §29.2-3 denotes lines 2-3 in paragraph or section 29.

All Biblical references are to the Vulgate; where the numbering in the Vulgate and King James’ translation differ, I have included references to the latter in brackets. References to classical authors are to standard texts, as given in the Appendix.
I am indebted to the Department of Philosophy, University of Copenhagen, from which I received a scholarship enabling me to carry out research for this thesis. Carl Henrik Koch, lecturer in the History of Early Modern Philosophy at this department, supported my endeavour throughout and wisely advised me to transfer my research to London. I should like to thank him too.

Among the staff in the Italian Department, University College London, I should like to express my gratitude to the late Giovanni Aquilecchia, with whom I had important conversations about Bruno in the early days. He sadly died last summer. My largest debt is, however, to Dilwyn Knox. I have benefited from his knowledge of Renaissance philosophy, and I owe many of my references to him. His precise, well-informed and challenging criticism of my drafts has been a continuous inspiration.

Cristina d’Ancona Costa kindly brought to my notice more recent studies of the Liber de causis, for which I owe her thanks. Likewise, I should like to thank Guido Giglioni and Stephen Clucas for many good discussions about Bruno and his world. Pasquale Arfè, Luca Bianchi, Salvatore Camporeale, Eugenio Canone, Carlotta Dionisotti, Germana Ernst, Hillary Gatti, Kristian Jensen, Lucy McGuinness, Stephen Pigney and Jonathan Rolls have similarly been stimulating and helpful in various ways, and I owe them thanks too. I should also like to thank the staff in the Warburg Institute in London, and Heidi Hein in the Institut für Cusanus-Forschung in Trier.

Finally, my greatest debt is to my wife Irene for her unstinting support and to our two daughters, Freia and Asta, for gently reminding me that there are matters more important than theses.
The aim of this thesis is twofold. The first is to explain the concept of contractio, or contraction, in the philosophy of Giordano Bruno (1548-1600). The second is to discuss its sources. The interpretations of contraction in Bruno's writings are ontological and noetic, and Bruno develops these two interpretations in parallel. Through his doctrine of contraction, Bruno endeavoured to explain the relationship of God to his Creation in a way that conformed with his pantheism. Moreover, for Bruno, the metaphysical structure defined through contraction determines the means by which the human soul can ascend to the One, for, as he states, noetic ascent is a reversed descent.¹ The first part of the thesis deals with contraction in its ontological and noetic interpretations in Bruno's Latin and Italian works. The second part deals with the sources of contraction.

From the nineteenth century to present day the doctrine of contraction presented by Nicholas of Cusa, also called Nikolaus Krebs or Nikolaus Khrypffs (1401-1464), has been seen as Bruno's only source of the notion in its ontological sense. Through this concept Cusanus had explained the relationship of God to his Creation in a way that agreed with Christian theology. Bruno picked up this notion from Cusanus, it has been argued, but reinterpreted it in keeping with his pantheism.² I shall argue instead that Cusanus' and Bruno's interpretations of contraction derive from late medieval and Renaissance interpretations of the Liber de causis, and that Giles of Rome, also called

---

¹ BRUNO, Sigillus ii 10, ii 22, pp. 202.19-203.14, 213.21-23. This point is also made in id., De umbris §34.2-7, p. 34; Causa v, pp. 291, 297; Spaccio iii 2, p. 415; De magia naturali §6.1-23, pp. 168-170 (= BOL, vol. 3, pp. 401.25-402.21).

² CLEMENS, Giordano Bruno, p. 143; MANCINI, La sfera infinita, p. 67; MIGNINI, 'La dottrina dell'individuo in Cusano e in Bruno', p. 348.
Aegidio Romano or Aegidio Colonna (ca. 1243-1316), was the chief inspiration for Bruno's idea of contraction. This possibility has been ignored in Bruno studies.

The term contraction had been applied in scholastic commentaries on the Liber de causis, a work falsely attributed to Aristotle.¹ The Liber de causis draws, among other sources, on the Elements of theology of Proclus (ca. 412-485). The treatise expounds a hierarchy of causes ultimately depending on one cause, God. Although pagan and Neoplatonic in origin, it was susceptible to Christian interpretations. In scholastic commentaries on the Liber de causis, 'contraction' was employed in various ways in theories of individuation within this hierarchy of causes, in keeping with commentators' philosophical inclination. The Liber de causis, and to some extent its medieval scholastic commentaries, remained popular in Renaissance philosophy, also among figures traditionally interpreted as Platonic or Neoplatonic in orientation, for instance Cusanus, Giovanni Pico della Mirandola (1463-1494) and Marsilio Ficino (1433-1499). Recently Leen Spruit has conjectured that Bruno was familiar with the commentary on the Liber de causis composed by Thomas Aquinas (ca. 1225-1274).² Nevertheless, the fortune of the Liber de causis and its scholastic commentaries has not yet been studied in the context of Renaissance philosophy. The following discussion of contraction in Bruno's philosophy will, I hope, remedy this omission.

The second important sense in which Bruno uses the term 'contraction' is, for lack of a better word, 'noetic'. Frances Yates' astrological-magical interpretation gave rise to a renewed interest in Bruno's early mnemonic works. However, she, and those

---

¹ For Aquinas' attribution, see COSTA, "'Philosophus in libro De causis'”, pp. 611-612. For other attributions among other scholastic philosophers before Aquinas, see ibid., pp. 633-644.

² SPRUIT, Il problema, p. 27. See also ibid., pp. 47 nn. 21 and 22, 109 n. 28, 111 n. 37, 144 n. 132, 283 n. 14, 307 n. 106, 309 n. 113, 313 n. 128. Spruit does not, however, consider Giles' commentary on the Liber de causis as a possible source for Bruno. Studies on Bruno's Aristotelian background do not examine the influence of the Liber de causis on his thought; see BLUM, Aristoteles; PAPULI, 'Qualche osservazione', pp. 201-228.
following her interpretation, saw Ficino's astrological and magical works as the chief source of Bruno's philosophy. This line of interpretation identified Bruno's noetic notion of contraction with what was perceived as Ficino's theory of noetic ascent, that is, Ficino's theory of a physiologically induced contraction ultimately induced by astral influence. I shall argue instead that Bruno's noetic interpretation of contraction derives from his epistemology, particularly his theory of memory, both of which had strong Neoplatonic connotations. Even though Bruno knew and used Ficino's notion of a physiologically induced contraction, he did not regard it as self-sufficient, but subordinated it to his idea of noetic ascent, conforming with his theory of descent, that is, of contraction in the ontological sense.

1 For this interpretation applied to Bruno's early mnemonic works, especially *De umbris* and the *Sigillus*, see YATES, *Giordano Bruno and the Hermetic tradition*, pp. 190-204, 205-206, 209, 271-273, 307-308; id., *The art of memory*, pp. 53, 198-201, 204, 208-213, 220-221, 246-255, 287-288, 290. Yates claimed that Bruno's *De umbris* "was in line" with Camillo's memory theatre (ibid., p. 204), which Yates claims was strongly influenced by Ficino's magic as presented in his *De vita* (ibid., pp. 154-159).

PART ONE

BRUNO'S CONCEPT OF CONTRACTION
1. Bruno on heroic ascent

I shall introduce Bruno's unified idea of descent and noetic ascent, articulated through his concept of contraction, as he presented it in the *Sigillus sigillorum*, which he published in London in 1583 as part of the *Ars reminiscendi*. Bruno discusses ontology in this work, but the practice of noetic ascent — or, to be more precise, the mind's movement from the manifold to unity — is the real purpose of the *Sigillus*:

"We want to treat these matters [descent from the One] not because we think that this is the place for considering the nature of these matters but so that we may teach how to examine, meditate upon and produce unity in every multiplicity and identity in every diversity."

Immediately after this quotation, Bruno presents the so-called 'fifteen contractions' (i 35-49), that is, the fifteen methods facilitating noetic ascent, which are the subject of this chapter. In the sentence introducing these fifteen contractions, he states that "a manifold virtue originates in the multiple contraction." Just as there are several ways to ascend, there are several intellectual virtues and hence several *contractiones* leading

---

3. Ibid., i 35, p. 180.21-23: "Ex proxe dictorum consideratione delitescit, quemadmodum multiplex a multiplici contractione virtus exoriat."
the soul from multiplicity to unity, depending on the mode of noetic ascent. Such an
interpretation agrees with a passage in the *Spaccio*, where the interlocutor Saulino
explains to earthly Sofia that even though influence from higher ontological realms is
the same for everyone, it is approached differently by different people, depending on
their different intellectual qualities.¹

I shall discuss Bruno’s sources for this and other aspects of his doctrine in the
second half of my thesis. Here I shall summarise Bruno’s fifteen contractions,
bringing out the connections with some key concepts in Bruno’s psychology and with
his unorthodox doctrine of noetic ascent. In the *Eroici furori* Bruno refers explicitly to
the fifteen contractions in his *Sigillus*, which, he says, some practise in a “shameful
manner”, others “in a heroic manner”.² I shall ask, therefore, which forms Bruno
considers “shameful”, which “heroic”.

---

¹ Id., *Spaccio* ii 1, p. 191. See also id., *Furori* ii 1, pp. 325-327.
² Id., *Furori* ii 1, p. 327: “De quali alcune vituperosa, altre eroicamente fanno che non
s’apprenda téma di morte, non si soffrisca dolor di corpo, non si sentano
impedimenti di piaceri”. On the same page of the *Furori* Bruno mentions the
contractions “nel libro De’ trenta sigilli” (“in the book On thirty seals”). Bruno
probably means the *Sigillus*, since it is there, and not in the *Triginta sigilli*, that he
discusses the fifteen forms of contraction (id., *Sigillus* i 35-49, pp. 180.19-193.5).
The title of the *Explicatio* (id., *Explicatio*, p. 73), covering the *Triginta sigilli* as well
as the *Explicatio*, indicates that the *Sigillus* is “added” to the *Triginta* and the
*Explicatio* (ibid., p. 73; “Explicatio triginta sigillorum ... Quibus adiectus est Sigillus
sigillorum”).
2. The fifteen contractions in the Sigillus sigillorum

The fifteen contractions are as follows:

(i) Contraction produced by solitude

The kind of solitude which stems from living in a secluded manner may induce a contemplative and inventive state of mind.\(^1\) Pythagoras, Zoroaster, Moses, Jesus Christ, Ramon Lull (1235-1315) and Theophrast Paracelsus (1493-1541) are examples of this contemplative contraction, according to Bruno.\(^2\) Bruno was convinced, here and elsewhere, that potentially creative seclusion can be abused by those who have the possibility to live a contemplative life, e.g. the monks: “But among them you will find that many have secluded themselves from the conduct of everyday affairs in order to escape human toil and concerns, seduced by the love of sloth and gluttony; only very few have done so from a desire for virtue so that they can pursue goodness and truth”.\(^3\)

\(^2\) Ibid., i 35, pp. 180.26-181.16. In the Renaissance the ideas attributed to Pythagoras and Zoroaster were believed to part of an ancient theology; see WALKER, Ancient theology, pp. 1, 2, 11, 13, 19-22, 26, 34-35, 39, 49-50, 54-56, 72-73, 78, 81-82, 85, 87, 100, 102-103, 110, 118, 125, 143-146, For Ficino as a possible source for this first contraction in Bruno’s Sigillus, see STURLESE, ‘Le fonti’, p. 141. In Ch. 4, pp. 153-154 below, I shall discuss Sturlese’s identifications of the sources for these fifteen contractions. In this section, however, I shall also mention her identifications. For discussions of this first contraction, see also RICCI, Giordano Bruno, pp. 229-230; CILIBERTO, La ruota del tempo, pp. 84-85.
\(^3\) BRUNO, Sigillus i 35, p. 181.16-20: “Sed ex iis plurimos, ut humanum laborem et curas fugerent, oeci et gulae amore illectos, perpaucos vero virtutis amore, ut bonitatem et veritatem persequerentur, invenies se a negociosorum conversazione sevocasse”. For this passage, see ORDINE, ‘Introduction’, pp. XC-XCII. For Bruno’s
Several scholars have suggested that in the *Spaccio* Bruno criticised the Protestant doctrine of justification by faith (*iustitia sola fide*), and the alleged sloth, *ocio*, accompanying it. But on this particular occasion in the *Sigillus*, Bruno’s attack on monastic idleness had a precedent not only in the widely known criticisms of the religious life, including monastic life, by Desiderius Erasmus (1466/1469-1536), but also in the Protestant John Calvin (1509-1564), whose ideas Bruno had encountered while he was in Geneva during June and July 1579, and those of many others besides. On Augustine’s authority, Calvin held that monasteries should be free from idleness, but Calvin remarked that in his day the opposite was the case. He asked ironically what would become of the so-called “contemplative life” which some monks claimed made them equal to angels, if that idleness were taken away.

---

1 For the theme of sloth, see BRUNO, *Spaccio* iii 1, p. 365, *et passim*. On grace and salvation in the thoughts of Luther and Bruno, see INGEGNO, *La sommersa nave*, especially pp. 11-20; CILIBERTO, *Giordano Bruno*, pp. 128-169.

2 For Bruno’s criticism of sloth, see BRUNO, *Sigillus* i 35, pp. 181.22-182.11. For Bruno’s stay in Geneva, see FIRPO, *Processo*, p. 160; RICCI, *Giordano Bruno*, pp. 128-137. For the date of Bruno’s stay there, see ibid., p. 129. For Bruno on Calvin, see FIRPO, *Processo*, pp. 28, 65, 177, 249, 251, 292.

3 CALVIN, *Institutio religionis christianae* IV xiii 10, col. 932: “Augustinus fortiter contendit, non licere monachis de alieno otiosis vivere. Tale exemplum suo tempore exstitisse negat bene constituti monasterii. Nostri praecepuam sanctimoniae suae partem in otio collocant. Nam si otium illis tollas, ubi erit illa contemplativa vita, qua se alios omnes excellere et ad angelos proptius accedere gloriantur?”
(ii) Contraction produced by restricting imagination to a place

The imagination, says Bruno, is sometimes contracted to a particular place, making someone indifferent to distances near and far. Examples are those people who betake themselves to a steep and narrow summit and stand there upright on one foot. Even more startling are those suffering from melancholy who wander along precipices.\(^1\) Who Bruno has in mind in these examples is not altogether clear. Is he perhaps alluding to episodes in saints' lives? The posture of standing on one foot on top of a mountain might, for instance, be an imitation of Christ on the cross or the Transfiguration. Be this as it may, this is the first of the fifteen contractions concerning humours. I shall return to the humours below.

(iii) Contraction of the horizon into the centre

Some religious men, endowed with unusual mental sight, are able to intuit what is going on in distant places. This ability Bruno describes as a "contraction of the horizon into the centre".\(^2\) This image has not yet been explained in the literature on Bruno, and it is very puzzling. What does it mean?

---

\(^1\) BRUNO, Sigillus i 36, p. 182.13-18: "Contracione imaginationis ad situm, per indifferentiam distantis atque proximi conceptam, nonnullos vidimus in alto arctoque culmine se se exagitasse, rectosque unico innixos pede in aëre constitisse; idemque atque magis per imprudentiam, atra bile laborantibus, per alta praecipitia obambulantibus accidisse." For the doctrine of the four humours, see SIRAISI, Medieval and early Renaissance medicine, pp. 104-109.

\(^2\) BRUNO, Sigillus i 37, p. 182.20-24: "Contractione quadam horizontis in centrum (de qua forte alias) a quibudam religioso affectis maximo loci intervallo seposita per eam animi vim, quae corporeis non est adstricta terminis, veluti intelligentiarum obtutu potitis, redditad sunt ad sensum non fallentem perspicua." Examples are provided ibid., i 37, pp. 182.24-183.7. For Ficino as a possible source for this third contraction, see STURLESE, 'Le fonti', pp. 141-142. On this particular occasion
Let me first consider the term ‘horizon’. There are two meanings of the term in this passage. First, it can denote the human soul existing on the boundary of the sensible and the intelligible worlds. Second, ‘horizon’ can symbolise the hypostasis Soul in the Neoplatonic system of emanation. Bruno may, however, be combining both meanings in his account of the third contraction.

In *De magianaturali* Bruno explains that the human soul is not spatially confined to the body.\(^1\) This comment probably derives from the soul-body theory of Plotinus (ca. 205-270), according to whom the soul ensouls the body without being confined to it spatially. In that sense the body is in the soul, not *vice versa*.\(^2\) The soul, Bruno continues in *De magia naturali*, thus stretches “throughout the horizon”, that is, beyond the perceptible world perceivable by the corporeal sense organs, upwards through the hierarchy of hypostases. This transcendent aspiration of the soul means, Bruno explains, that the soul can not only obtain cognition of that which it can comprehend though corporeal sense organs, but also of that which is imperceptible to the senses. The soul can thus also obtain cognition of that with which it “has contracted” “any use, participation and communion”, that is, we may assume, higher ontological realms than that of the perceptible world.\(^3\) When Bruno speaks of a

---

1. BRUNO, *De magia naturali* §16.6-7, p. 188 (= BOL, vol. 3, p. 409.16-17). The same idea comes up in id, *Causa* ii, pp. 121-125.
2. For Plotinus’ soul-body theory, see BLUMENTHAL, *Plotinus’ psychology*, pp. 9-19.
3. BRUNO, *De magia naturali* §16.6-10, p. 188 (= BOL, vol. 3, p. 409.16-20): “Hinc manifestum est animam plus se diffundere extra corpus, per totum horizontem suae naturae. Hinc accidit ut non solum sua membra cognoscat, sed etiam omnia cum quibus aliquem usum et participationem et communionem contraxit.” ‘Horizon’ is used similarly in id., *De immenso* i 1, p. 202.16-19: “[homo] in confinio aeternitatis atque temporis, inter archetypum et exemplatum, intelligibilem inter sensibilemque mundum positus, utriusque particeps substantiae, extremorum quodammodo interstitium, in horizonte naturae constitutus.” The description of man, i.e. his soul, as existing on the boundary of the eternal and the temporal worlds, is parallel to that.
“contraction of the horizon into the centre” in this third contraction in the *Sigillus*, he may be referring to this or a similar idea.

The second possible meaning of ‘horizon’ — that is, the hypostasis Soul — has at least two possible sources. Plotinus says that the hypostasis Mind appears to the individual human soul just as the sun rises over the horizon. When Bruno speaks of a “contraction of the horizon into the centre”, he may be alluding to that image as it appears in Ficino’s translation.\(^1\) Another and more likely source for the expression ‘horizon’ is the *Liber de causis*, in which the hypostasis Soul — which is dependent upon Mind — is said to exist “on the horizon of eternity from below and above time”.\(^2\) In the *Eroici furori* Bruno may employ this expression from the *Liber de causis* to explain how the human soul, which, like the hypostasis Soul, exists on the frontier, the ‘horizon’ of the intelligible and the sensible worlds.\(^3\)

of the hypostasis Soul in *PSEUDO-ARISTOTLE, Liber de causis* ii 22, ed. Pattin, p. 138. The expression “in horizonte naturae” used of the human soul in *De immenso* is parallel with the description of the hypostasis Soul in *PSEUDO-ARISTOTLE, Liber de causis* viii(ix) 84, p. 156. Both passages from the *Liber de causis* are quoted on p. 21 n. 2 below.

1 PLOTINUS V v [32] 8.3-7, which reads in Ficino’s translation, p. 527.13-18: “quapropter non decet prosequi [Mind], sed potius requiescere, donec nobis effulget, ita nos ad id spectaculum praeparantibus, sicut et oculus ortum solis expectat, cui sol ipse ex orizonte resurgens, et ut poetae aiunt, [']ex Oceano exhibet se spectandum['].” By “poeta” he probably alludes to HOMER, *Iliad* vii.421-422.

2 *PSEUDO-ARISTOTLE, Liber de causis* ii 22, ed. Pattin, p. 138: “Esse vero quod est post aeternitatem et supra tempus est anima, quoniam est in horizonte aeternitatis inferius et supra tempus.” See also ibid., viii(ix) 84, p. 156: “Et intelligentia quidem comprehendit generata et naturam et horizontem naturae scilicet animam, nam ipsa est supra naturam.” For the date of the *Liber de causis*, see p. 155 below.

3 BRUNO, *Furori* i 4, p. 189: “come il raggio del sole il quale quindi tocca la terra et è gionto a cose inferiori et oscure che illustra, vivifica et accende, indi è gionto a l’elemento del fuoco, cioè a la stella da cui procede, ha principio, è diffuso, et in cui ha propria et originale sussistenza: cossì l’anima ch’è nell’orizonte della natura corporea et incorporea, ha con che s’inalze alle cose superiori, et inchine a cose
on the *Liber de causis*, Giles had stressed this image of Soul, though without connecting it with ‘centre’, as Bruno does in this third contraction. It should be added that the two possible sources, Plotinus and the *Liber de causis*, are not mutually exclusive. Bruno may be consciously adapting both.

What, then, does Bruno mean by ‘centre’? What is it the soul approaches? Rita Sturlese has interpreted the term *centrum* in another context as the *sensus communis*, which unites the sense data from the five senses. However, this interpretation would not in itself explain the use of ‘centre’ in the third contraction, since the cognition achieved transcends the reach of the senses. Another possibility, not pointed out by Sturlese in relation to this contraction, is that ‘centre’ denotes a Neoplatonic hypostasis. Only a few pages before this third contraction in the *Sigillus*, Bruno explains that the hypostasis Mind (*mens*) gives from the centre shape to the seed, thus forming the mass of the universe. Hence, through the third contraction in the inferiori.” For this passage, see SARAUW, *Der Einfluss Plotins*, pp. 36-37, where PLOTINUS IV iii [27] 12.1-5 is pointed out as a source. It reads in Ficino’s translation, p. 381.24-30: “Hominum vero animae ipsorum simulachra tanquam Dionysii prospicientes in speculo, illic extiterunt desuper properantes, neque tamen a principio suo intellectuque disiunctae [“intellectus” is translated from “νοῦς”]. Neque enim una cum intellectu descederunt, sed pervenerunt quidem usque ad terram: at interim caput earum extat etiam super coelum.” PSEUDO-ARISTOTLE, *Liber de causis* ii 22, ed. Pattin, p. 138, quoted p. 21 n. 2 above, is an alternative source, which is ignored in SARAUW, *Der Einfluss Plotins*, pp. 36-37, and GRANADA in his note to BRUNO, *Furori* ii 4, p. 188 n. 53.

---

1 E.g. GILES, *Super authorem De causis, Alpharabium* ii, fol. 7v, lines 16-37.
2 STURLESE, ‘Le fonti’, pp. 112-113, refers the use of ‘centrum’ in BRUNO, *Sigillus* i 18, p. 165.17-21, to FICINO, *Theologia platonica* vii 2, vol. 1, pp. 263, 265-266, where the expression is used synonymously with *sensus communis*. This meaning of ‘centrum’ may also, perhaps ultimately, derive from Alexander of Aphrodisias; see SINNIGE, ‘Metaphysical and personal religion in Plotinus’, pp. 149-150.
3 BRUNO, *Sigillus* i 37, pp. 182.24-183.7.
4 Ibid., i 31, p. 174.12-15: “Mens enim, quae universi molem exagitat, est quae a centro semen figurat, tam mirabilibus ordinibus in suam hypostasim educit”. For
Sigillus, Bruno may explain that through the human soul's ascent to the Ideas in Mind, it becomes able to comprehend things without reference to time and beyond the reach of the senses, due to the soul's participation in Mind. Bruno, in short, reduces what might appear to be the supernatural cognition of some "religious zealots" to a metaphysical system.

There are two possible sources for this meaning of 'centre'. In Plotinus' theory on the human soul's ascent towards Mind, Plotinus speaks of one centre, the human soul, being united with another centre, Mind. Bruno may have picked up the expression 'centre' from Ficino's translation and commentary. In Plotinus' theology, this image was used on several occasions to illustrate how man — that is, the contemplative philosopher — can achieve mystical union with his first origin, the ineffable One, by travelling noetically through the hypostases Soul and Mind.

'centre' as an expression of the absolute, or God, see also id., Camoeracensis, pp. 68.27-69.5; Infinito i, p. 85.

1 PLOTINUS VI ix [9] 10.13-17, which reads in Ficino's translation, p. 769.34-41: "Tunc sane neque propri subjicit, neque tanquam vidit, neque duo quaedam imaginatur: sed animus tunc tanquam factus iam alius, neque ipse ulterior, neque sui duntaxat illuc se confert, eique se dedit, factusque totus illius, evadit protinus unum tanquam centrum [τὸ κέντρον] cum centro coniungens." See also FICINO, In Plotinum VI ix [9] 11, p. 769.48-51: "Animus ergo cum ipso principio rerum uno tunc demum unitur arctissime, quando ipse potissimum in se sit unum: id autem efficitur, quando exutus multitudinem [multitudine] quae ad imaginationem, rationem, intelligentiam pertinet, evadit sola sua unitas, atque hac ipsa per amatorium affectum fruitur unitate divina, centrum ita suum cum centro copulans universi." For this metaphor of the 'centre' as the "point" from which emanation occurs in Plotinus, see ARMSTRONG, Intelligible universe, p. 60; SINNIGE, 'Metaphysical and personal religion in Plotinus', pp. 147-148, 150-151, 153.

2 For the ascent of the soul, see PLOTINUS VI ix [8] 1-11 (= tr. Ficino, pp. 756.27-771.19). The image of the One as a 'centre' with which another 'centre', the human soul, may unite, also appears ibid., V i [10] 11.11 (= tr. Ficino, p. 492.22). For similar uses of 'centre' to express mystical union with the One, see ibid., VI viii [39]
Bruno’s statement that the third contraction occurs when the soul contracts from the ‘horizon’ into the ‘centre’ could mean, then, that the individual soul turns from its nature towards the Ideas in Mind, that is, the ‘centre’. In another context Bruno uses a similar image. The five senses, he says, have their centre in the human soul, the sensus communis, from where the human soul ascends to a second centre, God. Further, again in keeping with Neoplatonic metaphysics, Ficino says that God is the only ‘centre’ of everything, and that the emanations Mind, Soul, nature and matter form concentric circles around that centre. None of these sources, however, completely fits Bruno’s image in the third contraction, and they all require further clarification of the Platonic or Neoplatonic epistemology involved. I shall return to this issue in Chapter 3 and 4.

(iv) Contraction producing divine dreams, visions and revelations

Through the soul's “contraction” on, or attentiveness towards, the image of a thing to be understood, the human soul may expose itself to “divine dreams, visions and revelations.”

---

18.8, 9, 10, 11 (= tr. Ficino, p. 752.52, 54, 55). For the One as a ‘centre’ from which multiplicity derives, see ibid., VI v [23] 5.1-23 (= tr. Ficino, pp. 663.41-664.12).

1 BRUNO, §74.1-16, pp. 1036-1038 (= BOL, vol. 3, p. 50.4-19): “Figurabatur circulo, qui tum circa proprium centrum, tum circa alium secundum totum movebatur, ad denotandum duplicem intelligendi rationem illi tribui — ut Platonici est satis vulgare: altera, qua vertit se circa seipsum, altera circa Deum. [Bruno explains the first ‘centre’:] Quemadmodum omnes sensus particulares ad sensum communem — quemadmodum ad unum centrum — referuntur et reducuntur”. However, here Bruno speaks of the human soul moving in a circle around a centre, not towards it. This image may derive from PLOTINUS VI ix [9] 8.1-8 (= tr. Ficino, p. 76[6].29-41).

revelations”. Although this idea seems to open up the possibility of a supernatural agent transmitting knowledge to a sleeping human, this may not be Bruno’s intention, since he qualifies the idea by adding that “to the one who truly strives, nothing is difficult [to comprehend]”. Iamblichus’ De mysteriis Aegyptorum may be a source. There Iamblichus says that the soul disposes of a double road to knowledge, one dependent on the body, another independent of the body. In sleep, the soul can pursue the latter, since then it is free from the bonds of the body and can comprehend the intelligible world. In the Eroici furori Bruno says explicitly that Iamblichus’ idea of contemplation independent of the body is the model of the fifteen contractions in the Sigillus. Could it be that Bruno, in this fourth contraction, regards the human soul’s attentiveness, stimulating the soul to experience “divine dreams, visions and revelations”, as such a form of contemplation? I cannot say so definitively, but I think it is very probable.

In the fifth to the ninth contraction Bruno moves on to psychological issues, dealing with the role of various emotions in noetic ascent.

---

1 BRUNO, Sigillus i 38, p. 183.8-11: “Contractione intentionis in rei cognoscendae speciem, divinis insomnis, visionibus et revelationibus exponitur animus”.
2 Ibid., i 38, p. 183.11: “ipsi quippe vere intendenti nihil est difficile.”
3 IAMBLICHUS, De mysteriis Aegyptorum, Chaldaeorum, Assyriorum, tr. Ficino, fol. b5v, line 37 to fol. b6r, line 8 (= IAMBLICHUS, De mysteriis Aegyptorum, ed. des Places, iii 3, p. 101).
4 BRUNO, Furori ii 1, p. 327: “È tanta la virtù della contemplazione (come nota lamblico) che accade tal volta non solo che l’anima ripose da gli atti inferiori, ma et oltre lascie il corpo a fatto. Il che non voglio intendere altrimenti che in tante maniere quali sono esplicate nel libro De’ trenta sigilli, dove son prodotti tanti modi di contrazione.” By “De’ trenta sigilli” Bruno means the Sigillus. See p. 16 n. 2 above.
(v) Contraction produced by faith

A mental tension produced by faith can empower the soul to affect physical things.\(^1\) Bruno illustrates, ironically, this with mountains being moved by faith, an obvious allusion to Matthew 21.21-22: "Jesus answered and said unto them, Verily I say unto you, If ye have faith, and doubt not, ye shall not only do this which is done to the fig tree, but also if ye shall say unto this mountain, Be thou removed, and be thou cast into the sea; it shall be done. And all things, whatsoever ye shall ask in prayer, believing, ye shall receive."\(^2\) In the Bible, the mountain is moved by Jesus because the disciples have faith in him. In Bruno's fifth contraction faith cures the body and, Bruno adds ironically we may assume, moves mountains. No supernatural agent is needed.\(^3\) Events caused by faith, as the mountain being moved by faith, occur, Bruno says, when a 'passive principle' is found together with an 'active principle'.\(^4\) By 'passive principle' he may mean the object towards which faith is directed, e.g. a mountain, and by 'active principle' he may mean the subject who directs faith towards that object.\(^5\) Bruno adds in this fifth contraction that psychological affects — such as faith, fear, desire, hope, joy and sadness — are decisive to the efficacy of magicians' and doctors' work. Accordingly, Bruno denies that witchcraft (artificiosae

---

1. BRUNO, Sigillus i 39, pp. 183.12-184.7.
3. As we shall see in Ch. 4, in 1624 the French philosopher, scientist and theologian Marin Mersenne (1588-1648) wrote, precisely in connection with the fifteen contractions advanced in the Sigillus, that Bruno "does not believe at all in the Christian faith". See MERSENNE, L'impiété des déistes i 10, pp. 232-234, as quoted on p. 149 n. 1 below. For Mersenne's strong rejection of Bruno's treatment of faith in this paragraph of the Sigillus, see BUCCOLINI, 'Contractiones in Bruno', pp. 504, 509, 514, 517.
4. BRUNO, Sigillus i 39, p. 183.15-17.
fascinationes) and medical incantations (medicae adiurationes) work by virtue of anything supernatural.¹

Although Bruno only deals briefly with magic in these fifteen contractions, namely in this fifth contraction, it should be noted that he does dedicate two important pages to the theme of magic in the Sigillus ii 5, where it is treated as one of the guides (rectores) to noetic ascent.² It may be true that the object in the Sigillus ii 5 is magic, but his discussion of various forms of magic may also be intended as an alibi against potential accusations for the heterodox equation of Christian practice of faith with magic, even base magic, which may take place in the passage in question. One kind of magic, Bruno maintains there, eradicates reason through faith and credulity, which brings about an unworthy contraction of the human mind, so that reason is "mortified" and the mind dragged down to something ontologically lower by an imagination disturbed by faith. Another kind of magic produces a praiseworthy kind of contraction, building on "regulated faith", enabling the human being to make his senses acute and strong, and, on that basis, to ascend gradually to the higher parts of the soul, ultimately to contemplate the universals.³

¹ BRUNO, Sigillus i 39, pp. 183.17-184.5.
² For Bruno's theory of magic in the Sigillus, see ibid., ii 5, pp. 197.25-199.17.
³ Ibid., ii 5, pp. 197.26-199.1: "Quid de magia, quae cum media mathesi fere in eadem ab extremis physicis atque metaphysicis aequidistantia consistit? Haecque duplicis est generis: altera, quae vel per credulitatem et fidei vim, vel per alias non laudabiles contractionis species sensum mortificat, quo propria ratio per aliquod extrinsecum penitus absorbeatur, ut natura melior in alicuius deterioris imaginem transformetur ... ; altera vero est, quae per regulatam fidem et alias laudandas contractionis species tantum abest ut sensus perturbatione quandoque utatur, ut eumdem clauditatem fulciet, errantem corrigat, imbecilem et obtusum roboret et acuat. Haec cum norit, daemonis magni (qui amor est) virtute, animam per spiritum corpori copulari, magisque separatam divinamque vim spiritui per animam, et universalia omnia omnibus per media plura vel pauciora adnecti et concatenari, cumque non lateat geminam esse animam, superiorem vide licet magisque intellectualem quae in se ipsa pulchrum effingit, et inferiorem quae in alio, primam ad superiorem, secundam ad inferiorem et vulgarem Venerem referri, illamque
Outside the Sigillus Bruno distinguishes between theological and philosophical faith in a way which seems parallel to the distinction in Sigillus ii 5 between credulity (one sort of faith, possibly corresponding to theological faith), and rationally controlled belief (a second sort of faith, possibly corresponding to philosophical faith). Theological faith, Bruno says, is firm belief obtained through first principles, which are given by a superior intelligence, i.e. God, but which are not comprehensible to human reason. Philosophical faith, on the other hand, is firm belief in that which is manifest to human senses and reason, and whose appearance depends on first principles. How does this fit into the pages on magic in the Sigillus ii 5? It would make sense to assume that the contraction of the mind undertaken through a “regulated faith” enables man to comprehend the intelligible realm, and that it corresponds to philosophical faith; faith would then be “regulated” by the hierarchy of being, through which the soul ascends. This assumption may find support in De la causa, principio et uno, published in London in 1584, where Bruno asserts that, for someone who “does not believe”, “contemplation” and noetic “ascent” will be impossible.

---


2 BRUNO, Causa iv, p. 253: “Possete quindi montar al concetto, non dico del summo et ottimo principio, escluso della nostra considerazione, ma de l’anima del mondo, come è atto di tutto e potenza di tutto, et è tutta in tutto: onde al fine (dato che sieno innumerabili individui) ogni cosa è uno; et il conoscere questa unità è il scopo e termine di tutte le filosofie e contemplazioni naturali: lasciando ne’ sua termini la più alta contemplazione, che ascende sopra la natura, la quale a chi non crede, è impossibile e nulla.” For the date of publication, see AQUILECCIA, ‘Bruno, Giordano’, p. 658.
Bruno uses the orthodox Neoplatonic distinction between the two Venuses in an unorthodox context, namely to explain the two kinds of magic and the corresponding two forms of faith. Following Plato’s *Symposium*, Plotinus had correlated to the two-fold soul two kinds of desire, namely heavenly Aphrodite, characteristic of the higher part of the soul, and vulgar Aphrodite, characteristic of the lower part of the soul.\(^1\) The higher part of the soul, symbolised by heavenly Aphrodite, enables humans to comprehend the eternal Ideas.\(^2\) The Greek Aphrodite, used by Plotinus, corresponds to the Latin Venus, or the Italian *Venere*. In the Renaissance, Ficino had embraced the metaphor of the two Venuses and had made it a prominent metaphor in his Neoplatonism, symbolising two distinct human desires. Heavenly Venus stands for the desire for the Ideas in Mind, existing free of matter. Vulgar Venus, on the other hand, stands for the soul’s desire for the sensible beauty produced by generation and multiplicity in matter.\(^3\) Hence, in the thought of Ficino, the metaphor came to denote a distinction between intellectual and sensual desire. Other philosophers in the Renaissance influenced by Neoplatonism took up the metaphor.\(^4\)

Bruno integrates the Neoplatonic idea of the two Venuses into his personal idea of noetic ascent and his criticism of contemporary religious institutions, that is, against orthodox Christianity. Elaborating on the kind of magic produced through "regulated

---

3. *Ficino, De amore* II vii, pp. 153-155. See also ibid., VI v, VI vii-viii, pp. 205.7-12, 208-212. For Ficino’s use of the metaphor, see *PANOFSKY, Studies in iconology*, pp. 141-144.
4. *Landino, Disputationes camaldulenses* iii, pp. 125-126; *Pico, Commento* ii 10-13, pp. 498-504; *Diacetto, I tre libri d’amore* iii 2, pp. 108-110. For the use of the metaphor of the two Venuses in Renaissance thought and art, see *PANOFSKY, Studies in iconology*, pp. 141-144, 147-148, 152-155, 167-168; *Chastel, Art et humanisme*, pp. 269-272; *Wind, Pagan mysteries in the Renaissance*, pp. 113-151. However, the application of the metaphor in *Bruno, Sigillus* ii 5, pp. 197.26-199.1, as quoted on p. 27 n. 3 above, has not been described in these studies.
faith”, i.e. the rationally controlled powers of the soul, he says, picking up on the metaphor of the two Venuses, that the human soul is twofold. In order to ascend noetically, the higher soul should desire and ascend towards celestial Venus.\(^1\) Contraction, then, understood as the soul’s desire for the celestial Venus is, then, an intrinsic concept of Bruno’s concept of a pantheistic religion in which faith and revelation are replaced by the individual’s rational understanding of, and wonder at, the divine.\(^2\)

(vi) Contraction produced by filial piety

Similarly, filial affection (\textit{pietas ergapatrem}), may bring about a certain concentration of the mind. The mute son of Croesus, for instance, moved by filial affection, uttered words he was believed never to have heard before. But one should not believe, Bruno notes, that the son of Croesus was able to speak words never heard before. Rather, Bruno explains, one should imagine that the son of Croesus had previously heard those words, and that filial affection made the son of Croesus recall them.\(^3\)

(vii) Contraction produced by fear

Fear of natural dangers, such as snakes, can produce a fearful state of mind in which words uttered in the dangerous situation are imprinted so well in the fearful person

\(^{1}\) BRUNO, \textit{Sigillus} ii 5, pp. 197.26-199.1, as quoted on p. 27 n. 3 above.

\(^{2}\) This meaning of contraction is not described in GRÜNEWALD, \textit{Die Religionsphilosophie}, pp. 135-142. There, however, Bruno’s stance in regard to faith and reason in his Italian dialogues is described in parallel to this treatment of contraction in the \textit{Sigillus}.

\(^{3}\) BRUNO, \textit{Sigillus} i 40, p. 184.8-20. For Ficino as a possible source to this passage, see STURLESE, ‘Le fonti’, p. 142.
that it may be possible for him or her to recall them years later. Bruno claimed to have had this experience as a child. He was scared by a snake, which his father drove away using vehemently angry words. When Bruno later recalled the words shouted by his father, his parents were indeed surprised. This, Bruno asserts, indicates how a so-called miraculous event, in which men speak in an extraordinary manner, is not caused by the intrusion of a foreign spirit, but caused naturally. Bruno explains fear as a phenomenon with natural causes and effects, thus refuting a supernatural line of interpretation typically evoked in traditional religious explanations.\(^1\)

(viii) Contraction of *spiritus* produced by fear

Another possible outcome of fear is that the *spiritus* becomes tense and is driven towards the “castle of the heart” and other internal parts. (By the Latin term *spiritus*, as it is used here and in the following, I mean the vapour, derived from the finer blood, that acted as an intermediary between body and soul. The term ‘spirit’ and cognates elsewhere in this thesis do not concern *spiritus.*) The psychological effect described in the eighth contraction may in turn cause physiological change, for good or worse. It may, for example, cure the scared person.\(^2\) In a sound and robust soul, however, fear will not have such effects. Pythagoras is one example.\(^3\) In the *Eroici furori* Bruno mentions the fifteen contractions in passing and condemns contraction caused by fear of death as to be disdained.\(^4\) He does not, however, speak explicitly

---

1 BRUNO, *Sigillus* i 41, pp. 184.21-185.18.
2 Ibid., i 42, pp. 185.19-186.14. For Ficino as a possible source for this eighth contraction, see STURLESE, ‘Le fonti’, pp. 142-143. As already mentioned above, I shall discuss Sturlese’s identifications of the sources for these fifteen contractions in Ch. 4, pp. 153-154 below. For an explanation of the term *spiritus* in Ficino’s thought, see pp. 136-138 below.
3 BRUNO, *Sigillus* i 42, pp. 185.24-186.27.
4 Id., *Furori* ii 1, p. 327, as quoted on p. 16 n. 2 above.
about fear of death during his discussion of the fifteen contractions in the *Sigillus*, only about fear in general, but the discussion of fear in the seventh and the eighth contraction may imply fear of death. In other works Bruno explains that there is no reason to fear death, since the form and matter of which a human being is composed are permanent principles and do not dissolve on death.¹ Lastly, in the *Spaccio*, a dialogue about religious reform, Bruno complains that fear of death tyrannises his contemporaries. We may assume that he means the Christian idea of the soul’s afterlife and the resulting fear of life after death.² Fear is not wholly rejected by Bruno. It must, however, be joined with prudence in order to be acceptable, not with cowardice and desperation.³

(ix) Contraction produced by an intensity of desire

Desire for a certain physical feature may effectuate the physical state desired. One example Bruno gives is that of a pregnant woman, who can imprint on the foetus the characteristics she desires most.⁴

---

¹ Id., *Causa* ii, pp. 139-141; *Cena* v, p. 257.
² Id., *Spaccio* ii 3, p. 317: “Ecco qua, o Sofia, la più degna et onorata ricetta per rimediare alla tristizia e dolor che apporta la matura etade, et all’importuno terror de la morte che da l’ora che abbiamo uso di sensi suol tiranneggiar il spirito de gli animanti.”
³ Ibid., iii 3, p. 471: “Provediamo ora a la Lepre, la qual voglio che sia stata tipo del timore per la Contemplazion de la morte. Et anco per quanto si può de la Speranza, e Confidenza, la quale è contraria al Timore: perché in certo modo l’una e l’altra son virtudi, o almeno materia di quelle, se son figlie della Considerazione e serveno a la Prudenza: ma il vano Timore, Codardiggia, e Desperazione, vadano insieme con la Lepre a basso a caggionare il vero inferno et Orco de le pene a gli animi stupidi et ignoranti.”
⁴ Id., *Sigillus* i 43, p. 186.15-22. For Ficino as a possible source for this ninth contraction, see STURLESE, ‘Le fonti’, p. 143.
(x) Contraction produced by restriction of number of sense organs used

Because we shut our eyes during sleep, we experience certain mental images more clearly. Similarly, if we restrict the number of sense organs applied (*numerum contractio*), we use the remaining senses more acutely than if we had used all our senses.¹

(xi) Contraction produced by melancholy

From the tension of the mind produced by black bile (also mentioned in the second contraction) originate disturbed fantasies and lustful states of mind in some men. By eating special food it is possible to induce certain physiological forms of *spiritus* and thereby certain erotic fantasies, which the practitioners erroneously hold to be real.² Even though Bruno regards this form of contraction as despicable, he does not completely reject melancholy from his theory of noetic ascent. “More noble souls” who manage to contemplate the divine can, Bruno concludes in this contraction, be assisted by melancholy. However, this is not due to their *spiritus*, but to their superior intellect. Similarly, those who fail to undertake such a contemplation do so because of their intellectual incapacity.³ Hence, in itself melancholy is insufficient to provide

¹ BRUNO, Sigillus i 44, pp. 186.23-187.14. For Ficino as a possible source for this tenth contraction, see STURLESE, ‘Le fonti’, pp. 143-144.
² BRUNO, Sigillus i 45, pp. 187.15-189.14. For Ficino as a possible source for this eleventh contraction, see STURLESE, ‘Le fonti’, p. 144.
³ BRUNO, Sigillus i 45, p. 189.6-14: “Plane enim constat, haec nobilioribus animis ingeniisque felicioribus et actum imaginationis supra phantasticum objectum reflectere potentibus esse impossibilia. Haec etenim (sicut et altera proxime referenda) non ex temperatioris melancholieae divinioribus ingeniis subserviente materia, supra quam per cogitationis fortitudinem attolluntur, sed per quandam ratiocinii imbecillitatem in gremium materiae crassioris immersi supprimuntur.”
noetic ascent, although it can provide a starting point of contemplation if well balanced. This is the second time Bruno uses the term 'contraction' in connection with the theory of humours. The following contraction also concerns the humours.

(xii) Contraction produced by starvation

A similar kind of melancholic state of mind turns up from the precepts of some of "our not very ingenious apocalyptics". Self-inflicted hunger, which produces a "Saturnine complexion" (‘complection’ understood in the technical sense, i.e. the balance of humours determining the character of a person), and self-flagellation, producing ecstasy and leading the soul’s attention towards “the death of some Adonis”, generates a melancholic spirit (in the sense of soul) inwardly.¹ In this passage Bruno is clearly alluding sardonically to extreme forms of Christian asceticism. Apart from Ficino, to whom I shall return below, Bruno may here be alluding to the meditations endorsed in the Exercitia spiritualia of the Spanish founder

¹ Ibid., i 46, pp. 189.15-190.5: “iam ad non magis ingeniosos apocalypticos nostros respiciamus, qui cum eiusdem pessime olentis melancholiae specie laborent, fine tamen per libidinis diversitatatem differunt; hoc maxime detestamur, quandoquidem interim stulti non propriam modo, sed et aliorum ignorantum et asinorum (quibus prophetae atque revelatores pietatis apparent) turpissimam stultitiam enutriunt. Hi mage naturale nutrimentum contemnentes postquam in maciem et vitiose Saturnium complexionem fuerint adacti, quibusdam (ad phantasiam perturbandam) aptissimis praeviis (quas pias credunt) meditationibus ipsi faventem noctis umbram potiti, tristitiam quandam subeunt, ubi flagris lenius caedendo sese, ab internis calorem ad partes exteriores evocant, ut hoc interius mage remisso amplius in spiritu melancholicus tepor intendatur, et ut nulla ad extasim contrectandam desit occasio, animi excogitationem ad alcuibus Adonidis mortem adpellentes". On this passage, see RICCI, Giordano Bruno, pp. 232-233. CLEMENS, Giordano Bruno, p. 177, asserts that in BRUNO, Sigillus i 46, p. 190.14-18 we find an allusion to Francis of Assisi. For ‘complection’ in the passage quoted, se SIRAISI, Medieval and early Renaissance medicine, pp. 101-104.
of the order of Jesuits, St Ignatius Loyola (1491-1556).¹ In his *Exercitia spiritualia*, Loyola recommends that during meditation on Hell, one should eat less and torment one's body with pain, for instance, by self-flagellation.² Moreover, the meditations of Loyola were arranged around the life and death of Christ, which is possibly what Bruno alludes to with the words "the death of some Adonis": The meditations of the first week were dedicated to sins; the second to the life of Christ; the third to the passion of Christ; and the fourth to the resurrection and ascension of Christ.³

There may, however, be other sources than Loyola. Self-flagellation was a widespread practice among Christians, used, among other things, to imitate the suffering of Christ.⁴ And, again, the choice of Christ as a figure to meditate on in a spiritual exercise is hardly surprising, given the epoch we are dealing with. Bruno's criticism probably, therefore, aims at a much wider religious culture than that of Jesuits.
(xiii) Contraction producing levitation

In persons of eminent contemplative capacity, such as Aquinas, it is possible to unite in the soul the animal, sensitive and natural spiritus.\(^1\) Here spiritus animalis sensitivus atque motivus presumably refers to animal spirit in its various capacities rather than to the traditional threefold distinction of animal, natural and vital spirits. Elsewhere Bruno speaks of spiritus sensitivi et motivi flowing through the nerves.\(^2\) This suggests that spiritus sensitivi et motivi correspond to the animal spirits in that, according to the standard theory of the humours, natural spirits were transmitted through the system of veins, vital spirits through the arterial system, and animal spirits through the nervous system.\(^3\) Thereby, Bruno continues, the body floats in the air — not because of a miracle, but because of the power of Aquinas' soul. The rapture of St Paul may be assigned to the same cause, Bruno adds.\(^4\) We cannot, however, completely rule out the possibility that Bruno is ironic here, since Aquinas was notoriously corpulent.\(^5\)

---

\(^1\) BRUNO, Sigillus i 47, p. 190.22-25: "hic [Aquinas] enim cum collectis animi viribus in imaginatum coelum raperetur, adeo in unum spiritus animalis sensitivus atque motivus est collectus, ut corpus a terra in aerem vacuum tolleretur". WALKER, 'The astral body', p. 120, and id., Spiritual and demonic magic, p. 5 n. 4, points out that Ficino and Avicenna followed Galen, and others, and divided spiritus into three, namely, natural, vital and animal spiritus. For spiritus in Ficino's De vita, see WALKER, 'The astral body', p. 124 n. 1; id., Spiritual and demonic magic, p. 5 n. 4.

\(^2\) BRUNO, Libri physicorum arisotelis explanati, p. 381.22.

\(^3\) E.g. FICINO, In Timaeum lxxx, p. 1479.43-60.

\(^4\) BRUNO, Sigillus i 47, pp. 190.25-191.5. St Paul's raptus is depicted in Actus apostolorum 9.1-12. See also ibid., 22.5-16; 26.12-18. The flight up into heaven, to which also Mersenne refers (L'impitie des deistes i 10, p. 234), is described in 2 Ad Corinthios 12.1-4. For Ficino as a possible source for the thirteenth contraction, see STURLESE, 'Le fonti', p. 144.

\(^5\) WEISHEIPL, Friar Thomas d' Aquino, p. 17.
Aquinas was well known for his powers of concentration, which were so great that he was sometimes taken by rapture intellectually. However, Bruno may be referring to a legend, ignored so far in the literature on Bruno, according to which Aquinas was seen in levitation whilst praying in the chapel of Saint Nicholas in Naples. Given Bruno’s association with Naples, and his familiarity with Aquinas, he probably knew this legend. Is this the legend Bruno refers to? It says nothing about contemplation, but about prayer. Furthermore, the story suggests that it was Christ, to whom Aquinas was praying and who spoke to Aquinas in response, who levitated Aquinas, and not Aquinas’ own contemplative powers. According to Ingegno, Bruno offers a naturalistic explanation of Aquinas’ levitation, which may otherwise have been explained through supernatural interference. Is this a plausible interpretation?

To begin with, Bruno’s and Ficino’s accounts of St Paul’s levitation differ. Ficino insists that the rational powers of the individual are insufficient to bring about a rapture like that of St Paul; faith, hope and grace must also be present. Here, as in

1 Ibid., pp. 137, 235-236, 244, 300-301. For Aquinas in spiritu rapitūr, see ibid., p. 236.
3 For Bruno’s associations with Naples, see RICCI, Giordano Bruno, pp. 32-105. For the importance of Aquinas’ philosophy to Bruno, see references p. 160 n. 1 below.
4 INEGNO, ‘Nota sul Sigillus sigillorum del Bruno’, p. 366; id., Cosmologia, pp. 253-254, where Ingegno observes that Bruno’s treatment of Aquinas’ levitation is “puramente naturale”. See also RICCI, Giordano Bruno, pp. 70-71, who, like, Ingegno, observes that Bruno refuses to explain Aquinas’ levitation as a miracle but, instead, as an outcome of natural causes.
5 FICINO, In Epistolæ Pauli prooemium, p. 425.29-31: “Quoniam vero nec ipsa mentis contemplatio propriis viribus intelligentiae ad divina pervenire potest. In hac nobis iterum tres quidam gradus, quasi coeli tres constituenti, seu potius a Deo per Paulum petendi, videntur. Fides, spes, charitas.” For the role of grace in this text of Ficino, see VASOLI, ‘Considerazioni sul De raptu Pauli di Marsilio Ficino’, pp. 383-385, 397-398. Pico may refer, critically, to Ficino’s interpretation of St Paul’s
the case of faith, which is able to move mountains without divine interference, Bruno apparently assigns powers to the human being which are assigned to God in the Christian tradition, implying a devaluation of divine supernatural interference. This agrees with Ingegno’s interpretation.

(xiv) Contraction produced by malnutrition

This detestable contraction is produced by deliberately eating in such a way as to disturb a person’s natural complexion (again understood in the sense of humoral balance). People deliberately upsetting their natural balance of humours in this way can become demented and possessed (amentes atque fanatici), either because of a change in their own spirit or through the intrusion of an external spirit. In this way the simple-minded can appear wise and the credulous seem contemplative.1 To illustrate this point Bruno mentions a monk from Brescia who through contraction in this way seemed suddenly to have turned into a prophet, a great theologian and versed in every language. His brother monks had imprisoned him, because they attributed these powers to an evil force. But Bruno cured him. By means of a potion made of a polyp sucker blended with the juice of crushed polypody (a fern), he cured the monk, who thereafter reverted to being the ass that he had always been.2 Once again there is a

---

1 BRUNO, Sigillus i 48, pp. 191.6-24.
2 Ibid., i 48, pp. 191.24-192.5: “et monachus Brixiae, me praesente ipsumque curante, qui hac arte [of Saturnine temperament enhanced by melancholic humours] repente propheta, magnus theologus et linguarum omnium peritus videbatur effectus, ipse, cum monachorum tantam sapientiam ad malum principium referentum consilio
suspicion that Bruno is ridiculing Christian beliefs, notably in this case, the glossolalia described in Acts, and proposing that supposedly miraculous events of this kind should be attributed to natural causes.

(xv) Contraction practised by philosophers

Lastly, Bruno mentions the praiseworthy concentration of the soul, characteristic of philosophers. He mentions two philosophers — Anaxarchus and Polemon — and a Christian saint — Saint Lawrence — as examples of people who were able to ignore physical pain because they had separated, ‘contracted’, their souls from their bodies.¹

3. Heroic practice in the fifteen contractions and its theory

In these fifteen contractions we have seen Bruno’s views on a variety of physical and psychological circumstances which he thinks relevant to noetic ascent. Some of these circumstances overlap with religion, such as his treatment of faith, fear and other emotions in the fifth to the eighth contractions, others with medicine, such as his comments on melancholy in the eleventh, twelfth and fourteenth contractions. Two features recur in his remarks on these various types of noetic ascent. The first is his tendency to explain them by means of natural processes, that is, without recourse to a

fuisset in cacerem detrusus, virtute acetabuli cum polypodii contusi succo temperati, humoribus melancholicis atque spiritu evacuatis, talis, qualis semper extiterat, asinus apparuit.” This monk may, according to RICCI, Giordano Bruno, pp. 119-120, have been someone that Bruno actually met in Brescia.

¹ BRUNO, Sigillus i 49, pp. 192.6-193.5. He may refer to his fifteenth contraction in id., Furori ii 1, p. 327, as quoted on p. 16 n. 2 above. For Ficino as a possible source for this fifteenth contraction, see STURLESE, ‘Le fonti’, pp. 145, 158-159; RICCI, Giordano Bruno, p. 234.
supernatural agent. The second is his insistence that the human mind can be autonomous.

Which of the contractions are heroic? Bruno disdains traditional religious interpretations in terms of emotions, in particular faith, as in the contractions five to eight. And in the second, the eleventh, the twelfth and the fourteenth contractions he strongly criticises the attempt to ascend noetically through inducing melancholy artificially. The thirteenth contraction, about Aquinas’ powers of concentration, is dubious. The third, “contraction of the horizon into the centre”, and the fourth contraction, about intellectual concentration, which is described very briefly, are described without any overt criticism. The first contraction, about solitude, is described very positively. But only the fifteenth contraction (contraction of philosophers) is explicitly praised. Hence the solitary, contemplative philosopher’s endeavour is prominent, or “heroic”, to use Bruno’s word.

This account of the various forms of noetic ascent agrees with Bruno’s theoretical comments in a passage entitled ‘On the fivefold and simple degree of ascent’, included immediately before his discussion of the fifteen contractions.1 First, in this theoretical discussion, as for the fifteen contractions, Bruno regards ascent achieved through the exercise of intellect as the only valid form of ascent. Ascent achieved through the emotions — treated with disdain in the fifth to the eighth contractions — and an imbalance of humoral fluids — fiercely criticised in the eleventh, the twelfth and the fourteenth contractions — are not considered at all in this theoretical discussion. Second, Bruno clearly has in mind Plotinus’ account of the human soul’s ascent to the One.2 As we have seen in the third contraction, this theory of Plotinus may well be among the direct or indirect sources of the third contraction.

---


2 Plotinus is mentioned by name ibid., i 32, i 33, pp. 175.22, 178.7. Moreover, ibid., i 33, p. 175.22-24, whose context is noetic ascent, reads: “Plotinus ... si non ex toto, magna tamen ex parte nobis consentire videtur”).
The soul’s noetic ascent corresponds objectively to the ontological structure of the intelligible universe, which means in this context that noetic ascent passes through four stages before reaching the One, namely sensation (sensus), imagination (imaginatio), reason (ratio) and mind (intellectus). The first stage is sensation, which by means of sense organs initiates the soul’s cognition.\(^1\) The second stage is imagination, which considers the sense data transmitted by the sense organs and, in addition, discursive thought in the soul.\(^2\) The third stage is reason, which examines the content of imagination discursively.\(^3\) The fourth stage is mind, which is when the soul leaps from discursive reasoning into intuitive comprehension of the hypostasis Mind.\(^4\) The fifth and last stage is ecstasy and union with the One.\(^5\)

4. The double contraction

Bruno explains the philosopher’s ascent to unity in his *Eroici furori* and, even more conspicuously, in his mnemonic works. Of particular interest is his *Sigillus*. Having set out the fifteen contractions in the first part, he returns to the theme of contraction in the second part. On one occasion he ties contraction as a noetic concept to contraction as an ontological concept, stating that these two concepts denote opposite movements on the ladder of nature. Contraction in the ontological sense is movement from unity to multiplicity, whereas contraction in the noetic sense is a movement from sensible

---

1. Ibid., i 31, p. 173.2-4. Sensation, the first stage of noetic ascent, is treated ibid., i 31, pp. 172.16-174.20.

2. For this twofold function of imagination, see ibid., i 31, i 32, pp. 173.4-6, 174.22-175.3. For Plotinus as a source for Bruno’s idea of the twofold function of imagination, see pp. 113-114 below. For imagination as the second stage in Bruno’s account of noetic ascent, see BRUNO, *Sigillus* i 32, pp. 174.21-177.4.

3. Ibid., i 31, p. 173.6-7. For reason as the third stage, see ibid., i 33, pp 177.5-178.26.

4. Ibid., i 31, i 34, pp. 173.7-29, 178.27-179.16.

5. Ibid., i 34, pp. 179.17-180.6.
multiplicity to intelligible unity. The following passage outlines how Bruno conceives of the philosopher’s movement from multiplicity to singularity, praised in the course of the fifteen contractions:

There is then a double contraction. The first contraction is one by which absolute form becomes form of this or that in this or that entity, in the same way as light \( \text{lux} \), which is, as it were, first in itself and then, subsequently \( \text{postea} \), by a certain progression of this and that becomes the light \( \text{lumen} \) of this or that in this or that (without, however, ever emitting anything from its substance and without detracting from its integrity). The second contraction is that by which inferior nature, through a certain disposition of agreement and consent, a multiplicity participating by virtue of an impulse that is sometimes natural, at others a conceptual, is collected together and collects many participating entities into one. The first contraction is whereby form, absolute and infinite with respect to essence, is determined to this and that matter; the second contraction is whereby infinite and indeterminate matter is determined through number to this or that form.\(^1\)

This quotation needs some explanation. The idea explained at the end of the quotation is that there are two indeterminate principles, namely form and matter. Form is

\(^1\) BRUNO, Sigillus ii 22, p. 214.6-19: “Duplici ergo existente contractione: altera, qua absoluta forma fit huius illiusque in hoc et in illo forma, sicut lux, quae est primo velut in se ipsa, postea progressu quodam huius efficitur atque illius in hoc et in illo lumen, (dum tamen de sua substantia nihil emittat et a propria integritate non deficiat); altera contractio est, qua inferior natura per quamdam assensus et obedientiae habitudinem, tum naturali tum notionali adpulsu et multitudo particeps colligitur, et multa participatio colligit in unum. Prima contractio est, qua per essentiam infinita et absoluta forma finitur ad hanc et ad illam materiam; secunda est, qua per numerum infinita et indeterminata materia ad hanc illamque formam terminatur.” (I have deleted a comma after “efficitur atque illius”.) For a discussion of this passage, see SPRUIT, *Il problema*, pp. 148-149, 157-158; MANCINI, *La sfera*, pp. 67-70. STURLESE, ‘Le fonti’, p. 150, cites FICINO, *Theologia platonica* v\(16\), vol. 1, pp. 329.30-330.11, as the source for line 15-19 (“Prima contractio est ... formam terminatur”) of the above quotation of Bruno. Ficino does not, however, mention the term *contractio* or its cognates in that passage.
indeterminate inasmuch as matter is the principle that individuates form, and matter is indeterminate potentiality that becomes individuated through form. Both matter and form are characterised by infinity. The idea that number individuates infinite and indeterminate matter may be derived from the Neoplatonic theory of causation produced by means of numbers.¹

The analogy for the first contraction of forms — the light (lux) intrinsic to a light-giving source remaining undiminished even though it issues light (lumen) — derives from a Neoplatonic doctrine, namely that the One does not diminish on account of its ‘flowing out’, its emanation. This is the Neoplatonic doctrine of ‘undiminished giving’.² Bruno mentions this idea elsewhere in the Sigillus, stating that this is the light which “spreads from the sun through everything as its image”.³ In the Renaissance, Ficino had also used this distinction between the light intrinsic to a source (lux) and the light that it emits (lumen) to illustrate the Neoplatonic theory of emanation.⁴ He may well have been Bruno’s immediate source.

Bruno elaborates on the analogy of absolute form (forma absoluta) and light (lux) a few pages before the above quotation from the Sigillus. Absolute form, he says in the passage on form, “is the absolute form of being” from which all forms are communicated. It “gives being (esse) to all things” and is the “giver of forms”.⁵ The

¹ For this role of numbers, see also BRUNO, Sigillus ii 22, pp. 214.26-215.5. For the Neoplatonic theory of causation produced by means of numbers, see O’MEARA, Pythagoras revived, pp. 62-66.

² WALLIS, Neoplatonism, p. 62; DODDS’ note in PROCLUS, Elements of theology, p. 214; GERSH, ΚΙΝΗΣΙΣ ΑΚΙΝΗΤΟΣ, p. 28.

³ BRUNO, Sigillus ii 7, p. 200.6-8: “Est lumen intimius, quo sol per se lucet, a quo genere differens habetur lumen, quod inde velut imago solis per omnia manat.”

⁴ FICINO, In Timaeum x, p. 1442.5-10. See also id., Liber de lumine ii, p. 977.1-3; id., In Plotinum II i [40] 7, p. 93.27-31. For the light metaphor in Ficino’s philosophy, see SCHEUERMANN-PEILICKE, Licht und Liebe, pp. 61-258.

⁵ BRUNO, Sigillus ii 10, pp. 202.20-203.5: “Est una prima forma, per se et a se subsistens, simplex, impartibilis, essentiae, formationis et subsistentiae omnis principium, indiminiuibiliter omnibus se com[m]unicans, in qua omnis forma, quae
last expression had been used by Albert the Great (1193-1280) in his account of Stoic and Platonic theories of the origin of Ideas, as well as by Arabic philosophers as an equivalent for the Active Intellect. Bruno concludes in the Sigillus: "This universal form of being [i.e. absolute form] is infinite light, which bears the same relation to the forms of everything that the form of essential light bears to the forms of participated light (lux), light (lumen) and colour." So, absolute form is like light (lux), as it is intrinsically in the light producing body, existing in itself and for itself. When communicated to matter, this essential lux becomes the participating form of lux — light and colours (lumen and color) in things. Here Bruno draws on a standard Neoplatonic distinction, elaborated most authoritatively by Proclus, between

---

1 The expression ‘datore de le forme’ is translated from the Latin “dator formarum”, which probably derives from PLATO, Timaeus 28a6-b1. A Latin translation of a phrase in that passage of the Timaeus reads in the translation of Calcidius (fourth century AD): “Operi porro fortunam dat opifex suus” (PLATO, Timaeus 28a, tr. Calcidius, p. 20.22). See also ALBERT, De causis et processu universitatis a prima causa 1 i 3 (Stoics), I iv 1 (Plato), pp. 8.21-22, 8.34, 43.4, 43.63. It had also been used by Arabic philosophers, such as Avicenna (980-1037) and Averroes (1126-1198); see SPRUIT, ‘Motivi peripatetici’, pp. 393-396; id., Il problema, p. 109.

2 BRUNO, Sigillus ii 10, p. 203.10-13: "Haec forma universalis essendi est lux infinita, se habens ad omnium formas, sicut forma lucis essentialis ad lucis participativae, luminum et colorum formas.”
unparticipated, participated and participating being, corresponding to transcendent
Idea, immanent Idea and the material particulars.¹

In the quotation Bruno also explains the second contraction of inferior nature from
multiplicity to unity. In relation to this process he speaks of inferior nature and
multiplicity being united “through a certain disposition of agreement and consent”,
taking place “by virtue of an impulse that is sometimes natural, at others conceptual”.
His meaning is not entirely clear, but I shall make two suggestions which do not
necessarily exclude one another. First, by the terms ‘inferior nature’ and
“multiplicity” Bruno may be thinking relatively of any inferior hypostasis in the
Neoplatonic scheme of emanation; the more multiple a hypostasis is, the more inferior
it is. Matter is the lowest level in this scheme and it generates more multiplicity than at
any other ontological level. Bruno seems, then, to suggest that matter has an intrinsic
and active potency to cause some kind of unity, and that this process takes place “by
virtue of an impulse that is sometimes natural”. Here he may be hinting at an idea
developed in De la causa, according to which the two principles of matter and the
World Soul reciprocally determine each other to produce individual things.² Second,
the expression “conceptual impulse” may also mean that human contemplation is able
to gather the multiplicity of the sensible world into unity.³ This last interpretation fits
with Bruno’s ideas about experience of unity in the intelligible realm, the heroic
method of ascending noetically according to his account of the fifteen contractions.

¹ WALLIS, Neoplatonism, p. 126.
² BRUNO, Causa ii, p. 147, as quoted on p. 58 n. 2 below. Ciliberto noted the
similarity between the principles of individuation in the Sigillus and De la causa; see
CILIBERTO, Giordano Bruno, pp. 36-39; id., ‘Introduction’, pp. XXVI-XXVII. Ciliberto did not, however, point out contraction as a common component.
³ In one instance Bruno uses “adpulsus” in this noetic sense, see BRUNO, Explicatio,
p. 133.14-19: “Primus praecipuusque pictor est phantastica virtus, praecipuus
primusque poëta est in cogitativae virtutis adpulsu, vel connatus vel inditus noviter
quidam enthusiasmus, quo vel divino vel huic simili quodam afflatu ad convenienter
aliquid praesentandum excogitatum concitantur.”
In the following chapter I shall deal with contraction in the ontological sense, and then, in Chapter 3 and 4, I shall focus on the noetic sense of the term. By 'noetic', it may be best to state here once and for all, I mean 'mystical' in the sense that it can be applied to the *philosophies* of Plotinus, Proclus and other Neoplatonists. Philosophy can lead the soul from the multiplicity of the perceptible world to the intelligible realm, preparing it, perhaps, for an ultimate step that will take it out of itself in ecstasy to enjoy union with an absolute singularity (however that may be conceived). I shall use the terms 'noetic' and 'mystical' and their cognates in this sense.¹

¹ O'MEARA, *Plotinus*, pp. 106-108, comments that we should not see mysticism as the antithesis of rational.
CHAPTER 2

CONTRACTION AS AN ONTOLOGICAL CONCEPT

1. Bruno’s discussion of ontological contraction

In Bruno’s philosophy, contraction in the ontological sense is used in his theory of individuation to describe how a universal, infinite and singular substance relates to the individual entities dependent upon it.¹ The term is also applied in a special case in his philosophical description of human beings, who are ensouled like the rest of nature, though in a particular way.² The concept contraction has often been mentioned and paraphrased in accounts of Bruno’s theory of individuation, but it has not yet, to my view, received the attention it deserves in itself.³ By paying attention to how Bruno

¹ BRUNO, De umbris §§29.2-4, 63.2-6, 92.12-17, 94.2-9, 234.14-17, pp. 32, 52, 69, 69-70, 193; Sigillus ii 10, ii 18, ii 22, pp. 203.1-5, 209.11-14, 213.14-214.19; Causa epist., ii, iii, iv, pp. 21, 147, 187, 233, 243, 247; Spaccio epist., iii 2, pp. 23-25, 427; Furori i 4, p. 167; Lampas §419.15-22, p. 1452 (= BOL, vol. 3, p. 245.16-24); Acrotismus, pp. 93.19-94.3, 94.18-95.3, 148.19-149.3; De principiis §77, p. 684.3-7 (= BOL, vol. 3, p. 553.1-8); De minimo I 4, I 9, pp. 145.28-29, 169.21-22; De immenso i 1, v 12, viii 6, pp. 205.1-4, 156.10-17, 303.6-8; De compositione I i 4, p. 100.12-17; Summa, pp. 15.8-12, 21.7-12, 73.3-8, 95.18-19, 108.5-11.

² Id., De umbris §61.5-8, p. 51; Cabala ii, pp. 95-97; Lampas §408.13-23, pp. 1434-1436 (= BOL, vol. 3, pp. 238.22-239.6); De minimo V ii 3, p. 193.3-7.

describes the individuation of individual entities through contraction, we can clarify some important ideas in Bruno’s philosophy and in particular his interpretation of nature as a living and divine being.

We find ‘contraction’ employed in the ontological sense in many of his writings, but his treatment of the concept in the Sigillus and De la causa, published in London in 1583 and 1584 respectively, are of particular interest. De la causa offers Bruno’s most detailed account of contraction and for this reason I shall chiefly base my account of contraction on it. Bruno’s comments in the Sigillus, written shortly before De la causa, though less specific, complement Bruno’s treatment in De la causa nicely. Metaphysics is not Bruno’s main concern in the Sigillus. The various metaphysical comments in the Sigillus, including that of contraction as a theory of individuation, are sketchy and subordinated to the main purpose, the epistemological aspects of noetic ascent. Together the Sigillus and De la causa present a more or less coherent theory, one that enables us to interpret most of Bruno’s references to contraction in other works. In what follows, then, I shall base my account of contraction mainly on De la causa, where the metaphysical context of contraction is clearly set out, and include the Sigillus when it elucidates the metaphysical themes raised in De la causa.


Metaphysical themes are primarily dealt with in the following passages; BRUNO, Sigillus i 14-16, pp. 164.9-165.7: descent and ascent from and to the One (prima mens), Mind (intellectus), and nature; i 32-34, pp. 174.22-180.18: Plotinus’ metaphysics and epistemology (Plotinus is mentioned at i 32, i 33, pp. 175.22, 178.7); ii 3, pp. 195.17-196.25: using the art of memory, one should unite oneself with the anima mundi; ii 11, pp. 203.15-204.4: absolute form descends; ii 22, pp. 212.14-215.20: on contraction as descent and ascent. For BRUNO, Sigillus i 14-16, see SPRUIT, Il problema, pp. 285-286. For Sigillus i 32-34, see STURLESE, ‘Le fonti’, pp. 138-141. For Sigillus ii 3, see ibid., pp. 145-146. For Sigillus ii 22, see ibid., pp. 150, 160.
2. The metaphysical context of contraction

Bruno's theory of individuation is probably Aristotelian in origin, though it also adopts elements from non-Aristotelian philosophies. For instance, Bruno's concern about the respective roles of matter and form in the process of individuation derives from the terminology and problems characteristic of Aristotelian philosophy. But Bruno also adopts Platonic and Neoplatonic ideas. This is not to deny that classical and Renaissance Neoplatonism included many elements of Aristotelian philosophy, notably for present purposes the doctrine of matter as potency. But blurred though it may sometimes be, the distinction between Aristotelian and Neoplatonic ideas in Bruno's philosophy is usually quite evident and important. These originally Platonic and Neoplatonic elements were used by Bruno in his formulations of a unity underlying and determining the multiplicity of nature, in keeping with his inclination towards pantheism.

The fundamental philosophical problem in De la causa is that of substance, and the concept of contraction is strictly connected to it. Bruno's discussion of substance is directed against various philosophers — Aristotelian, Platonic and otherwise — who present matter as a formless, passive potentiality, analogous to the timber used by a carpenter to realise his ideas.¹ Bruno's main target is, however, Aristotle's concept of substance, which leads, he claims, to unsatisfactory consequences in two branches of philosophy, namely, ethics, on the one hand, and metaphysics on the other.

Aristotle distinguishes primary from secondary substances. A primary substance is an individual entity, an individual horse for instance, which can be a subject of

¹ For the comparison, see BRUNO, Causa iii, p. 173. For the concept of matter in De la causa, see VÉDRINE, La conception, pp. 273-288; BLUM, Aristoteles, pp. 66-75; SPRUIT, Il problema, pp. 46 n. 17, 166-185, 291-292.
predication, e.g. “white”, but never itself be predicated of anything else. A secondary substance is the essence or definable form represented by the species or genus to which the primary substance belongs, e.g. that of ‘horse’. In the sublunary sphere we find corporeal substances. A corporeal substance is an individual entity composed of matter and form. Matter is the principle of individuation. Form is immanent in such an entity, not transcendent. The unity of form and matter produces an individual substance. A corporeal substance’s form is the immanent principle of its change, and it determines which species the substance belongs to. Therefore, all members of the same species share the same form. Matter is individuated or, in Aquinas’ terminology, “contracted” into an individual entity through this form. Conversely the substance of a given species is “contracted” to a determinate mode of existence by accidents. This Aristotelian theory of substance is the aim of Bruno’s criticism.

In the case of human beings this means, Aristotle maintains, that the substance of the individual is the individual soul imparting life to the body. As such, the human

1 ARISTOTLE, Categories v 2a11-14; Metaphysics V viii 1017b13-14. This definition also features ibid., VII xiii 1038b15-16. For Aristotle’s concept of substance, see GUTHRIE, A history of Greek philosophy, vol. 6, pp. 203-222.
2 ARISTOTLE, Categories v 2a14-19.
3 Id., Metaphysics VII i-iv 1028a10-1030b13.
4 Ibid., VII xi 1037a29-30.
5 Ibid, VII iv 1030a3-6.
6 AQUINAS, Summa theologiae 1a, qu. 44, art. 2, resp., vol. 4, p. 458: “Sed considendum est quod materia per formam contrahitur ad determinatam speciem; sicut substantia alicuius speciei per accidens ei adveniens contrahitur ad determinatum modum essendi; ut homo contrahitur per album.”
7 For Bruno’s report of Aristotle’s view, see BRUNO, Causa ii, iii, iv, pp. 141, 191, 219. For Bruno’s report of, and criticism of, the Peripatetic view that matter is like a woman, i.e. passive, whereas form is like a man, i.e. active, see ibid., iv, pp. 219-231, 265. For the source of this simile, see ARISTOTLE, Physics I ix 192a13-25. For Bruno’s report of Aristotle’s ideas of matter as formless, and other philosopher’s similar ideas, see BRUNO, Causa iii, pp. 173-179.
soul was the *entelecheia* or 'act' of the body.\(^1\) The soul is the form, or as scholastics would call it, 'substantial form', of the individual human being, considered as a substance, whereas its body is the matter of it.\(^2\) Consequently, Bruno points out, human beings are fearful of death, since it dissolves the body, the material part of the individual human being as a substance, and leaves its soul without the component it requires to make up a substance.\(^3\) One of the implicit aims of *De la causa* is to console mankind by working out an alternative notion of the origin and nature of the human soul in order to eliminate this fear of death.\(^4\) This is an important ethical and theological implication in *De la causa*, but one that *De la causa* does not treat in detail. Bruno deals with it instead in his discussion of the fifteen contractions in the *Sigillus*, in the *Cabala*, and in the *Spaccio*, a dialogue about religious reform.\(^5\) The *Sigillus* and the *Spaccio* present the epistemological and ethical consequences of the metaphysical considerations of substance.

The overall metaphysical problem in Aristotle's conception of substance is, Bruno maintains in *De la causa*, that substances individuated according to Aristotle's scheme are subject to dissolution, and, accordingly are not eternal and permanent, which,

---
\(^1\) ARISTOTLE, *De anima* ii 1 412a27-28. For Bruno's report of this view, see BRUNO, *Causa* iii, pp. 185-187.


\(^3\) BRUNO, *Causa* ii, pp. 139-141: "Dicono [Aristotelians] quello esser veramente omo che resulta dalla composizione; quello essere veramente anima che è o perfezione et atto di corpo vivente, o pur cosa che resulta da certa simmetria di complessione e membri; onde non è maraviglia se fanno tanto, e prendono tanto spavento per la morte e dissoluzione: come quelli a'quali è imminente la iattura de l'essere."

\(^4\) For "consolation", see ibid., ii, pp. 139-141. For the "terror" of fear of death, see id., *Spaccio* ii 3, p. 317: "importuno terror de la morte". Elsewhere, Bruno similarly states that with his philosophy fear of death can be overcome, see id., *Cena* iii, pp. 171-173; *Infinito*, epist., p. 55; *De immenso* i 1, p. 201.3-6.

\(^5\) For Bruno's theories on the immortality of the human soul and on metempsychosis, see SPRUIT, 'Motivi peripatetici', pp. 371-373, 383; GRANADA's note to BRUNO, *Furori* arg., p. 42 n. 71.

51
Bruno argues, substance — that is, Aristotle’s concept of primary substance — must be. Aristotle, Bruno says, conceives of substance as something ‘accidental’, in the sense that it has a corruptible and dependent existence, rather than being a self-subsistent entity. Here Bruno presumably addresses Aristotle’s notion of primary substances. For instance, as the oak tree grows and finally decays, the oak tree as a substance dissolves. When Bruno claims that Aristotle conceives of substance as something accidental, and asserts that this is self-contradictory, he refers to Aristotle’s contrast between substance and accidence. Bruno notes the following problem. When Aristotle explains corporeal substances as unities of form and matter, the latter being accidental, he also, implicitly conceives of the former as accidental, which conflicts with Aristotle’s own ideas about the difference between substance and accidence.

Bruno, for a long time, he tells us through his mouthpiece Teofilo, adhered to the solution to this problem of substance proposed by the Greek materialists Democritus and the Epicureans. They held that only body existed, that matter is substance, and that forms are nothing but “certain accidental dispositions of matter”, a solution which is better in agreement with nature than the position of Aristotle, Teofilo says. However, Bruno eventually rejected this materialistic conception, since it implies that matter would be able to individuate itself, which Bruno thinks is untenable. There must be, then, two types of substance, both being principles, namely, one which forms, another which is formed. The first is form, the second is matter.

---

1 BRUNO, Causa epist., iii, pp. 17-19, 189.
2 Ibid., iii, pp. 185-189.
3 E.g. ARISTOTLE, Categories v 2a27-2b6.
4 BRUNO, Causa iii, p. 169: “Democrito dumque e gli Epicurei, i quali quel che non è corpo dicono esser nulla, per conseguenza vogliono la materia sola essere la sustanza de le cose ... Questi medesimi ... vogliono le forme non essere altro che certe accidental dispositions de la materia: et io molto tempo son stato assai aderente a questo parere, solo per questo, che ha fondamenti più corrispondenti alla natura che quei di Aristotele”.
5 Ibid., iii, p. 169: “ma dopo aver più maturamente considerato, avendo risguardo a più cose, troviamo che è necessario conoscere nella natura doi geni di sustanza,
It may seem at first sight as if Bruno has returned to Aristotle's position. This is not the case, Bruno does not define form as Aristotle had done. By form he does not mean a secondary substance, that is, a specific species, contracted with matter and rendered an individual substance, but the World Soul.\(^1\) The World Soul is a universal principle

\[\text{l'uno che è forma, e l'altro che è materia; perché è necessario che sia un atto sostanzialissimo, nel quale è la potenza attiva di tutto; et ancora una potenza et un soggetto, nel quale non sia minor potenza passiva di tutto: in quello è potestà di fare, in questo è potestà di esser fatto.}^\]

\(^1\) Ibid., iii, pp. 169-171. For the World Soul as the formal principle, see also ibid., epist., ii, pp. 13, 137. For the World Soul in Bruno's philosophy, in particular in his De la causa, see VÉDRINE, La conception, pp. 140, 198-201, 203, 282, 286-288, 301-305; MICHEL, 'Renaissance cosmologies', pp. 95-100; SPRUIT, Il problema, pp. 185-205. For the World Soul in the Platonic tradition, see MOREAU, L'âme du monde, especially pp. 43-55. For the World Soul in Bruno's philosophy, in particular in his De la causa, see VÉDRINE, La conception, pp. 140, 198-201, 203, 282, 286-288, 301-305; MICHEL, 'Renaissance cosmologies', pp. 95-100; SPRUIT, Il problema, pp. 185-205. For the World Soul in the Platonic tradition, see MOREAU, L'âme du monde, especially pp. 43-55. For the World Soul in Plotinus, see ARMSTRONG, 'Plotinus', pp. 250-258; BLUMENTHAL, Plotinus' psychology, pp. 27-28. The concept of the World Soul also played a significant role in twelfth-century Platonism, transmitted by Macrobius (fl. c. 400 AD), Calcidius, Virgil and some Church Fathers, as described in GREGORY, 'The Platonic inheritance', pp. 54-80. In the Italian Renaissance the World Soul was equated with the Holy Spirit by some Platonist or Neoplatonic philosophers, for instance Steuco; see WALKER, The ancient theology, pp. 37-41, especially p. 38 n. 5. Bruno reduced the Holy Spirit to the World Soul from a philosophical point of view, as explained in AQUILECCHIA, 'Introduzione', pp. XXXIV-XXXVI. The Stoics too adopted the doctrine of the World Soul, though Renaissance thinkers often interpreted classical Stoic references to it as evidence that an author was in fact a Neoplatonist, Pythagorean or whatever. One Stoic reference understood in this way is Virgil's Aeneid vi.726-727: "totamque infusa per arctus, mens agitat molem, et toto se corpore miscet", cited in BRUNO, Causa ii, p. 115. On this occasion Bruno interprets Virgil's words as Pythagorean (ibid., ii, p. 115). Similarly, in id., Acrotismus, p. 177.10-12: "... Pythagoricis Deus sit infinitus spiritus omnia penetrans, comprehendens atque vivificans". This interpretation may partly derive from the fact that Ficino thought that Virgil was a Platonist, hence indirectly a Pythagorean; see FICINO, In Plotinum II i [40] 3, in Ficino, Opera (Basel 1576), p. 1597.31-50, especially lines 36-39: "Rectius admodum Platonicus ille Maro [Virgil]
which endows individuating forms to the infinite matter of the entire infinite universe, but without itself becoming limited to individuated entities. It therefore remains unaffected by the decay of individual entities.¹ Thereby Bruno ensues that form, the one principle of universal substance, is eternal and permanent.² Furthermore, Bruno does not conceive of matter as Aristotle did. First, Bruno ranks matter equal to form, that is, to the World Soul, since matter too is a permanent and eternal principle.³ Second, he takes great care to formulate the respective roles of matter and form in a way which does not reduce matter to passive potentiality formed by the World Soul, but prefers, instead, to assign to matter active potentiality too.⁴ This seems, however, inconsistent with Bruno’s recognition of the necessity of two kinds of substance, form and matter, of which matter is passive.⁵

This interpretation of substance has profound theological consequences. Bruno assumed the traditional view that there is one and only one ultimate cause for the entire universe, the First Cause.⁶ This First Cause is God.⁷ Aristotle had distinguished the terms ‘beginning’ (in Greek ἀρχή; in Latin principium) from ‘cause’ (in Greek ἔφεσις; in Latin causa). A beginning is the first thing from which something either

---

¹ For the World Soul animating the entire infinite universe, see BRUNO, Causa v, p. 285. For the World Soul as spatially unlimited, see ibid., ii, pp. 149-151.
² Ibid., iii, p. 189.
³ Ibid., iii, pp. 189-191.
⁴ Ibid., epist., iv, pp. 23, 237-239, 251-265.
⁵ Ibid., iii, p. 169, as quoted on p. 52 n. 5 above. AQUILECCHIA, ‘Introduzione’, pp. XIV-XVI, discusses this problem in Bruno’s De la causa.
⁶ BRUNO, Causa ii, pp. 101-111.
⁷ Ibid., ii, p. 111: “Diciamo Dio prima causa, in quanto che le cose tutte son da lui distinte come lo effetto da l’efficiente, la cosa prodotta dal producente.” In AQUINAS, Summa theologiae 1a, qu. 44, art. 1, vol. 4, pp. 455-457, the discussion about God had similarly articulated the traditional characteristic of God as First Cause.
exists or comes into being or becomes known. E.g. a point is the beginning of a line.

A cause is that whose presence results in the existence of something. There are four kinds of causes, namely, efficient, material, formal and final causes. A hand drawing a line, for instance, is the efficient cause of the line.\(^1\) According to Bruno, the cause and beginning of the universe do not coincide, for, as he explains, a beginning does not have to be a cause. For instance, a point is not the cause of a line, although a point is the beginning (principium) of a line.\(^2\) A principle (principium) remains in the effect (as, for instance, matter and form or the elements remain in the object that they constitute, in a conventional sense); a cause is extrinsic.\(^3\) And this applies to the universe too. Matter is eternal and permanent, and matter, Bruno says, gives being to the forms and both remain intrinsic to the things that derive from their composition. In that sense matter is the beginning, the principle, of the universe.\(^4\) Since matter has this role, Bruno calls it “divine”.\(^5\) The role of matter as giving being to the forms contrasts with Aristotle’s conception of matter. He had held the problematic view that matter is principle of individuation, but, at the same time, in itself non-being.\(^6\) Bruno’s view, that matter is not pure potentiality and not prope nihil in that it contains forms

---

1 ARISTOTLE, *Metaphysics* V i-ii 1012b34-1014a25.

2 BRUNO, *Causa* ii, p. 111. The example of a point as the beginning of a line may derive from ARISTOTLE, *Metaphysics* V i 1012b34-1013a4, or from AQUINAS, *Summa theologiae* 1a, qu. 33, art. 1, resp., vol. 4, p. 358.

3 Ibid., iii, pp. 189-191: “Noi veggiamo che tutte le forme naturali cessano dalla materia, e novamente vegnono nella materia: onde par realmente nessuna cosa esser costante, ferma, eterna e degna di aver esistimazione di principio, eccetto che la materia; oltre che le forme non hanno l’essere senza la materia, in quella si generano e corrompono, dal seno di quella esceno, et in quello si accogliono: però la materia la qual sempre rimane medesima e feconda, deve aver la principal prorogativa d’essere conosciuta sol principio substanziale”. For matter as the principle of being in the thought of Bruno, see BLUM, *Aristoteles*, pp. 62-66.

4 For matter as principle and divine, see BRUNO, *Causa* iii, p. 191. For matter as divine, see also ibid., epist., iii, pp. 17, 193; *Spaccio* iii 2, p. 415.

potentially rather than in act, and that matter gives being to forms, can be seen as an effort to overcome this problem.\(^1\) Bruno identifies the (efficient) cause of the universe with Mind, the first and principal faculty of the World Soul, which is immanent in the infinite universe, and which is the formal principle of the universal substance.\(^2\) What we should think of when we say ‘God’, according to these passages in *De la causa*, is not, then, a transcendent God who is the first cause and principle of the universe, but the infinite, animate universe itself. However, Bruno’s general position regarding the relationship between God and the universe is problematic.\(^3\)

This is the metaphysical context of Bruno’s concept contraction. In the following two sections I shall describe how contraction played a significant role in Bruno’s conception of the universe.

3. The World Soul

We are told in the *Sigillus* that the World Soul is full of seminal reasons, causing generation in nature. Bruno attributes this doctrine explicitly to Plotinus, presumably *Enneads* IV iv [28] 12.\(^4\) In *De la causa* Bruno mentions seminal reasons too.\(^5\)

\(^1\) For an exposition of Bruno’s discussion of this problem, see BLUM, *Aristoteles*, pp. 62-66, 69, 73.

\(^2\) BRUNO, *Causa* ii, p. 113: “Or quanto alla causa effettrice, dico l’efficiente fisico universale essere l’intelletto universale, che è la prima e principal facultà de l’anima del mondo, la quale è forma universale di quello.” See also ibid., ii, p. 121: “Or per venire a li principii constitutivi de le cose, prima raggionarò de la forma per esser medesma in certo modo con la già detta causa efficiente: per che l’intelletto che è una potenza de l’anima del mondo, è stato detto efficiente prossimo di tutte cose naturali.”

\(^3\) Cf. id., *Spaccio* i 3, pp. 169-171; *Infinito* i, p. 87; *Summa*, p. 88.16-24.

\(^4\) Id., *Sigillus* ii 3, p. 196.9-14. For Plotinus’ notion of seminal reasons, see WALLIS, *Neoplatonism*, pp. 25, 68.

\(^5\) BRUNO, *Causa* ii, pp. 115-117.
However, in the *Sigillus* and in *De la causa*, Bruno describes the World Soul very differently from Plotinus.

Plotinus’ doctrine of seminal reasons in the World Soul derived from Stoic cosmology, where those seminal reasons were defined as agents of the World Soul, causing organic harmony in the sensible world.\(^1\) The Stoics conceived the World Soul as the highest deity in the universe and its active principle — the passive counterpart was matter. These two principles were mutually dependent and unified in a corporeal thing.\(^2\) Plotinus accepted the idea of seminal reasons in the World Soul, but, unlike the Stoics, he did not regard the World Soul as the highest deity, nor did he regard it as material and spatial.\(^3\) Instead, Plotinus placed the World Soul on the lowest level of the intelligible world, as the second emanation, dependent upon the first emanation, Mind, which in turn is dependent upon the One.\(^4\) Consequently, the seminal reasons were not material, contrary to the Stoics.

Bruno only refers to the Stoics twice in *De la causa*, though not directly to their idea of seminal reasons, and he does not refer to them in the *Sigillus* in regard to this theme either.\(^5\) Therefore it is difficult to claim that Bruno’s conception of seminal reasons derives from that of the Stoics, even through Bruno’s general tendency

---


5 BRUNO mentions the Stoics in *Causa* iii, pp. 169, 203. The context of the first reference is the Stoics’ view that forms are nothing but accidental dispositions of matter. The second reference regards the Stoics’ idea that matter has a sensible as well as an intelligible aspect.
towards materialism makes it easy to conjecture that in regard to seminal reasons he was more in line with the Stoic materialistic view than that of Plotinus.¹

This conception of the World Soul, the formal principle of the universal substance, is one of two theoretical components in Bruno's theory of individuation. The other is matter, to which I shall return below. Before I do so, however, we must examine Bruno's interpretation of ontological contraction, a key concept in his theory of individuation. Bruno's concept of contraction presupposes mutual dependency between form and matter:

Furthermore, this form [World Soul] is defined and determined by matter, because, having in itself the capacity of constituting particulars of innumerable species, it becomes contracted and constitutes an individual. And, on the other hand, the potency of indeterminate matter, which can receive any form whatsoever, becomes restricted to a species. So one is the cause of making the other definite and determinate.²

Here the interdependency is between “indeterminate matter” and the World Soul. In the Sigillus Bruno similarly defines individuation through a double contraction (duplex contractio) characterised by an interdependency between indeterminate matter (indeterminata materia) and absolute form (absoluta forma).³ The latter is

---

¹ See the considerations about possible influence from Stoic physics and cosmology in GRANADA, 'Giordano Bruno y la stoa', especially pp. 127-131, 136-145.

² BRUNO, Causa ii, p. 147: "Oltre, questa forma è definita e determinata per la materia, per che avendo in sé facilità di constituir particolari, di specie innumerabili, viene a contraersi a constituir uno individuo; e da l’altro canto la potenza della materia indeterminata, la quale può ricevere qualsivoglia forma, viene a terminarsi ad una specie: tanto che l’una è causa della definizione e determinazione de l’altra.” See also ibid., epist., p. 15: “Si vede ... come [la forma, i.e. anima del mondo] definisce e termina la materia, come è definita e terminata da quella [i.e. matter].”

³ Id., Sigillus ii 10, ii 22, pp. 203.1-5, 213.14-214.19. The phrase duplex contractio appears ibid., ii 22, p. 214.6-7. The Latin term indeterminatum is used about matter
synonymous with the World Soul.\textsuperscript{1} In the \textit{Sigillus}, Bruno similarly states that the World Soul's animation of matter by forms is influenced by the complexion of matter (\textit{pro conditione materiae}).\textsuperscript{2}

Since individuation involves a dialectical relationship between matter and form, and since matter thus affects the outcome of a process of individuation, individual entities within the same species display individual differences. If matter, on the other hand, were regarded as passive potentiality given essence by form, then the problem would arise why there are differences between members of the same species. Bruno avoids this problem by assigning to matter a power of individuating form.

The doctrine of form and matter co-determining particulars is Neoplatonic in origin. I shall return to it in detail later. Here I shall introduce it briefly. The dependency of the World Soul on matter, proposed in the above quotation from \textit{De la causa}, seems to contradict Plotinus' conception of corporeal matter as absolute potency and dependent upon the World Soul.\textsuperscript{3} But Plotinus is inconsistent on this

\begin{footnotesize}
\begin{enumerate}
\item BRUNO, \textit{Causa} iii, p. 189, as quoted on p. 43 n. 5 above. The World Soul is called "principio formale" ibid., epist., ii, pp. 13, 137, so by "anima" ibid., iii, p. 189, Bruno refers to the World Soul, which is, as he says there, equal to "datore de le forme". "Forma absoluta" is identified with "dator formarum" in id., \textit{Sigillus} ii 10, p. 202.20-26. For "dator formarum", see pp. 43 n. 5, 44 n. 1 above.
\item BRUNO, \textit{Sigillus} ii 3, p. 196.15-19: "Unde cum anima ubique praesens existat, illaque tota et in toto et in quacumque parte tota, ideo pro conditione materiae in quacumque re etiam exigua et abscura mundum, nedum mundi simulacrum valeas intueri, ut non temere omnia in omnibus dicere cum Anaxagora possimus."
\end{enumerate}
\end{footnotesize}
point, for on other occasions, such as *Enneads* VI iv-v, he also assigns to matter the power of individuating form, contrary to his principle that matter is pure potentiality. The idea that matter, according to some modern interpreters, has the power of individuating form is explained through the doctrine of reception according to the capacity of the recipient.\(^1\) This doctrine does not necessarily concern solely matter. Several passages seem to leave the possibility open that it occurs throughout the Neoplatonic system. The doctrine was taken up by Proclus, it later featured in the *Liber de causis*, and it was embraced in Giles' commentary on the latter work, in particular in relation to matter. Giles' application of the doctrine to matter — to anticipate my argument — is probably the source to Bruno’s notion of contraction in the ontological sense.\(^2\)

But let us return to the quotation from *De la causa*. By using the concept contraction in this manner, Bruno achieves two important things. First, the formal

\(^1\) For the formulation “reception according to the capacity of the recipient”, see ARMSTRONG, *Intelligible universe*, p. 60. In O’MEARA, *Structures hiérarchiques*, pp. 56-61, 68, it has been asserted that this doctrine implies a causal dualism between Ideas and bodies, or matter, suggesting that individuation is caused not only by Ideas, but also by matter or bodies which receive Ideas. O’Meara’s interpretation has been questioned in LEE, ‘The doctrine of reception’, p. 85, on the ground that it “appears to undermine ... the theory as theory of eidetic causation, insofar as the dualism suggests that matter has a positively specifiable nature which is causally independent both on the eide and of psychical activity.” For his alternative monistic interpretation, according to which matter does not have the potency proposed by O’Meara, see ibid., pp. 86-97. Lee claims that the doctrine of reception according to the capacity of the recipient is inconsistent with Plotinus’ notion of matter as impassible and deprived of qualities (ibid., pp. 90-96). In BLUMETHAL, ‘Did Plotinus believe in Ideas of individuals’, pp. 61-80, Plotinus’ problematic accounts of the *species differentiae* in relation to individual human beings is related to the general metaphysical question about the power of matter to individuate, later discussed by O’Meara and Lee. For matter in this context, see ibid., pp. 70, 74, 78.

\(^2\) For Giles’ treatment of this idea, see pp. 188-190 below.
principle of universal substance, the World Soul, is present in all entities in the infinite universe through its contraction with matter. This is a vital element in Bruno’s doctrine of universal animation, which he has Dickson proclaiming is a metaphysical novelty. Although the doctrine was new to Dickson, and probably to some Aristotelians too, it was not new to pagan and Renaissance Platonists. Second, insisting on the dialectical relationship between matter and the World Soul, and assigning to matter the ability to contract forms from the World Soul, he uses the term ‘contraction’ to promote his view of matter as alive. The World Soul is ubiquitous in the infinite universe, but the contraction into individuals depends upon the “capacity” of the recipient, that is, of matter, to receive, or rather allure, forms from the World Soul. Bruno holds, then, that there is a double contraction involved in individuation, where the forms of the World Soul contribute with one aspect of this double contraction, and where the “capacity” of matter contribute to the other aspect.

Bruno’s interpretation of contraction, where matter individuates form, was in conflict with the articles 46 and 110 in the Condemnation of 1277. It is yet unclear what that meant to Bruno. In the next section I shall explore further the idea of the capacity of the recipient, matter, in order to explain contraction as produced by matter.


2 For the doctrine of reception according to the capacity of the recipient in Bruno, see id., De umbris §63.2-6, p. 52: “Intellectus primus lucis amphitrites, ita lucem suam effundit ab intimis ad externa, et ab extraemis attrahit, ut quidlibet ab ipso pro capacitate possit omnia contrahere, et quaelibet ad ipsum pro facultate per ipsius luminis viam tendere.” See also id., Sigillus i 32, p. 176-27-29; Cena iii, pp. 159-161; Causa v, p. 283; Infinito i, p. 85; Spaccio iii 2, p. 415; Furori i 4, p. 157. The presence of this doctrine in Bruno’s ontology is not described in VÉDRINE, La conception, pp. 273-288; BLUM, Aristoteles, pp. 54-75. It is, however, touched upon briefly in SPRUIT, Il problema, pp. 46 n. 17, 172-173.

3 MARENCONFON, Later medieval philosophy, p. 73. For the Condemnation in the Renaissance, see MAHONEY, ‘Reverberations’, pp. 902-930.
4. Matter

The dialectical relationship between form and matter in Bruno’s theory of individuation faces him with the task of explaining how matter can play an active role in the process of individuation and is not simply passive and formless. In what sense is matter alive? How does matter “contract” forms? And what is the “capacity” of matter?

Bruno’s point of departure is the traditional Aristotelian and scholastic interpretations of matter, as expressed by Aristotle and Aquinas. Aquinas considered matter pure, passive potentiality.1 Matter, he held, was the principle of individuation, and was determined into a substance when contracted with form. Form defined the essence of the compound matter and form.2 The notion of matter implied in this conception of substance is the major point of criticism in Bruno’s thoughts about matter. As pointed out, Bruno abandons the notion of individual substances, advanced by Aristotle and Aquinas, and argues, instead, for one single, immanent and universal substance with two principles, one formal and one material. In what follows, matter denotes Bruno’s material principle of the universal substance. A second distinctive feature of Bruno’s concept of matter is that unlike Aristotle and Aquinas he assigns active potentiality to matter, thereby accounting for matter’s contraction of forms.3

---

1 AQUINAS, *Summa theologiae* 1a, qu. 44, art. 2, arg. 1m, vol. 4, p. 457: “sicut primum principium activum est Deus, ita primum principium passivum est materia.”

2 Ibid., 1a, qu. 44, art. 2, resp., vol. 4, p. 458, as quoted on p. 50 n. 6 above.

3 BRUNO, *Causa* iii, p. 193: “Ma prima vorrei saper se per la grande unione, che ha questa anima del mondo e forma universale con la materia, si potesse patire quell’altro modo e maniera di filosofare, di quei che non separano l’atto dalla raggion della materia, e la intendeno cosa divina: e non pura et informe talmente, che lei medesma non si forme e vesta.” See also ibid., epist., iii, iv, pp. 17, 239, 249-251; *Sigillus* ii 22, p. 214.17-19.
As mentioned in the preceding section, the doctrine of reception according to the capacity of the recipient is central to Bruno’s conception of matter’s ability to contract forms. Preceding from this starting point, three characteristics of Bruno’s notion of matter are to be considered in this section. First, the sources of Bruno’s notion of matter. Second, contraction produced by matter by virtue of its active participation in the individuation of particulars. Third, the cosmological role of contraction produced by matter.

(i) Sources for Bruno’s concept of matter

Bruno develops his idea of matter from Plotinus’ *Enneads* II iv-v. But he does so partly on the basis of Ficino’s commentary on *Enneads* II iv 11, where Ficino

---

discusses the conception of matter and extension found in Averroes (Mohammed ibn Rushd; 1126-1198). Ficino’s possible role as an intermediary for, or at least as influential source for, Bruno’s use of Averroes in this particular context, has been ignored in Bruno studies.

Plotinus distinguishes corporeal from intelligible matter. Corporeal matter, he states in relation to the soul of each individual human being, is “the cause of the soul’s weakness and vice: it is then itself evil before soul and is primary evil.” Alluding to Plato’s metaphor of the human soul as a winged charioteer in the *Phaedrus*, Plotinus exhorts us to avoid corporeal matter so as to make the soul virtuous, “winged and perfect”. Apart from this condemnatory view on corporeal matter in relation to

---


ethics, Plotinus also states that this sort of matter is non-being and the same thing as privation.\(^1\)

Intelligible matter is discussed in the *Enneads* II iv 1-5. Contrary to his views on corporeal matter, Plotinus does not condemn intelligible matter, but approves it for being shaped by higher entities, ultimately the One, much like the World Soul is shaped by Mind.\(^2\) Intelligible matter and corporeal matter are both principles of indeterminacy within their respective realms, but intelligible matter is not insubstantial, like corporeal matter, nor is it evil.\(^3\) Hence there is a great difference between the two. Finally, intelligible matter exists in the intelligible world as a model imitated by corporeal matter in the sensible world.\(^4\) Ficino kept the two ideas of matter apart.\(^5\)

In the Middle Ages Avicebron, also known as Avencebrol, whose Arabic name was Salomon ibn Gabirol (1020-1070), and David of Dinant (fl. c. 1200) had conflated these two ideas, corporeal matter (matter as potentiality) with intelligible


\(^5\) FICINO, *In Plotinum* II i [40] 1, p. 86.33-35. And for Proclus, see WALLIS, *Neoplatonism*, pp. 148-149.
matter (intelligible matter as a principle of indeterminacy in the intelligible world). Aquinas rejected the fusion of corporeal and intelligible matter by means of the distinction of essence and existence (to which we shall return later). In *De la causa*, by contrast, Bruno praises explicitly Avicebron and David of Dinant for their views. He similarly says that those nourished by Aristotle’s doctrine have not understood the concept of matter as it is understood among those “others”, probably a reference to Avicebron and David of Dinant, who have “praised matter greatly” and “scandalised” “some theologians”, Aquinas among others we can assume. These critics (of David and Avicebron) do not, Bruno continues, understand that these thinkers who praise matter greatly conflate matter in the intelligible with matter in the sensible worlds.

---


3 BRUNO refers to Avicebron in his *Causa* iii, iv, pp. 169, 191, 233 (explicitly to Avicebron’s *Fons vitae* ibid., iii, p. 169) and to David of Dinant (ibid., epist., iv, pp. 17, 267). He also refers to Avicebron’s *Fons vitae* and to David of Dinant in *De vinculis* §77.35-47, pp. 518-520 (= BOL, vol. 3, p. 696.1-13). For Bruno’s indebtedness to Avicebron’s ideas, see WITTMANN, ‘Giordano Brunos Beziehungen zu Avencebrol’, pp. 148-151. According to Wittmann, Bruno probably knew Avicebron’s ideas indirectly from Aquinas’ unfavourable reports (ibid., p. 151). For Aquinas’ report of, and stance towards, Avicebron’s philosophy, see WITTMANN, *Die Stellung des h. Thomas von Aquin zu Avencebrol*, pp. 33-77. Avicebron’s *Fons vitae* was not printed in the Renaissance. But the library at St Victor held a manuscript and Bruno might have read it during his stay in Paris (VÉDRINE, *La conception*, p. 278 n. 33). David of Dinant’s books were burnt in 1210 (MACCAGNOLO, ‘David of Dinant’, p. 429) but were known indirectly through Albert’s and Aquinas’ reports (THÉRY, *Autour de décret de 1210*, pp. 151-155). For Bruno’s use of David of Dinant, see TOCCO, *Le fonti*, pp. 530-531.

4 BRUNO, *Causa* iii, pp. 213-215: “Conchiudendo dunque vedete quanta sia l’eccellenza della potenza la quale se vi piace chiamarla ragionetta di materia, che non
The essential point is, then, that all potentiality — active as well as passive — is matter, and this applies to both corporeal and intelligible entities. This is the reason why Bruno refutes the traditional description of matter as prope nihil.\(^1\) In *De la causa* Bruno’s point of departure, however, in relation to the distinction corporeal versus intelligible matter is not Avicebron or David of Dinant, but Plotinus’ *Enneads II iv*, cited by Bruno as Plotinus’ book *De la materia*, an Italian translation of the Latin title given by Ficino to Plotinus’ treatise.\(^2\) From this book of Plotinus and Ficino’s commentary on it Bruno takes the idea of corporeal matter as an imitation of intelligible matter but ignores Plotinus’ distinction between the two.\(^3\) In general terms Plotinus’ treatise lent itself to Bruno’s purposes, i.e. to explain the formative principles of the universe as immanent rather than transcendent.

Bruno rephrases Plotinus’ argument for the existence of intelligible matter as follows. Since the sensible world is an imitation of the intelligible world, and since the

\[\text{hanno penetrato i filosofi volgari, la possete senza detrare alla divinità trattar più altamente, che Platone nella sua *Politica* et il Timeo. Costoro per averno troppo alzata la ragione della materia son stati scandalosi ad alcuni teologi. Questo è accaduto o perché quelli non si son bene dechiarati, o perché questi non hanno bene inteso, perché sempre prendono il significato della materia secondo che è soggetto di cose naturali solamente, come nodriti nelle sentenze d'Aristotele; e non considerano [the critics of David and Avicebron] che la materia è tale appresso gli altri, che è comune al mondo intelligible e sensibile, come essi dicono, prendendo il significato secondo una equivocazione analoga.}^\]

\(^1\) Ibid., iv, p. 251. For Bruno’s rejection of the expression prope nihil in regard to matter, see SPRUIT, *Il problema*, pp. 174-175.


sensible world contains composites of matter and form, then the intelligible world too must comprise forms and matter, the latter being non-corporeal, intelligible matter.\(^1\) Hence form and matter in the intelligible world are a "duplicate of the Aristotelian sense-world", in Armstrong’s account of Plotinus’ doctrine.\(^2\) Even though Bruno paraphrases Ficino’s Latin translation of Plotinus’ *Enneads*, he does not, as mentioned, here or over the subsequent pages, retain the distinction between the two kinds of matter which is maintained in Ficino’s translation. Ficino opens his comment on *Enneads* II iv by stating that “in Chapter four [i.e. *Enneads* II iv 4] Plotinus demonstrates that in the intelligible world there exists something similar to matter in some way.”\(^3\) Ficino repeats the ontological distinction between the two kinds of matter, hinted at by the expression “similar to matter”, when he writes that just as the

\(^1\) BRUNO, *Causa* iv, p. 237: “Plotino ancora dice nel libro *De la materia*, che ‘se nel mondo intelligibile è moltitudine e pluralità di specie, è necessario che vi sia qualche cosa comune, oltre la proprietà e differenza di ciascuna di quelle. Quello che è comune tien luogo di materia, quello che è proprio e fa distinzione, tien luogo di forma’. Giunge che ‘se questo [i.e. the sensible world] è a imitazion di quello [i.e. the intelligible world], la composizion di questo è a imitazion di quello’”. Bruno is translating freely from *Plotinus* II iv [12] 4.2-9, in Ficino’s translation, pp. 160.64-161.7: “Profecto si plures ibi [intelligible world] sunt species, commune quiddam in ipsis esse necessarium est: rursusque proprium quoad [1492 ed.: ‘quo’] aliud ab alio distinguatur. Hoc utique proprium atque haec separans differentia, forma certe est propria. Quod si illic est forma, est insuper et formatum, circa quod differentia est. Subest itaque materia quae illam accipiat formatum, perpetuoque subjectum. Praeterea si intelligibilis illic mundus existit: hic vero noster illius est imitatio, atque componitur ex materia: illic quoque oportet esse materiam.” Bruno is closer to Ficino’s translation than to Ficino’s commentary on this passage. Cf. FICINO, *In Plotinum* II iv [12] 4, p. 150.28-29: “Sic itaque mundus corporeus superioris imago est, incorporeum mundum referens velut exemplar: si multiformis referatur ad multiformem, si materia haec referatur ad illam.”

\(^2\) ARMSTRONG, *Intelligible universe*, p. 66.

\(^3\) FICINO, *In Plotinum* II iv [12] 4, p. 150.10: “In capite quarto probat in mundo intellectuali esse nonnihil materiae quodam modo simile.”
sensible world comprises (immanent) forms and matter, so too the intelligible world includes forms (the Ideas) and matter of some kind. Immediately after he quotes from Plotinus' book *De la materia*, Bruno refutes the distinction between the two kinds of matter. Teofilo, refuting Plotinus explicitly, argues that there is only one matter, not two. Consequently Bruno refrains from speaking of two kinds of matters over the next pages in *Delacausa*, but only of one.

Having elided the distinction between the two kinds of matter, Bruno applies Plotinus' idea of intelligible matter to corporeal and incorporeal entities. Bruno thus agrees with Plotinus on the existence of a material substrate in order to account for the differentiation in the corporeal world. However, the next thing Bruno does is to claim that "one is matter, one is the potency by which all that exists, exists in act; and for no less reason it [this single matter] is appropriate in incorporeal substances as in corporeal ones".

---


2 BRUNO, *Causa* iv, p. 237: "E benché dichi che tutta quella moltitudine conviene in uno ente impartibile e fuor di qualsivoglia dimensione, quello dirò essere la materia, nel quale si uniscono tante forme”. Also ibid., iv, p. 239. Here and elsewhere Teofilo is the loyal spokesman of Bruno’s philosophy; see ibid., v, p. 317: “Teofilo, fidel relatore della nolana filosofia.”

3 Ibid., iv, p. 237: “Per il che il mondo superiore non solamente deve esser stimato per tutto indivisibile, ma anco per alcune sue condizioni divisibile e distinto; la cui divisione e distinzione non può esser capita senza qualche soggetta materia.” For the probable source, see PLOTINUS II iv [12] 4.2-9, tr. Ficino, pp. 160.64-161.7, as quoted on p. 68 n. 1 above.

4 BRUNO, *Causa* iv, p. 239: “una sia la materia, una la potenza per la quale tutto quel che è, è in atto; e non con minor raggione conviene alle sustanza incorporee, che alle corporali”.

69
(ii) Contraction produced by matter

It is in this context that Bruno now introduces the notion of contraction. Matter, together with the World Soul, contracts itself in the course of individuation, partly into corporeal dimensional bodies, partly into non-corporeal and non-dimensional entities. Contracted entities exist in different ways. Incorporeal entities exist as eternal actualisations of one potentiality in matter, and they are therefore incorruptible. Corporeal entities, on the other hand, change. They are actualisations of potentialities occurring over time. It is in this process of individuation that the World Soul participates too, as mentioned above, and it is here that matter receives forms according to its capacity to receive.

The important role attributed to matter in Bruno's theory of individuation is reflected in his thoughts about the source of actualisation. There is no change in the intelligible world, Plotinus asserts. And intelligible matter is all things at once and

---

1 Ibid., iv, p. 243: "Dicsono. Alcuni, quantumque concedano essere materia nelle cose incorporee, la intendono però secondo una ragion molto diversa. Teofilo. Sia quantosivoglia diversità secondo la ragion propria per la quale l’una [i.e. ‘sensible matter’] desce a l’esser corporale e l’altra [i.e. ‘intelligible matter’] non, l’una riceve qualità sensibili e l’altra non, e non par che possa essere ragion comune a quella materia a cui ripugna la quantità et esser suggetto delle qualitadi che hanno l’essere nelle demensioni, e la natura a cui non ripugna l’una né l’altra: anzi l’una e l’altra è una medesima; e che (come è più volte detto) tutta la differenza depende dalla contrazzione a l’esser corporea e non essere corporea: come nell’essere animale ogni sensitivo è uno; ma contraendo quel geno a certe specie, ripugna a l’uomo l’essere leone, et a questo animale d’esser quell’altro." See also ibid., iv., p. 233. For a discussion of ‘dimension’ in the fourth dialogue of De la causa, see BLUM, Aristoteles, pp. 30-31; SPRUIT, Il problema, pp. 172-173. Although BLUM, Aristoteles, pp. 66, 68-71, 73, 78-79, discusses the metaphysical context of contraction in De la causa very well, and even though he mentions the concept of contraction, Blum does not discuss it in detail.

2 BRUNO, Causa iv, p. 241.
does not change into anything.\(^1\) Therefore, in the intelligible world form and matter are "one nature", although they may be distinguished conceptually as two different aspects.\(^2\) Commenting on this passage, Ficino wrote that "in the incorporeal world, matter is the essence and nature of form: for form is the being and act of matter."\(^3\) Plotinus’ and Ficino’s comments have a striking similarity with Bruno’s concept of universal matter. The possibility that they were his source is corroborated by Bruno’s quotation of Plotinus on just this point.\(^4\) Bruno maintains that matter is the source of what is in act and takes up a feature of Plotinus’ intelligible matter, namely the idea that in intelligible matter many forms are united in an undifferentiated unity.\(^5\) Plotinus

---


\(^3\) FICINO, *In Plotinum II* v [25] 3, p. 171.29-31: "In mundo autem incorporeo materia quidem est essentia et natura formae: forma vero est esse actusque materiae. Rursum materia nec ad formam in potentia ibi est, neque potentia est ad formam: sed est potius ipsa potentia formae: forma vero non est actus aliquis in materia sive potentia, sed ispe potius potentiae actus."

\(^4\) BRUNO, *Causa* iv, p. 251: “Costui [Plotinus] facendo differenza tra la materia di cose superiori et inferiori, dice che quella è insieme tutto; et essendo che possiede tutto, non ha in che mutarsi”.

\(^5\) For the idea that matter is the source of what is in act; see ibid., iv, p. 263: “sono [le forme] nel seno della materia; che dumque? ella è fonte de la attualità”. See also ibid., iv, p. 259: “Tutti dumque per modo di separazione vogliono le cose essere da la materia, e non per modo di apposizione e recezione: dumque si de’ più tosto dire che [la materia] contiene le forme e che le includa, che pensare che ne sia vòta e le escluda.” Bruno here refers to the opinion of the Pythagoreans, Anaxagoras, Democritus, mentioned ibid., iv, p. 257. Lastly, Bruno attributes to Plotinus the idea that matter is an active principle, see ibid., iv, pp. 249-251: “Per il qual senso si vede che la materia le [le forme] manda come da sè, e non le riceve come di fuora. Questo in parte intese ancor Plotino, prencipe nella setta di Platone.” For the idea that in intelligible matter many forms are united in an undifferentiated unity; see ibid., iv, p. 237: “quello dirò essere la materia, nel quale si uniscono tante forme”.

---

71
had said this specifically about intelligible matter, but Bruno applies this to his unified concept of matter. By doing so Bruno makes the forms or Ideas innate to matter.

(iii) The cosmological role of contraction produced by matter

Over the last pages we have seen how Bruno interprets contraction as involving a reciprocal relationship between form, i.e. the World Soul, and matter, as he understood these terms. One last aspect of contraction and matter has to be considered. Bruno not only works out an alternative concept of matter, he also redefines its cosmological role. When Bruno states in De la causa that matter provides the extension of particulars, he follows Averroes. By doing so Bruno contradicts Plotinus who argued that matter is without extension in itself, and that dimensions as well as qualities are imposed by form. Even though Bruno agrees with Averroes that matter comprises extension, against the opinion of Plotinus, Bruno does not agree with Averroes when it comes to the question of the materiality of the superlunary sphere. In De substantia orbis Averroes had followed Aristotle and claimed that the heavens do not comprise any of the four elements of the sublunary region, implying that materiality had to be denied in the heavens. Ficino criticises Averroes for assigning dimension to the heavens without also assigning matter. According to Plotinus,

2 BRUNO, Causa iv, pp. 249-251: “Dice lui [Averroes] che la materia ne l’essenza sua comprende le dimensioni interminate: volendo accennare che quelle pervegono a terminarsi, ora con questa figura e dimensioni, ora con quella e quell’altra, quelle e quell’altra, secondo il cangiari di forme naturali. Per il qual senso si vede che la materia le [forme] manda come da sé, e non le riceve come di fuora.” For Averroes on this point, see STURLESE, “‘Averroè quantumque arabo’”, p. 323.
5 FICINO, In Plotinum II i [40] 1, p. 86.32-33: “Neque licet alicui, more Averrois, dimensiones in caelo sine materia ponere.”
Ficino reports, dimension and quality are ontologically simultaneous. Hence it is impossible to speak of a superlunary region without materiality.

Bruno voices a similar criticism of Averroes and complains that he had followed the Aristotelians in their conception of dimension as separable from matter. Bruno holds, even more than Ficino, that the universe is homogenous, and, partly due to his notion that matter comprises extension, he assigns extension — infinite extension — to the heavens and therefore to the entire universe. Also in line with Plotinus and Ficino (with some qualifications that need not detain us here), Bruno denies the Aristotelian division between sublunary and superlunary regions, thus opening up the theoretical possibility of having his unified concept of matter operating in both regions, which are, in fact, one infinite universe, according to Bruno. Given Bruno’s idea about the materiality of the superlunary sphere, he claims the capacity of the universe, i.e. infinite matter, is infinite — a capacity which, as we have seen, individuates particulars together with the World Soul through contraction.

---

2 BRUNO, Causa iv, p. 249. “è consueto modo di parlare di Peripatetici ancora, che dicono tutti l’atto dimensionale e tutte forme naturali uscire e venir fuori dalla potenza de la materia. Questo intende in parte Averro ... Dice lui che la materia ne l’essenza sua comprende le dimensioni interminate”.
3 Ibid., v, pp. 273-277.
4 Id., Infinito v, p. 361.
5 Ibid., i, p. 85: “Per che deve esser frustrata la capacità infinita, defraudata la possibilità de infiniti mondi che possono essere, pregiudicata la eccellenza della divina imagine, che deverebbe più risplendere in un specchio incontratto, e secondo il suo modo di essere, infinito, imenso?” See also id., Cena iii, v, pp. 161, 239.
5. Coincidence of opposites

Ficino’s Latin translation of Plotinus in 1492 and its several reprints in the sixteenth century provided Bruno with a new conceptual framework, e.g. the Plotinian idea of intelligible matter. This Neoplatonic notion, and indeed Bruno’s own revision of it, gave him a component which was foreign to scholasticism and to Cusanus’ medieval Platonism.\(^1\) Admittedly Avicebron and David of Dinant had spoken about ‘universal matter’ long before Ficino’s translation of Plotinus and Bruno knew these sources through scholastic refutations of them, the most important being Aquinas’. But it was, I believe, Plotinus who proved decisive. Bruno seeks to formulate an original interpretation of the universe by, on the one hand, conflating the Neoplatonic concepts of intelligible and sensible matter and, on the other, expressing this unified concept of matter and its several important corollaries in various philosophical contexts through the notion of contraction. Although Bruno’s philosophy is completely different from the orthodox Christian intentions of Cusanus, Bruno strove to adapt Cusanus’ principle of coincidence to his own pantheistic philosophy.\(^2\) In this section we shall see how that relates to Bruno’s concept of contraction.

---

\(^1\) For the uses of Platonic and Neoplatonic components in the philosophies of Ficino and Cusanus respectively, see GARIN, ‘Cusano e i platonici del quattrocento’, pp. 75-96.

\(^2\) Bruno mentions Cusanus in relation to the principle of coincidence of opposites. See BRUNO, \textit{Causa} v, p. 301. The principle is described ibid., v, pp. 299-307. Bruno’s indebtedness to Cusanus on this occasion has been noted in BLUM, \textit{Aristoteles}, p. 92. For a discussion of Bruno’s use of this passage in Cusanus, see BÓNKER-VALLON, ‘La matematica’, pp. 68, 77. BRUNO, \textit{Causa}, v, pp. 302-303, uses Cusanus’ illustrations of the principle of coincidence of opposites. They are taken from CUSANUS, \textit{De docta ignorantia} i 13, p. 26. The same figure is used in BRUNO, \textit{De minimo} i 4, p. 148. Moreover, Bruno uses an illustration in \textit{De umbris} and \textit{De minimo} similar to the one in CUSANUS, \textit{De beryllo} \S\S9, 10, 19, pp. 11-13, 22-24, though without mentioning Cusanus explicitly; see BRUNO, \textit{De umbris} \S52, p. 44;
Cusanus had followed a traditional idea and claimed that potentiality and actuality are identical in God, which means that in Him all potentialities are actualised simultaneously. In the universe, on the other hand, all potentialities cannot be actualised simultaneously, since that would conflict with the principle of contradiction, saying that it is impossible for two contradictory attributes to exist in one subject at the same time and in the same respect. For instance, one leaf of an oak tree cannot be green and yellow at the same time and at the same place, but will be green at one time, during spring time, and yellow at another time, during autumn. No such limitation applies to God, who realises all his potentialities simultaneously. Cusanus formulates this idea about God by stating that in God the greatest (maximum) coincides with the smallest (minimum).

Bruno adopts Cusanus’ idea that the principle of the universe, which is God according to Cusanus, is characterised by a coincidence of opposites. But Bruno specifies that matter, not God, is the principle in which contraries coincide. Here

---

1 For the principle of contradiction, see ARISTOTLE, Metaphysics IV iii 1005b19-20.
3 For the principle, see BRUNO, Causa iii, p. 205: “Or contempla il primo et ottimo principio, il quale è tutto quel che può essere; e lui medesimo non sarebbe tutto, se non potesse essere tutto: in lui dumque l’atto e la potenza son la medesima cosa.” Cf. Bruno’s comment on matter ibid., iv, pp. 243-245: “Teofilo. ... Quella materia per essere attualmente tutto quel che può essere, ha tutte le misure, ha tutte le specie di figure e di dimensioni; e perché le have tutte, non ne ha nessuna, perché quello che è tante cose diverse, bisogna che non sia alcuna di quelle particolari. Conviene a quello che è tutto, che escluda ogni essere particolare. Dicsono. Vuoi dunque che la materia sia atto? vuoi ancora che la materia nelle cose incorporee coincida con l’atto? Teofilo. Come il possé essere coincide con l’essere.” For the principle of coincidence of opposites in nature, see also ibid., v, pp. 299-311, 315.
Bruno applies his unified concept of matter, arrived at through Plotinus’ treatise on matter, to Cusanus’ idea of coincidence of opposites. Whereas contractions from matter, here understood as a substrate, into corporeal entities ejeist in successive order, in an “unfolded” manner, matter as substrate exists per se in one eternal moment of pure actuality, in an “enfolded” manner. Plotinus had applied two similar descriptions to sensible and intelligible matter respectively, saying that sensible matter exists in successive order and intelligible matter in eternal actuality. Bruno applies these two descriptions to his unified concept of matter.

Matter as substrate exists, Bruno continues, as an undifferentiated unity of such actualisations prior to its contractions into particular entities, be it corporeal or incorporeal ones. This means that matter, still in the sense of material substrate,

---

1 Ibid., iv, p. 251: “Costui [PLOTINUS II iv [12] 3.9-14 (= tr. Ficino, p. 160.46-56, as quoted p. 76 n. 2 below]) facendo differenza tra la materia di cose superiori et inferiori, dice che quella [intelligible matter] è insieme tutto; et essendo che possiede tutto, non ha in che mutarsi: ma questa [sensible matter] con certa vicissitudine per le parti, si fa tutto; et a tempi et tempi, si fa cosa e cosa, però sempre sotto diversità, alterazione e moto. Cossì dumque mai è informe quella [intelligible] materia, come né anco questa [sensible], benché differentemente quella e questa: quella [intelligible] ne l’istante de l’eternità, questa [sensible] ne gl’istanti del tempo; quella insieme, questa successivamente; quella [intelligible] esplicatamente, questa complicatamente; quella come molti, questa come uno; quella per ciascuno e cosa per cosa, questa come tutto et ogni cosa.” The terminology complicatio-explicatio is also applied in Bruno’s Sigillus, see id., Sigillus i 42, ii 3, ii 22, pp. 186.1, 196.24, 215.4.


3 BRUNO, Causa iv, pp. 233-237, especially p. 237.
exists in pure actuality and is therefore everything simultaneously. Hence opposites coincide in it.\(^1\) Thus far Bruno confirms Cusanus’ idea of coinciding opposites in the principle of the universe. But, importantly, Bruno applies this idea within a very different metaphysical structure, in which matter is the principle characterised by coinciding opposites, not God, thereby accommodating Cusanus’ idea to his pantheism.

\(^1\) Ibid., iv, pp. 243-245, especially p. 245: “Quella materia per essere attualmente tutto quel che può essere, ha tutte le misure, ha tutte le specie di figure e di dimensioni".
CHAPTER 3

CONTRACTION AND NOESIS

1. What is contraction produced by noetic ascent?

In the Latin mnemonic works, especially in the Sigillus and De umbris, and in his Italian dialogue Eroici furori Bruno applies the term 'contraction' within a theory of noetic ascent. On these occasions 'contraction' is applied within Bruno's theory of noetic ascent as a reversed descent, that is, the intellect's movement from multiplicity to unity. This is what I shall mean by 'contraction' in a noetic sense. Bruno's treatment of 'contraction' in this sense reflects scholastic and Neoplatonic sources.

This sense of contraction must be distinguished from three other senses, which I shall mention briefly here before exploring contraction in the noetic sense. First, in the mnemonic works 'contraction' denotes a logical notion, namely, an attribution, i.e. a 'contraction', or specific application, we might say, of one or more predicates to a

---

1 BRUNO, De umbris §§54.6-8, 55.9-12, 84.11-12, pp. 47, 48, 63; Sigillus ii 22, pp. 213.21-214.19; De compositione i i 13, p. 119.3-15; De magia naturali §16.6-10, p. 188 (= BOL, vol. 3, p. 409.16-20); Lampas §243.14-17, p. 1230 (= BOL, vol. 3, p. 141.12-15); De monade iii, p. 356.20-27; De minimo i 4, p. 146.20-24; Furori i 3, i 4, ii 1, ii 3, pp. 137, 159, 327, 421. Contraction in this noetic sense has only received scant attention; see NELSON, Renaissance theory of love, pp. 186, 188; SPRUIT, Il problema, pp. 147-149, 157-158; STURLESE, 'Per un'interpretazione', pp. 963-964.

2 See p. 11 n. 1 above.
subject. Second, 'contraction' is employed to describe methods of, or circumstances conductive to, noetic ascent, notably in the fifteen contractions in the *Sigillus*, where, for instance, solitude is one method Bruno describes among others. As we have seen in Chapter 1, Bruno has strong reservations against several of the methods of noetic ascent described in the fifteen contractions, which he consequently dismisses as false. Although the various methods of contraction described in these fifteen contractions differ from contraction in the noetic sense, it should be recalled that they do overlap in some instances. An example is the solitary, contemplative philosopher’s noetic ascent, which, in the practice prescribed in the fifteen contractions and in the theoretical account of it which precedes these fifteen contractions, contains significant elements from Plotinus’ Neoplatonism. In this and the next chapters we shall see how Bruno analyses this practice of the philosopher. Third, ‘contraction’ is used in a physiological sense to denote a physiologically induced contraction of *spiritus*. Once again, there is an overlap in meaning. The physiological concept of ‘contraction’ is related to ‘contraction’ as a noetic concept, as we shall see in Chapter 5, but the two

---

1 BRUNO, *De umbris* §§100.2-6, 180.1-5, pp. 73, 131; *Triginta sigilli*, pp. 90.5-7, 105.30-106.10; *Explicatio*, p. 139.8-11; *De lampade combinatoria* I ix, p. 280.20-25; *De lampade venatoria*, pp. 58.8-18, 75.12-15. For a plausible source for this use of ‘contraction’ in logic, see LULL, *Lectura artis* xi, pp. 426-428. This source has not been noted in studies on Bruno’s use of Lull; it is ignored in YATES, *The art of memory*, pp. 175-196, 206-208, 214, 218-220, 226, 244; id., *Giordano Bruno and the Hermetic tradition*, pp. 96, 195, 206, 27, 324; VASOLI, ‘Immagini’, pp. 352, 353, 356-365, 374, 376-378, 384, 403-408; id., ‘Umanesimo e simbologia’, pp. 254-258, 260-268, 272, 289-292, 294, 304; ROSSI, *Clavis universalis*, pp. 131-154. Blum does not deal with contraction in the logical sense, but he does discuss Bruno’s postulated isomorphy between structures in human thought, as expressed in logic, and ontological structures; see BLUM, *Aristoteles*, pp. 22-23, 26-28. For Bruno’s interest in Lull’s art of combination in this context, see ibid., pp. 23-24.

meanings of ‘contraction’ are theoretically distinct. In Chapter 5 we shall see how these two meanings relate to each other.

To turn to contraction in the strictly noetic sense. We have seen that Bruno identifies the ontological meaning of contraction through a fairly consistent conceptual framework, involving key concepts like form and matter. We might expect him to do the same in regard to his noetic interpretation of contraction. This is not, unfortunately, the case. Whereas contraction in the ontological sense is a fairly well-defined, technical term inherited, as we shall see in Chapter 6, from the scholastic tradition, contraction in the noetic sense is not a well-established philosophical usage. Bruno never defines what he means by the term.

Even though Bruno’s use of contraction in this sense is used without the idiomatic stability and repetitiousness which often characterises terminology of long standing philosophical traditions, it is not an arbitrary and meaningless concept. Bruno, as already said, often uses it to describe various aspects of the intellect’s movement from plurality to unity. In this chapter I shall set out the philosophical description of man to which contraction in the noetic interpretation is tied (Section 2). Then I shall analyse Bruno’s explanation of contraction in the noetic sense in his Sigillus (Section 3). As we shall see, his treatment of ‘contraction’ in this context is coloured by scholastic concepts, in particular his notion of intention. This notion is also, however, interpreted by Bruno in a Neoplatonic manner, allowing him to insert it into his account of intelligibles understood as extramental and intramental realities. In the next section I shall move on to his use of ‘contraction’ in the Eroici furori, where the notion of intention remains important (Section 4). Lastly, I shall turn to Bruno’s criticism of noesis induced physiologically by melancholy, in particular its consequences for love poetry and theology (Section 5).
2. Philosophical anthropology and contraction by noetic ascent

In the preceding chapter we have seen how Bruno integrates some of Plotinus' ideas about emanation into his ontology, though in a revised form which fits into Bruno's pantheistic orientation. Plotinus' philosophical conception of man is determined by his theory of the three hypostases, the One, Mind and Soul. Bruno similarly formulates various aspects of his philosophical description of man with an eye on Plotinus' philosophical anthropology. His stance towards Plotinus' conception of man is characterised by different but not necessarily contradicting tendencies. On the one hand he affirms Plotinus' view of man, for instance in De umbris, where he says laconically that, according to Plotinus, man is first of all Idea, thereafter soul, and lastly — that is insofar as he is a corporeal being — not man at all. What did Bruno mean by affirming the allegedly Plotinian idea that man is primarily Idea and secondly soul?

Bruno's fifteen contractions in the Sigillus display a parallel reservation in regard to the body, such as melancholic humours, in Bruno's final judgement over the proper method of noetic ascent. Melancholy may provide an initial stimulus for noetic ascent.

---

1 PLOTINUS V i [10] 10.1-10 (= tr. Ficino, p. 491.16-31).

2 BRUNO, De umbris §61.2-8, p. 51: "Ideam primum hominem, animam secundum, tertium vero quasi iam non hominem dixit Plotinus, ubi de ratione multitudinis idearum edisserit. Dependet secundus a primo, tertius a secundo, dum per ordinationem, contractionem, et compositionem, ordinatur ad physicam subsistentiam. Pro metaphysico igitur conceptu tertius ascendat in secundum, secundus in primum." As pointed out by Sturlese in her note to BRUNO, De umbris §61.2-8, p. 51, the source is FICINO, In Plotinum VI vii [38] 5, p. 697.36-38: "Quae quidem idea primus homo est: anima vero ita sicut dixi se habens est homo secundus: tertius vero homo est et quasi iam non homo, animal compositum ex corpore nostro simul atque vita quadam huic infusa ab anima praeecedente".

3 For Bruno's criticism of noetic ascent through melancholic humours, see his eleventh, twelfth and fourteenth contractions, summarised on pp. 33-34, 34-35, 38-39 above.
according to Bruno, as we shall see in Chapter 5, but it has to be completed by reason and intellect. These reservations of Bruno resemble, for instance, Plotinus’ warning against subjecting the soul to the affections of the body, which will block the soul’s ascent.¹ On the other hand, Bruno also maintains that the individual human being is individuated through its contraction of formal and material components, that is, of body and soul, and he regards corporeal complexion as decisive, for the better or worse, for the kind of contemplation which, if any, an individual is able to undertake.² This idea was also implied in Plotinus’ philosophy through the doctrine of reception according to the capacity of the recipient, but he did not emphasise it as strongly as Bruno, and did not link it to an individual’s complexion.³

Another aspect of Bruno’s reference to Plotinus’ idea of man relates to Plotinus’ thoughts about the ontological status of the human soul. Although Plotinus is not clear on this point, there are several passages allowing the interpretation (the one preferred by most modern scholars) that the World Soul and individual human souls are both dependent upon the hypostasis Soul.⁴ This means, in turn, that individual souls are

³ PLOTINUS VI iv [22] 3.1-10 (= tr. Ficino, p. 646.35-50). For this adaptation of the doctrine to human individuals, see BLUMENTHAL, ‘Soul, World-Soul and individual soul in Plotinus’, p. 60; LEE, ‘The doctrine of reception’, pp. 87-90. For the ontological implications of this principle, see references to the modern discussion of this doctrine of Plotinus on p. 60 n. 1 above.
⁴ E.g. PLOTINUS IV ix [8] 4.1-26 (= tr. Ficino, p. 479.46-19). This passage leaves it open whether the source of many individual souls is the World Soul, or the hypostasis Soul, in which case the Would Soul could also originate from the hypostasis Soul. Blumenthal argues convincingly that Soul and World Soul are distinct in Plotinus, and that there are therefore three kinds of soul in Plotinus: the hypostasis Soul, the World Soul, and individual souls; see BLUMENTHAL, ‘Soul, World-Soul, and individual soul in Plotinus’, pp. 57-58. Cf. RIST, Plotinus: The road to reality, p. 113, who asserts that the hypostasis Soul and the World Soul are
not dependent upon the World Soul.\textsuperscript{1} There is, according to Plotinus, a parallel between the World Soul and the individual soul: just as the World Soul transcends the cosmos, the human soul transcends the body.\textsuperscript{2}

According to Plotinus, the individual human soul animates an individual human body.\textsuperscript{3} This does not mean, however, that the human soul is located in and confined to the human body in a spatial sense, nor, on the other hand, that the ascent of the human soul requires a separation from the body, but rather an inner detachment from the body, that is, its sensory information and mental images. The human soul both pertains to the sensible and to the intelligible worlds.\textsuperscript{4} Bruno affirms this equal state of the individual human soul, and of the World Soul, stating that their relation to the body, or the universe, is similar to the helmsman's relation to the ship. He is part of the ship as far as he goes with it when he steers it, but he also exists independently of the ship and is free to leave it.\textsuperscript{5} This is the background for Bruno's use of contraction in his description of noetic ascent.

\textsuperscript{1} For Bruno and the problematic relationship of World Soul and individual soul, see SPRUIT, \textit{Il problema}, pp. 204-205.
\textsuperscript{3} On the descent of the soul, see RIST, \textit{Plotinus: the road to reality}, pp. 112-129.
\textsuperscript{5} For Plotinus on the soul's descent into the body, see BLUMENTHAL, \textit{Plotinus' psychology}, pp. 2-6. For Plotinus' theory on the relation between soul and body, see ibid., pp. 10-19.

\textsuperscript{5} BRUNO, \textit{Causa} ii, pp. 121-125. For Plotinus' view on the analogy soul-body and ship-helmsman, see BLUMENTHAL, \textit{Plotinus' psychology}, pp. 17-18.
In the Sigillus, ‘contraction’ is listed as one of the “witnesses” of the One, that is, as a way of understanding something about the One by perceiving its effects, or vestiges, in nature. Having suggested in poetic terms how form and matter are individuated into sensible particulars, Bruno explains contraction, in the noetic sense, as follows:

Just as the one single, true intelligible entity descends to us by becoming concrete, so we must ascend to it through abstraction. For this is what we are attempting to do when we collect infinite individuals into species, innumerable species into many intermediary genera, these into ten or twelve determinata, and these finally into a supreme, analogous one of all things. We do this in order that we can contract (contrahamus) through these intentions (intentiones), almost following a reversed contraction; we contract multiple being and an infinity of parts into specific and generic being, and this into being in the most universal genus, and this [finally] into a being or essence absolutely. In this way we contract the posterior into the prior, the effects into causes, then the partial causes into common causes, and the closest and immediate causes into the more distant

1 For ‘contraction’ as one of the four witnesses (testes), see BRUNO, Sigillus ii 22, p. 212.14-17. For the perceptible vestiges of contraction in nature, see ibid., ii 22, p. 213.14-17. For ‘vestige’ in Bruno’s philosophy, see also id., De umbris §§22.4-11, 23.2-8, 25.7-11, 29.7-8, 52.14-15, 70.3-4, 97.2-4, pp. 26, 27, 28-29, 32, 44, 55, 71; Cantus iii 1, p. 235.25-27; Sigillus i 28, pp. 169.27-170.6; Cena i, p. 51; Causa ii, pp. 103-107, Infinito epist., p. 45; Spaccio iii 2, p. 415; Furori ii 4, ii 5, pp. 457, 465; Lampas §64.14-23, p. 1022 (= BOL, vol. 3, p. 43.7-15); Theses de magia §21.2-4, p. 340 (= BOL, vol. 3, p. 462.28-30); De minimo I 4, p. 149.3-5; De compositione i 1, i 2, pp. 94.12-18, 98.1-7; De vinculis §63.2-8, pp. 492-494 (= BOL, vol. 3, p. 684.17-23). For ‘vestige’ in Bruno’s thought, see SPRUIT, II problema, pp. 60-61, 209, 265. For the philosophical background of ‘vestige’ in Renaissance philosophy, see WIND, Pagan mysteries in the Renaissance, pp. 42 n. 25, 241-255.
and intermediate causes, and these second causes into first causes, and these many [first] causes into one cause.¹

In the quotation contraction is explained through two concepts, abstraction (abstractio) and intention (intentio). The following two sections explain these terms in more detail.

(i) Abstraction through “ten or twelve determinata”

Bruno’s explanation of contraction through noetic ascent as abstraction is fairly straightforward at first sight. Just as the One descends to particulars through the hierarchy of genera and species, it is intellectually possible to reverse the process and ascend towards the One, from where all genera originate.² What Bruno means by “ten or twelve determinata”, we may assume determinatagenera, is puzzling.

¹ BRUNO, Sigillus ii 22, pp. 213.21-214.6: “Sic enim per concretionem intelligibile unum et verum ad nos descendit, quemadmodum necessarium est nos ad ipsum per abstractionem ascendere. Id quidem tentamus, cum infinita individua in species, innumerabiles species in plurima genera media, haecque in determinata decem vel duodecim, et ipsa in unum analogum supremum omnium colligimus, ut per ipsas intentiones quasi oppositam contractionem prosequentes, esse multiplex et infinitum particulare in esse specificum et genericum, et hoc ad esse in generex maxime universali, idque ad esse simpliciter sive essentiam contrahamus, sicut posterius in prius, effectus in causas, has partiales in communes, illasque proximas et immediatas ad remotiores atque mediatas, easque secundas ad primas, ipsasque plures ad unam.”

² For contrahere used similarly to describe noetic ascent to the One, see id., De minimo I 4, p. 146.20-24: “Siquidem quanto altior ille/ Incumbit, lumen magis intenditque superne,/ Hoc operae precium est ut plus se colligat, atque/ Discutiens numerum in monadem se invertat, et ipsam/ Sic eat in monadem, ut hanc in se contrahat idem.”

Id., De umbris §28.9-11, p. 31, noetic ascent is described as a movement from many individuals to many species, and from there to one genus. In her note to this passage, Sturlese points out this resembles the description of noetic ascent in Bruno, Sigillus ii 22, p. 213.23-27. But there are differences. One is that Bruno does not include the
A parallel passage in *De lacausa*, published only a year after the *Sigillus*, supports the assumption that on p. 84 above Bruno is referring to the Aristotelian categories by the expression *determinata*.\(^1\) There Bruno speaks of noetic ascent towards the One as a reversed descent. He explains how Platonists and Peripatetics, for this purpose, reduce infinite individuals to species, and these species ultimately to "determinati geni", which a certain Archytas holds to be ten. These ten are then reduced to one being.\(^2\) The metaphysical scheme fits with that of the *Sigillus*. The number of species differ, however, and I shall return to this issue in a moment.

Under the name of Archita, the work *Decem praedicamenta*, translated by Domenico Pizzimenti, had been printed in Venice in 1561. Aquilecchia holds, however, that Bruno may not have known this work, even though he refers to it. Instead, he may have known Archytas' work through Simplicius' commentary on Aristotle's *Categories*, published in Boethius' *Opera omnia*, Basel 1570.\(^3\) According to the report of Archytas, then, the Aristotelian doctrine of the ten categories was derived from Pythagorean thought.\(^4\) In Renaissance thought Plato was commonly

---

\(^1\) This source for the *Sigillus* is suggested by TIRINNANZI in BRUNO, *Le ombre delle idee*, etc., tr. N. Tirinnanzi (Milan 1997), p. 430 n. 219.

\(^2\) BRUNO, *Causa* v, p. 297: "Quindi i Peripatetici e Platonici, infiniti individui riducano ad una individua raggione di molte specie; innumerali specie comprendono sotto determinati geni, quali Archita primo volse che fussero diece; determinati geni ad uno ente, una cosa". For Archita, see also id., *De compendiosa architectura* iii 7, p. 60.19-21: "Archytas Tarentinus et Gorgias Leotinus et alii denario eorum, quae praedicamenta appellantur, proposito, nihilio minora et pauciora proposuere quam Lullius."

\(^3\) See the note by AQUILECCHIA, in BRUNO, *Causa*, p. 377 n. 41. The crucial passage to which Aquilecchia refers, occurs in BOETHIUS, *In praedicamenta Aristotelis* i, p. 114.5-6: "Archites etiam duos composuit libros quos καθολὼς λόγους inscrisit, quorum in primo haec decem praedicamenta dispositus".

\(^4\) BOETHIUS, *In praedicamenta Aristotelis* i, p. 114.5-12.
thought to be a Pythagorean. This would explain why Bruno in this passage of De la causa attributes this doctrine not only to Peripatetics, but also to Platonists.

On this background we can be fairly sure that by “ten or twelve determinata”, mentioned in the quotation from the Sigillus on p. 84 above, Bruno means the ten Aristotelian categories, or predicaments, which Bruno speaks of as genera (“determinati geni”) in De la causa. This usage can be explained. In Aristotle’s philosophy there are ten categories. In his terminology ‘genus’ (γένος) can also denote one of the ten categories. Hence the expression determinata in the quotation from Sigillus on p. 84 above may be an elliptic expression for determinatagenera.

But why does Bruno mention “ten or twelve determinata [genera]” in the quotation from the Sigillus on p. 84 above? Aristotle’s Categories is, again, one possible explanation. There he divides these ten categories into two groups, the first consisting of just substance, and the second comprising the remaining nine, all of which are accidents. When these two groups are added to the ten, we arrive at twelve. This subdivision may explain why Bruno mentions “ten or twelve” determinata in the above quotation. In the Sigillus ii 15 we find another explanation of the “ten or twelve determinata [genera]”. There Bruno states that there are ten categories, which he calls formae generales. In addition to the ten categories — Aristotelian categories we may assume — Bruno adds two, namely movement (motus) and cause (causa). Hence, there are ten or twelve categories, depending on the inclusion of the last two categories added by Bruno.

1 ARISTOTLE, Categories iv 1b25-2a10. Here Aristotle mentions the following ten categories: (1) substance, (2) quantity, (3) quality, (4) relation, (5) place, (6) time, (7) position, (8) state, (9) action, (10) affection. See also id., Topica i ix 103b20-24.

2 E.g. id., De anima i 1 402a22-26.

3 Id., Categories iv-v 294-2b6.

4 BRUNO, Sigillus ii 15, p. 207.4-6: “Formae vero rerum generales sunt etiam duodecim: decem puta categoriae, quibus addimus L motum, M causam.”
One may wonder, however, why Bruno would speak of contemplating accidents at such a high level of abstraction, moving between genera and the One. Further, even though Bruno only claims that these *determinata* are used in our abstraction from genera to the One, one may also wonder whether he also regarded these *determinata* as having ontological status. According to Aristotle, the categories not only structure reality, they are also the forms through which our thoughts can be formed, reflected in the subject-predicate structure of our language. The categories thus endow our thoughts and language about the extra-mental world with the possibility of objective validity. Although this idea of Aristotle may ultimately be behind Bruno’s use of the categories, their uses differ. For in the *Sigillus* and in *De la causa* Bruno does not regard the categories as intermediaries between our thoughts and language, on one hand, and the extra-mental world on the other, but as intermediaries between genera and the One, thus reflecting his concerns about a unified nature of descent and noetic ascent. This is probably how Bruno understands noetic ascent as ‘abstraction’ through the categories, or the “ten or twelve *determinata*”, as explained in the quotation on p. 84 above. Such a use of categories would explain how Bruno conceives of them as a means of mediating between sensible multiplicity and the supra-intelligible One.

In the quotation from the *Sigillus* on p. 84 above, Bruno also holds that this intellectual process of abstraction leads to “a supreme, analogous one of all things”, that is, a form of “understanding” of the One. That is, he adds, an understanding of

---


2. BRUNO, *Causa* v, p. 297, as quoted on p. 86 n. 2 above; *Sigillus* ii 22, pp. 213.21-214.6, as quoted on p. 85 n. 1 above. CUSANUS, *De docta ignorantia* ii 6, p. 80.1-7, as quoted on p. 205 n. 4 below, similarly speaks of ten categories inserted between the One and genera. GILES, *Super authorem De causis*, Alphaborium vii, fol. 25v, lines 33-42, as quoted on p. 206 n. 2 below, also inserts the ten categories in the order of descent, though not between the One and genera, but at the lowest ontological level, i.e. that of individuals. For a discussion of this difference between Giles and Cusanus, see p. 207 below.
the first cause of the universe. This is a traditional idea found in scholasticism, deriving from the idea of a hierarchy of causes propounded in the *Liber de causis*.\footnote{Cf. SPRUIT, *Il problema*, pp. 147-148, where BRUNO, *Sigillus* ii 22, p. 213.21-23 ("Sic enim per concretionem intelligibile unum et verum ad nos descendit, quemadmodum necessarium est nos ad ipsum per abstractionem ascendere") is interpreted within a Neoplatonic three world metaphysics (the sensible world, the intelligible world and the conceptual world in the human mind). Although Bruno certainly adheres to this idea elsewhere in the *Sigillus*, and indeed in other works, this seems not to be the case in the next lines, ibid., ii 22, pp. 213.23-214.6, quoted and translated on p. 85 n. 1 above. We do find a three world metaphysics in id., *Sigillus* i 16, pp. 164.27-165.7; *De umbris* §52.10-12, pp. 43-44; *Causa*, epist., p. 23; *Cabala* i, p. 69; *De compositione* dedication, I i 1, I i 5, I ii 20, pp. 89.20-90.30, 94.12-95.2, 101.4-24, 198.6-13; *Oratio valedictoria*, pp. 14.22-15.5; *Lampas* §252.[1-5], p. 1372 (= BOL, vol. 3, p. 206.14-19); *De magia naturali* §7.1-2, p. 172 (= BOL, vol. 3, p. 403.4-5); *De minimo* I 1, p. 136.21-28.}

(ii) Intention

The second central concept in the quotation on p. 84 above is intention (*intentio*). The term *intentio* has at least two distinct meanings in Bruno’s mnemonic writings. First, it is a general term denoting something like a philosophical viewpoint or understanding. Second, it is a technical term derived from a theory of intentionality in scholastic epistemology. Aquinas used the term *intentio* with several meanings, including the second of these senses.\footnote{For the various meanings of *intentio* in the philosophy of Aquinas, see SIMONIN, ‘La notion d’*intentio* dans la philosophie de St Thomas’, pp. 448-460.} He used it to denote the psychological act in the rational soul in which the attention focuses on sense data in the imagination or fantasy.\footnote{For this meaning of *intentio* in Aquinas, see SIMONIN, ‘La notion d’*intentio* dans la philosophie de St Thomas’, pp. 456-457.}
Bruno defines *intentio* as "the act of the cognitive or appetitive faculty towards the [sense] object", and contrasts it with conception (*conceptio*), which is the act occurring when a faculty receives sense objects. He also distinguishes primary intentions from secondary intentions. Primary intentions (*intentiones primae*) he divides into intentions of particulars and intentions of universals. Primary intentions of particulars are based on direct sense impression, for instance, the impression produced by looking at Socrates or at the sun. Primary intentions of universals are concepts ultimately based on intentions of particulars. For instance, the intention of 'animal' is based on that of men, which may, for instance, be based on the perception of Socrates. Secondary intentions (*intentiones secundae*) are concepts of concepts produced by primary intentions. An example of this could be 'species of animals'. Aquinas had upheld a fairly similar distinction between primary and secondary intentions.


intentions. When Bruno uses *intentio* in the quotation on p. 84 above, he may mean that intentions — primary intentions of particulars, then primary intentions of universals, then secondary intentions — lead, or are in some way related to increasing degrees of abstraction.

In relation to *intentio*, Bruno also distinguishes (a) “first and simple intellect”, which, “just as a unity embracing all numbers”, does not have objects outside itself, but is itself in some way, and is therefore able to comprehend without the use of intentionality; from (b) “the rest”, e.g. human intellects, which have to use intentionality, since the object is outside them. This means that the “first and simple intellect” is able to comprehend without temporal progression and without sense data, unlike other intellects. The underlying idea is that Mind does not have a distinction between ‘knower’ and ‘known’. It is that thing which is in act by thinking its thoughts. In this sense it is different from the human mind that uses discursive reason. These comments are similar to those Bruno advances in the *Sigillus* insofar as he states that noetic ascent through abstraction aims at a simultaneous understanding of all, an act in which we imitate, albeit imperfectly, the divine mind by understanding

---


2 BRUNO, *Summa*, p. 113.10-22: “Intentio. Intellectus primus et simplex, qui in se ipso omnem complitur cognitionem, sicut unitas omnem numerum, cognoscit ubique totus, sicut est ubique totus, sine distractione et applicatione; quandoquidem non habet objectum extra se, sed, sicut dictum est, idem est objectum et cognoscens. Ideo non intentionaliter, id est non per decursum seu influxum seu effluxum seu progressum quendam cognoscit, sed eadem absolutione cognoscit qua et est; reliqua vero quibus objectum est externum, sive intelligentia sive ratiocinantis sive sentientia, tensione quadam seu attenzione, qua nempe tendendo ad aliquid cognoscunt, informantur cognitionis propriae specie.” This difference between God and human beings was underlined in AQUINAS, *Summa contra gentiles* i 55, vol. 13, p. 157.
the intelligible species.\footnote{BRUNO, Sigillus ii 21, pp. 211.23-212.2.} Our understanding of these intelligible species are — like universal intentions — prompted by, though not reducible to, sensation.\footnote{Ibid., ii 21, pp. 210.25-211.22. For Bruno's treatment of species intelligibilis in general, see SPRUIT, 'Species intelligibilis': from perception to knowledge, pp. 203-213; and for species intelligibilis in the Sigillus, ibid., p. 206.}

Up till this point in my explanation of Bruno's notion of intentio I have dealt with intentio as an intellectual response, direct or indirect, to sensation. However, Bruno also make the important point that primary and secondary intentions are the same as rationes. Bruno explains rationes and how they relate to intentiones in the following passage, which describes descent from the intelligible to the sensible world:

The species is indeed called an Idea prior to [its descent to] natural things. In natural things it is called a form or vestige of the Ideas. Posterior to natural things it is called ratio or intentio, which is distinguished into primary and secondary [intention], and which we are sometimes wont to call a shadow of the Ideas.\footnote{BRUNO, De compositione I i 1, p. 94.14-18: “Quae sane species ante naturalia appellatur idea, in naturalibus forma sive vestigium idearum, in postnaturalibus ratio seu intentio, quae in primam atque secundam distinguitur, quam nos aliquando idearum umbram consuevimus appellare.” The term intentio in this passage is used similarly in id., De umbris §52.12-15, p. 44.}

Ficino had defined reasons, rationes, within a Neoplatonic framework. According to him rationes are the rational principles in the human soul corresponding to the Ideas in the World Soul or Angelic Mind.\footnote{E.g. FICINO, Theologia platonica xi 4, vol. 2, p. 112.21-34; xv 16, vol. 3, p. 81.19-34. See also AUGUSTINE, De diversis quaestionibus 83, xlvi 2, col. 30.} Moreover, Ficino had also used 'Ideas' and 'forms' together with 'reasons' within a metaphysical structure similar to the one Bruno employs in the quotation above.\footnote{For a similar use of 'Ideas', 'form' and 'reason'; see FICINO, In epistolas duodecim Platonis, p. 1531.23-29; De amore II iii, V iv, pp. 149.30-39, 185.5-7.} Due to Bruno's identification of intentio with
ratio, he could hold, in the passage quoted above and elsewhere, that the intentio was more than the human intellect’s arrival at a logical concept. It was, in addition, an ascent to a higher reality, the realm of the Ideas.

One reason for Bruno’s accommodation of the scholastic term intentio, for instance in the quotation on p. 84 above, may well have been that the distinction between primary and secondary intentions was useful in Bruno’s account of how it was possible to ascend noetically from sensible nature, known through the so-called primary intentions, to the formative principles of the universe, the Ideas, known through the secondary intentions. Sensible particulars are the point of departure of abstraction, noetic ascent, and the intellect “contracts” sensible multiplicity through intentions.\(^1\) Bruno takes up this point again in the Eroici furori, as we shall see.

4. Contraction in the Eroici furori

In the Eroici furori — a work discussing the idea of Neoplatonic, noetic ascent within the vernacular tradition of philosophical commentaries on love poetry — Bruno returns to the notion of intention, and I shall discuss it briefly since it sheds some light on the quotation from the Sigillus on p. 84 above. In the Eroici furori he assigns to the human intellect the task of arriving at the intelligible unity of Mind.\(^2\) This may take place when the philosopher turns away from the multitude of people and “contracts

---

1 For similar uses of intentio; see BRUNO, De umbris §§72.2-7, 84.11-12, 140.2-9, pp. 56, 63, 102; Sigillus ii 7, ii 11, ii 22, pp. 199.25-200.6, 203.16-26, 213.23-214.6.

2 Id., Furori i 3, p. 137: “La è oggetto finale, ultimo e perfettissimo; non già in questo stato dove non possemo veder Dio se non come in ombra e specchio, e però non ne può esser oggetto se non in qualche similitudine; non tale qual possa esser abstratta et acquistata da bellezza et eccellenza corporea per virtù del senso: ma qual può esser formata nella mente per virtù de l’intelletto.”
within himself”, that is, withdraws in contemplation. In this state “[the soul of the philosopher] contracts the divinity into itself”, Tansillo proclaims, “since it is in God by means of the intention, by which it penetrates into the divine (inasmuch as it can), and since God is in the soul of the philosopher inasmuch as the human mind, once it has penetrated the divine, comes to conceive of the divine and (inasmuch as it can) to receive it and understand it in its concept [of it].” In Aquinas’ epistemology, too, conceptus is defined in conjunction with intentio. It is understanding, the psychological outcome of intentio, rather than attention. Bearing in mind that Bruno conceives the divine as immanent in the universe, or even the universe itself, this expression in the Eroici furori, “to contract the divine”, may simply mean to comprehend and contemplate the infinite multiplicity of the universe within oneself.

---

1 Ibid., ii 1, p. 315: “Se aspira al splendor alto, ritiresi quanto puô all’unità, contrahasi quanto è possibile in se stesso, di sorte che non sia simile a molti, perché son molti; e non sia nemico de molti, perché son dissimili, se possibil fia serbar l’uno e l’altro bene: altrimente s’appiglie a quel che gli par megliore.”

2 Ibid., i 3, p. 137: “[anima del filosofo] contrae la divinità in sé essendo ella in Dio per la intenzione con cui penetra nella divinità (per quanto si può), et essendo Dio in ella, per quanto dopo aver penetrato viene a concipierla e (per quanto si può) a ricettarla e comprenderla nel suo concetto.” For this application of ‘contraction’ in the Furori, see SARAUW, Der Einfluss Plotins, pp. 44-45; NELSON, Renaissance theory of love, p. 188. See also BRUNO, Furori ii 3, p. 421: “atteso che avendo contratta in sé la divinitade, è fatto divo”. The concept of contraction in this noetic sense is similarly applied in Bruno’s myth of Actaeon in the Furori. The myth recounts that Actaeon is a hunter who becomes prey of the hunt himself, killed by his own hunting dogs, thus symbolising the self-transformation, or rather self-annihilation, resulting from divine contemplation. Ibid., i 4, p. 159, Bruno states that Actaeon after he becomes prey of the hunt himself: “s’accorse che de gli suoi cani, de gli suoi pensieri egli medesimo venea ad essere la bramata preda, perché già avendola contratta in sé, non era necessario di cercare fuor di sé la divinità”. For the Actaeon myth in the Furori, see BEIERWALTES, ‘Actaeon’, pp. 345-354.

3 See my discussion of Bruno’s distinction between intentio and conceptus on p. 90 above.
In an article published in 1916 Julie Sarauw has suggested that the passage from the *Eroici furori* cited on p. 94 above derives from Plotinus' description of mystical union with the One in *Enneads* VI vii [38] 34.8-14. Such union arises at the moment when the soul turns away from lower things and makes itself as beautiful as it can, so that it becomes like Soul. In that moment the human soul "sees it [Soul] in itself suddenly appearing", and the soul experiences union with Mind, Plotinus says.\(^1\) This may well be Bruno's source. Elsewhere in the *Eroici furori* Bruno states that, according to Plotinus, there are three "preparations" for experiencing the divine. First, to "conform oneself" to a "divine similitude", that is, to make ourselves like the divine by turning away from perceptible things that are beneath or of the same ontological level as ourselves. Second, to apply all "intention" to the higher species. Third, to enslave all "will" and "desire" to God.\(^2\) These three ways of preparing oneself for the divine occur, in fact, not in Plotinus but in Ficino's commentary to *Enneads* V viii [31] 10, although Bruno did not copy Ficino's comment exactly, especially not in the first preparation.\(^3\) Sarauw did not note this, even though she based her study of Bruno and Plotinus on an edition of the Greek text of the *Enneads* accompanied by the

---

1. Tr. A. H. Armstrong. This is pointed out in SARAUW, *Der Einfluss Plotins*, pp. 44-45. For Ficino's Latin translation, which Bruno used, see PLOTINUS VI vii [38] 34, tr. Ficino, p. 725.38-53.

2. BRUNO, *Furori* i 5, p. 225: "Cicada. In che maniera intendete che si faccia cotal conversione? Tansillo. Con tre preparazioni che nota il contemplativo Plotino nel libro *Della bellezza intelligibile*: de le quali 'la prima è proporsi de conformarsi d'una similitudine divina' divertendo la vista da cose che sono infra la propria perfezione, e commune alle specie uguali et inferiori; 'secondo è l'applicarsi con tutta l'intenzione et attenzione alle specie superiori; terzo il cattivar tutta la voluntade et affetto a Dio'."

1580 edition of Ficino’s translation and commentary. Bruno did not know Greek, and on this and other occasions he clearly used Ficino’s Latin translation and commentary. In the meanwhile Bruno’s use of Ficino’s commentary on this point has been noted by Miguel Granada.

The term ‘contraction’, used by Bruno in the *Eroici furori* to describe this act of intellection, does not feature in Ficino’s commentary. As mentioned at the beginning of this chapter, contraction in this noetic sense was not common traditionally, certainly not as commonly as contraction in its ontological sense. There are, however, two instances where Ficino uses the term to describe some sort of noetic ascent. In the *Theologia platonica* Ficino had translated some lines from Zoroaster’s *Chaldean oracles*, in which Zoroaster describes how the divinity may be “contracted” into the human soul in a mystical union, provided the soul leaves behind all bonds to the body. Zoroaster states that the soul becomes utterly intoxicated by “drinking in the divine draughts”. In a comment on these lines, Ficino explains that Zoroaster means

---

1 Cf. SARAUW, *Der Einfluss Plotins*, p. 44, who points out PLOTINUS V viii [31] 10 as the source for the above passage in the *Furori*.


3 See note 13 by GRANADA to BRUNO, *Furori* i 5, p. 225.

to receive the *influxus* from God, transmitted by angelic minds to the human soul.\(^1\) It is, perhaps, worth bearing in mind that this use of 'contraction' occurs in a poetic context, and for this reason it may not have the same philosophical connotations that we find elsewhere.

In a letter addressed to Lorenzo dei Medici Ficino does, however, use 'contraction' in a philosophical sense. The context is a discussion of felicity and its degrees, in particular the roles of will and intellect in the process of noetic ascent to God. Ficino distinguishes, in a traditional fashion, between an affective and an intellectual understanding of God. The former is superior to the latter, according to Ficino on this occasion. In the intellectual understanding of God, Ficino says, "we contract", that is, we limit, "His greatness [God's] according to the capacity and comprehension of our mind (*mens*)". In affective understanding, on the other hand, the human mind expands itself and thereby conforms, at least to some extent, to the immense goodness of God.\(^2\)

Although this passage may have inspired Bruno's use of 'contraction' in his *Eroici furori*, two differences should be noticed. Even though Bruno, too, employs the distinction between affective and intellectual understanding of God in the *Eroici furori*, he does not, as Ficino does in this particular passage, conceive of them as mutually

---


2 Id., *Le lettere*, 1.115.181-185: "Superare vero eos amando gaudendoque potius quam intelligendo valemus; proinde cognoscendo Deum eius amplitudinem contrahimus ad mentis nostre capacitatem atque conceptum, amando vero mentem amplificamus ad latitudinem divine bonitatis immensam." SPRUIT, *Il problema*, p. 240, notes Ficino's use of 'contraction' here, though he does not relate it to Bruno's notion of contraction. The voluntarist view expressed by Ficino in this letter to Lorenzo dei Medici was apparently contradicted in Ficino's commentary on Plato's *Philebus*, where Ficino argued in favour of an intellectualist view; see ALLEN, 'Introduction', pp. 35-48; KRAYE, 'Moral philosophy', pp. 351-353.
exclusive, but rather as dialectically dependent. Further, whereas Ficino uses the term 'contraction' in this letter to denote a limitation of the soul's understanding of God, contrasted with the affective understanding, Bruno uses the term 'contraction' in the reverse sense, to describe the soul's assimilation to the divine — an assimilation that, ultimately, is intellectual rather than affective.

5. Bruno's criticism of noesis induced by melancholy: its consequences for love poetry and religion

Bruno's criticism of noetic ascent facilitated by melancholy in the second, eleventh, twelfth and fourteenth of the fifteen contractions in the Sigillus has ramifications in his Italian dialogues, published at London within two years of the Sigillus, and in his so-called De magia naturali, composed in Helmstedt in 1589. The most important references concerning melancholy and the fifteen contractions in the Sigillus occur in the Eroici furori.

In his De amore, composed between 1467 and 1469, Ficino had employed his theory of melancholy in his treatment of Neoplatonic raptus enacted by love and poetry. Later in De vita he discussed melancholy at length. Following Plato's Phaedrus, Ficino described the furor brought about through poetry and love as instances of Neoplatonic raptus. On other occasions Ficino asserted that melancholy

---

1 E.g. BRUNO, Furori ii 3, p. 423: “Cossì primieramente la cognizione muove l'affetto, et appresso l'affetto muove la cognizione.”
2 FICINO, De amore VI v, VI ix, pp. 205.20-30, 215.3-12; De vita i 3-6, pp. 112-122.
3 The other forms are prophesy and mystery. The four kinds are, then, vaticinium, mysterium, poesis, amor (FICINO, In Phaedrum ii, p. 75.29 [= id., Opera, p. 1364.8]). These four kinds are also mentioned in id., De amore VII xiv, p. 257.2. This typology corresponds to PLATO, Phaedrus 265b2-5 (prophecy, mysticism, poetic frenzy and love). For these forms in Ficino, see GENTILE, 'In margine', pp. 53-61.
was conductive to the Platonic furor. By the time, then, that Bruno composed his Eroici furori in 1584, the doctrine of melancholy had for some time been an integrated part of the tradition of philosophical commentaries on love poetry. In the Eroici furori Bruno writes within this tradition of philosophical discussions of love, attacking the idea that melancholy is a vital element in noetic ascent.

In the Eroici furori, as in his Sigillus, Bruno mocks the love poet affected with melancholy ironically. The kind of frenzy which Bruno favours, he states, does not depend on the physiological state produced by melancholy. It depends instead on the cognitive faculties of the contemplating individual. As in the Sigillus, Bruno maintains that those suffering from melancholy, that is, those who are unable to raise above the effect that excessive melancholy has on their imagination, behave dangerously and fail to ascend noetically in a true sense.

It is possible to distinguish between two kinds of furore, Bruno states in the Eroici furori. One which displays “blindness, stupidity and irrational impulse”, another

---

1 See pp. 136-141 below, especially p. 140 n. 5.
2 NELSON, Renaissance theory of love, pp. 163-233.
3 BRUNO, Furori arg., i 3, pp. 5, 17-19, 123.
4 Ibid., i 3, p. 123: “Non è furor d’altra bile che fuor di conseglio, ragione et atti di prudenza lo faccia vagare guidato dal caso e rapito dalla disordinata tempesta; ... Ma è un calor acceso dal sole intelligenziale ne l’anima et impeto divino che gl’impronta l’ali: onde più e più avvicinandosi al sole intelligenziale, rigettando la ruggine de le umane cure, dovien un oro probato e puro, ha sentimento della divina et interna armonia, concorda gli suoi pensieri e gesti con la simmetria della legge insita in tutte le cose.” Bruno’s criticism of physiologically induced contraction as a means of noetic ascent in the Furori is ignored by INGEGNO, ‘Nota sul Sigillus sigillorum del Bruno’, pp. 361-369; id., Regia pazzia, pp. 137-141, especially p. 140.
5 Cf. BRUNO, Furori i 3, p. 123, cited in the note above, with id., Sigillus i 45, p. 189.6-14, as quoted on p. 33 n. 3 above.
which consists in “divine abstraction”.¹ So far, Bruno seems to allude to a distinction in Ficino’s *De amore* between two kinds of *furore* which are both “alienations of the mind” (*alienatio mentis*), but where one alienation is caused by human weakness (*morbus*), the other by God.² “Divine abstraction”, as some people call it, can be divided into two kinds according to Bruno. The first turn men “void of sense and spirit [in the sense of soul] of their own” into “receptacles” for the divine “spirito e senso”. The second kind of divine *furore* we find in men “naturally endowed with a lucid and intellectual spirit [again, in the sense of soul]” whose “inspired understanding” and “acute senses” turn them into “principali artefici et efficienti”, i.e. men who are principles and causes of things, not into “receptacles and instruments” like the former.³ Those who experience the former kind of divine *furore* have within them

---

¹ *Id.*, *Furori* i 3, p. 119: “sono più specie de furori, li quali tutti si riducono a doi geni: secondo che altri non mostrano che cecità, stupidità et impeto irrazionale, che tende al ferino insensato; altri consisteno in certa divina abstrazione per cui dovegnono alcuni megliori in fatto che uomini ordinarii.” For a similar division of abstraction,, see also *Id.*, *Idiota triumphans* i, p. 6.19-24.

² *Ficino*, *De amore* VII iii, p. 245.10-12: “Plato noster furorem in *Phaedro*, mentis alienationem definit. Alienationis autem duo genera tradit. Alteram ab humanis morbis, alteram a deo provenire existimat.” Ficino refers to *Plato*, *Phaedrus* 265a9-11. For the sources to this letter, see *Gentile*, ‘In margine’, pp. 39-61. For Ficino’s distinction in the *De amore* VII iii, p. 245.10-12, see also ibid., VII xii-xiii, pp. 256.19-258.10; id., *In Phaedrum* ii, pp. 75.27-79.28 (= *Id.*, *Opera*, p. 1364.5-47); id., *In Ionem*, p. 1281.40-43: “Plato noster, optime Laurenti, furorem in Phaedro, mentis alienationem definit. Al[i]enationis autem duo genera tradit. Unam ab humanis morbis, alteram a Deo provenientem.” In an early letter dated December 1457, Ficino had similarly singled out *alienatio* as the meaning of *furore* in Plato; see *Ficino*, *De divino furore*, p. 614.1.

³ *Bruno*, *Furori* i 3, pp. 119-121: “E questi sono de due specie perché: altri per esserno fatti stanza de òi spiriti divini, dicono et operano cose mirabile senza che di quelle essi o altri intendano la raggione; e tali per l’ordinario sono promossi a questo da l’esser stati prima indisciplinati et ignorantì, nelli quali come vòti di proprio spirito e senso, come in una stanza purgata, s’intrude il senso e spirito
more dignity, power and efficacy, since they give room to the divine, or at least so they pretend. Those who experience the latter kind of divine furore are themselves more powerful and efficacious, and they are divine.1

The distinction in the Eroici furori between two kinds of “divine abstraction” — that is, between those who have an “inspired understanding” on one hand, and those who are “void of sense and reason” of their own and therefore only “receptacles”, on the other — is important in relation to Bruno’s notion of noetic interpretation of contraction. Abstraction is, as we have seen in the “twofold contraction” described in the Sigillus, a means of carrying out a reversed descent.2 Descent from the One to the manifold is one form of contraction, whereas abstraction, i.e. noetic ascent, is the other form of contraction from manifold towards the One.

What Bruno says about contraction as abstraction in the Sigillus fits well with his comments in the Eroici furori about “divine abstraction”. First, the kind of abstraction discussed in the Sigillus corresponds to the form of “divine abstraction” carried out by those assigned an “inspired understanding” in the Eroici furori, since it is similarly based on the rational faculties.3 Second, the “divine abstraction” of these men, Bruno

---


2 Id., Sigillus ii 22, pp. 213.21-214.6, as quoted on p. 85 n. 1 above.

3 Cf. id., Furori i 3, p. 123, as quoted on p. 99 n. 4 above, with id., Sigillus ii 22, p. 213.21-23, as quoted on p. 89 n. 1 above.
adds in the *Eroici furori*, is not determined by their “black bile”, i.e. melancholy, but primarily by the superiority of their rational faculties.¹ In the *Sigillus* Bruno had similarly stated that those “more noble souls” who contemplate the divine may be assisted by tempered melancholy, but that the success of their contemplation is due to their intellectual capacities, not to their humours alone.² Third, Bruno says in the *Eroici furori* that the *furore* of those adhering to reason is not “oblivion, but memory”.³ Memory was also vital to the theory of noetic ascent in the *Sigillus* as part of the *Ars reminiscendi*.⁴ Fourth, in the *Sigillus* Bruno criticises the first kind of so-called “divine abstraction” among those afflicted by melancholy: such people abandon reason, becoming instead “receptacles” (used by demons and spirits). In the *Eroici furori* Bruno makes the same criticism.⁵

Both the *Sigillus* and the *Eroici furori*, then, criticise noetic ascent induced by intruding spirits or melancholy. In both instances, Bruno claims, it derives not from an active, autonomous inner experience and intellectual endeavour, but instead from extrinsic elements. This, then, is the criticism Bruno raises against the theory of noetic ascent through physiologically induced contractions in the field of love poetry. Bruno is not necessarily directing his attack against Ficino, but perhaps against those poets who pretended to employ Ficino’s theory of melancholy.

The distinction between authentic human experience, on one hand, and self-suggestion which turns men into “vessels” of the divine, on the other, has some offshoots in Bruno’s reflections on religion, to which I shall turn briefly. Bruno phrases his criticism against religious practices whereby men become “receptacles and

---

¹  *Id.*, *Furori* i 3, p. 123, as quoted on p. 99 n. 4 above.
²  *Id.*, *Sigillus* i 45, p. 189.6-14, as quoted on p. 33 n. 3 above.
³  *Id.*, *Furori* i 3, p. 121: “Questi furori de quali noi raggioniamo [the divine abstraction promoted through intellectual endeavour], e che veggiamo messi in execuzione in queste sentenze, non son oblio, ma una memoria”.
⁴  *Id.*, *Sigillus* i 17, p. 165.11-13.
⁵  Cf. *id.*, *Furori* i 3, pp. 119-121, as quoted on p. 100 n. 3 above, with *id.*, *Sigillus* i 45, i 46, i 48, pp. 188.20-189.14, 189.16-190.18, 191.7-21.
instruments” of the divinity in a way that implies his disagreement with the fundamental Christian requirement that the good Christian should have faith in the Scriptures, and that he should be passive and obedient towards what is perceived as God’s will. For the expression Bruno picks up on in the *Eroici furori* — religious men as passive “receptacles and instruments” — is also employed by St Paul and in the principle of *iustitia sola fide* promoted by Martin Luther (1483–1546) and Calvin.¹

In the *Cabala* Bruno similarly criticises those who are passive “vessels”.² There he attributes “santa ignorantia” and “divina asinitade” to persons who block the process of contemplation of the divinity under the pretence of religion.³ Bruno depicts such people in the *Cabala* like those characterised as “vessels” in the *Eroici furori*, who are also called “asses”, and who do not really undergo the process of *deificatio* but feign


² BRUNO, *Cabala* declamazione, pp. 23-25.

³ Ibid., declamazione, p. 23.
to do so.\textsuperscript{1} An example of this in the context of religion can be found in the twelfth contraction in the \textit{Sigillus}. There “our not very ingenious apocalyptics” are said to generate melancholic spirit inwardly, whereby they appear to others like “pious prophets and revealers”. They are, in fact, “asses”, like the people they convert.\textsuperscript{2} Another example is in the fourteenth contraction, also in the \textit{Sigillus}. There a monk is said to have increased melancholic humours in himself and thereby, in the eyes of his fellow monks, turned into a prophet and a great theologian. Bruno’s drug, however, cured him and revealed him as the “ass” which he had always been.\textsuperscript{3} These examples suggest that the theory of melancholy had become part of a religious culture detested by Bruno because it belittles the innate rational faculties in man. It is through them that the soul can communicate with the divine.

Bruno renewed his criticism of such practices in his \textit{De magia naturali}. There he states that one kind of magic seeks to evoke “gods, demons and heroes” through “prayers, consecrations, fumigations, sacrifices, dress of certain kinds and ceremonies”. This is, presumably, an allusion to Christian religious rites. In this kind of magic, Bruno continues, the practician turns himself into a “receptacle or instrument”. This form of magic is the “magic of the desperate”.\textsuperscript{4} Bruno probably included Christian rites and practices among them.

\begin{enumerate}
\item For “vessels” in the \textit{Furori}, see id., \textit{Furori} i 3, pp. 119-121, as quoted p. 100 n. 3 above. For “asses” in the \textit{Furori}, see ibid., i 3, p. 121: “come l’asino che porta sacramenti”. For the theme of “santa ignoranza” and “divina asinitade” in the \textit{Cabala} and other of Bruno’s works, see ORDINE, \textit{La cabala}, pp. 55-71.
\item BRUNO, \textit{Sigillus} i 46, pp. 189.15-190.5, as quoted on p. 34 n. 1 above.
\item Ibid., i 48, pp. 191.24-192.5, as quoted on p. 38 n. 2 above.
\item Id., \textit{De magia naturali} §2.17-24, p. 162 (= BOL, vol. 3, p. 398.8-16): “Si isti [magia] accessit cultus seu invocatio intelligientiarum et efficientum exteriorum seu superiorum, cum orationibus, consecrationibus, fumigiis, sacrificiis, certis habitibus et ceremoniis ad Deos, daemonas et heroas; tunc vel fit ad finem contrahendi spiritus in se ipso, cuius ipse fiat vas et instrumentum, ut appareat sapiens rerum, quam tamen sapientiam facile pharmaco una cum spiritu possit evacuare — et haec est magia desperatorum”. An example of such a “desperate” person being cured by a drug
\end{enumerate}
given by a "wise man" might be the story about the monk cured by Bruno in Brescia, reported in BRUNO, Sigillus i 48, pp. 191.24-192.5, as quoted on p. 38 n. 2 above.
CHAPTER 4

CONTRACTION AND MEMORY

1. Interpretations of Bruno’s idea of memory

Plotinus’ essay on matter led Bruno to assume the immanent existence of Ideas in matter. These Ideas also exist in the human memory, Bruno claims. Therefore there are two roads to the intelligible reality, due to the nature of the human soul. One consists in the contemplation and veneration of living nature, where Ideas exist intrinsically within matter. Bruno praises this approach to the divine in the Spaccio as a form of religion practised by the Egyptians and fated by the eternal vicissitude of things to recur again (in fact, in Bruno’s philosophy). In the previous chapter we have seen how contemplation of the sensible universe is one way of approaching this intelligible reality. The other road, the theme of this chapter, consists in summoning Ideas in the soul through the inventiveness of the higher memory, as described in the mnemonic works.

We can account for this second road in three ways. First, Bruno’s idea of memory in his early mnemonic works owes more to Plotinus than has hitherto been recognised. Second, even though Bruno does not link memory to contraction explicitly, his idea of noetic ascent through a “contracted similitude” of the intelligible realm is applicable to Bruno’s idea of noetic ascent through memory. Finally, we must ignore Sturlese’s claim that the mnemonic images in Bruno’s De umbris are nothing but “arbitrary signs” denuded of ontological reference. Instead, I shall propose that the
experimentation with mnemonic signs prescribed in Bruno’s mnemonic works implies that he conceived of these images as means of noetic ascent.

Bruno mentions Plotinus in several epistemological contexts in *De umbris* and the *Sigillus*.¹ Plotinus was, Bruno says, the “prince of Platonists”.² What was, then, Plotinus’ role in relation to the idea of memory in these works? In his monumental study of Bruno’s Latin works dating from 1889, Felice Tocco discussed Plotinus’ presence in these two mnemonic writings of Bruno. Tocco, however, concluded that Aristotle’s psychology was more influential than Plotinus’ in Bruno’s two works.³ Ever since Tocco several scholars have made important observations about Plotinus’ contribution to Bruno’s notion of memory — though without any significant revaluation of Plotinus’ importance in regard to Bruno compared to that of Aristotle.⁴ The most influential studies of Bruno’s mnemonics after Tocco have identified Bruno’s idea of memory with Aristotle’s doctrine in *De memoria et reminiscentia* and the account of memory in the pseudo-Ciceronian *Ad Herennium*, or derivatives of these sources.⁵ In this way Plotinus, even though Bruno praises him extravagantly

---

¹ BRUNO, *De umbris* §§54.6, 61.3, 71.2, 72.3, pp. 47, 51, 55, 56; *Sigillus* i 32, i 33, ii 3, pp. 175.22, 178.7, 196.13. The last reference concerns ontological issues. The other references concern epistemological ones.

² Id., *De umbris* §71.2, p. 55: “Notavit Platonicorum princeps Plotinus”.

³ TOCCO, *Le opere*, pp. 46-48, 362-365, emphasizes Plotinus’ importance for the idea of noetic ascent in *De umbris*, but underlines Aristotle’s *De memoria et reminiscentia* and the pseudo-Ciceronian *Ad Herennium* as sources for the art of memory, including Bruno’s (ibid., pp. 21-23).


⁵ TOCCO, *Le opere*, pp. 21-23; YATES, ‘The Ciceronian art of memory’, pp. 874-877, 901; id., *The art of memory*, pp. 45-50, 73-89, where Yates integrates this empirical concept of memory into her interpretation of Bruno’s use of mnemonic
several times in his epistemological theories in *De umbris* and the *Sigillus*, has been largely ignored, whereas Aristotle, whom Bruno mentions in *De umbris* rarely and in philosophically unimportant passages, has come to be seen as the main source of Bruno’s mnemonics in *De umbris* and the *Sigillus*.

The interpretation that I would like to propose in this chapter is, in brief, that Plotinus’ concept of memory, like his philosophy as a whole, comprised important Aristotelian traits, but that Plotinus’ concept contained additional elements which also occur in Bruno’s mnemonic works. The Aristotelian elements in Bruno’s mnemonics derive partly from Plotinus, who incorporated elements of Aristotle’s psychology, and partly from Aristotle and Aristotelian or scholastic psychology, and we cannot very often be sure which source Bruno is following. This means, in turn, that it is as untenable to identify Bruno’s notion of memory with that of Plotinus exclusively, as it is to do so with that of Aristotle. Bruno draws from both sources. He does not clarify his view in a systematic manner anywhere, but uses what fits into his various philosophical aims and contexts. What I shall do is to point out where in Bruno’s early mnemonic works Plotinus’ theory of memory may play an unnoticed role.

First, I shall outline Plotinus’ discussion of Aristotle’s account of sensation and memory, pointing out where Bruno sides with Plotinus and where with Aristotle (Section 2). Afterwards I shall explain Plotinus’ view of memory, taking into account his doctrine that imagination and memory in the human soul are twofold. This doctrine was central to Bruno’s doctrines of memory and noetic ascent (Sections 3 and 4). I
shall then explain the role of memory in Plotinus' account of noetic ascent and argue that this account of memory and noetic ascent may have influenced Bruno's theory of noetic ascent (Section 5). Finally, I shall show how this reading fits into Bruno's original interpretation of the traditional metaphor of the Golden Chain (Section 6).

2. Plotinus' discussion of Aristotle's doctrine on memory

Bruno draws, as mentioned above, on two main sources in his notion of memory, Neoplatonic and Aristotelian, and he manages to do so regardless of the deep philosophical differences between them on the issue of memory. Aristotle had presented a coherent theory of sensation, imagination, reasoning and memory in his *De anima* and *De memoria et reminiscencia*. In the former he had asserted that reasoning man makes use of mental images derived from sensation: "No one could ever learn or understand anything without the exercise of perception, so even when we think speculatively, we must have some mental image \([\phi\alpha\nu\tau\alpha\sigma\mu\alpha]\) of which to think, for mental images \([\phi\alpha\nu\tau\alpha\sigma\mu\alpha\tau\alpha]\) are similar to objects perceived except that they are without matter".\(^1\) Scholastic authors used *phantasmata* as their translation of the Greek word.

This empirical theory of knowledge is the basis of the doctrine of memory presented in *De memoria et reminiscencia*. Here Aristotle connects sensation, imagination and memory as follows: "It is obvious, then, that memory belongs to that part of the soul to which imagination \([\phi\alpha\nu\tau\alpha\sigma\tau\alpha]\) belongs; all things which are imaginable are essentially objects of memory, and those which necessarily involve imagination are objects of memory only indirectly".\(^2\) To the question of how we remember things that are not actually present, he answers that "it is obvious that one must consider the affection which is produced by sensation in the soul, and in that part

---

1. ARISTOTLE, *De anima* iii 8 432a7-10, tr. W. S. Hett, Loeb ed.
2. Id., *De memoria et reminiscencia* i 450a22-25, tr. W. S. Hett, Loeb ed.
of the body which contains the soul — the affection, the lasting state of which we call memory — as a kind of picture; for the stimulus produced impresses a sort of likeness of the precept, just as when men seal with signet rings”.\(^1\) In short, memory depends on sense data. It consists of imprints, like the imprints that seals imprint on wax.

Plotinus disagreed with Aristotle’s theory of sensation and memory.\(^2\) “We do not assert”, Plotinus says, “that the impression of the sense-object enters the soul and stamps it, nor do we say that memory exists because the impression remains.”\(^3\) Sensation and hence memory are not passive reservoirs of past sense impressions, according to Plotinus, but a power of the soul characterised by its intentionality. The faculty of sight, which is independent of what is perceived, is an example of this power of the soul.\(^4\) Plotinus produces five arguments to support his rejection of Aristotle’s theory, though without mentioning Aristotle explicitly. First, if the soul received impressions from sense-perceptions, it would not have to use its intentionality when sensing, since the impressions would already be in the soul. Second, if the soul received impressions in sensation, how would it be possible to judge distances of objects? Third, if such impressions were impressed on the soul, and they were the basis of cognition, then how would the soul be able to judge the size of the object perceived? This leads to the fourth and most important objection, namely, that if we received impressions of the object we perceive, then we would not see the object itself, but only its impression in our mind, and the objectivity of the sensation

---

1. Ibid. i 450b28-32, tr. W. S. Hett.
4. BLUMENTHAL, *Plotinus’ psychology*, pp. 81-82.
would be doubtful. Lastly, Plotinus argues in more general terms that the Aristotelian doctrine of impressions would imply that the object of perception, the impression, would not be separate from the faculty of seeing. This would make cognition impossible according to Plotinus, since that which sees and what is seen must be two separate things. The same applies to the soul and the sense impression produced by the senses. Hence Plotinus rejects the theory of the soul being stamped with sense impressions.¹

Bruno repeats part of Plotinus’ last argument almost verbatim, stating that we would be unable to perceive a sense-object if it was “placed” on the physical eye itself, and the soul even less so if the sense impression was stamped directly on it.² Verbal similarities between Bruno’s and Plotinus’ accounts of this idea suggest that Bruno read Plotinus rather than Ficino’s commentary, since Ficino did not mention this idea in his commentary.³ Bruno also gives an argument not advanced by Plotinus in the course of the five arguments summarised above, but which supports his rejection of Aristotle’s theory. “You would be mistaken in thinking,” Bruno says, “that you can retain in the soul, so to speak, a sort of image of those things which sense had perceived in such a way that the soul is thereby shaped and somehow receives a

---

¹ For these five arguments against Aristotle’s theory, see PLOTINUS IV vi [41] 1.11-40 (= tr. Ficino, pp. 452.36-453.20).
² BRUNO, Sigillus i 28, p. 169.21-24: “Et nimirum quod experimur rem pupillae impositam non discerni, remotiorem vero posse, tanto magis ad animam est referendum, quanto ipsam plus a materiae finibus elongatam novimus.” Cf. PLOTINUS IV vi [41] 1.31-36, tr. Ficino, p. 453.9-14: “Omnino vero quod fertur, non posse nos rem impositam pupillae discernere, remotam vero posse, idem quoque multoque magis est ad animam transferendum. Si enim rei vidende figuram poneremus in anima, spectaculum illud, quo insigniretur, minime cerneret.”
³ Cf. FICINO, In Plotinum IV vi [41], p. 453.15: “Quintum, non discernemus rem sensui sic impositam.”
vestige of the sense impression. For the *species* that next comes along to shape the soul would necessarily obliterate the preceding one."\(^1\)

In place of Aristotle's theory of sensation and memory Plotinus proposes that sensation is an intentional activity of the soul directed towards the object of sensation. In the case of hearing, Plotinus says: "The impression is in the air, and is a sort of articulated stroke, like letters written on the air by the maker of the sound; but the power and the substance of the soul does something like reading the impressions written on the air when they come near and reach the point at which they can be seen."\(^2\) Just as Plotinus denies that the soul receives sense-imprints when perceiving, he denies that memory summons retained sense impressions when recollecting.\(^3\) Plotinus argues that memory is likewise an intentional power of the soul, similar to sensation.

Bruno agrees with Plotinus that memory cannot be reduced to a passive reservoir of received sense impressions, and insists, too, that it is an intentional activity.\(^4\) In the *Sigillus*, for instance, he states that memory does not derive from sensation or from introspection, "but from some unnamed faculty of the soul, which is used in a kind of *intentio* of, or attention to, something".\(^5\) Bruno could use the aspect of intentionality in Plotinus' idea of memory, since it fitted into his idea of noetic ascent as a contraction

\(^1\) BRUNO, *Sigillus* i 28, p. 170.2-6: "Temere enim eorum, quae sensus perceperat, quasi figuram quamdam opinaberis in animo servari, ut animus inde figuretur et veluti quoddam admittat impressionis vestigium; sequens enim species ad figurandum animum accedens, necessario praecedentem alteram delesset."


\(^3\) PLOTINUS IV vi [41] 3.1-79 (= tr. Ficino, pp. 454.12-455.62).

\(^4\) BRUNO, *De umbris* §87.8-13, p. 66.

\(^5\) Id., *Sigillus* i 28, p. 169.15-20: "Ne inquam putes per introspectum quemdam potius quam adspectum seu prospectum memoriam fieri vel comparari; effusione enim quodam provenit, qua non inquam ex oculus, sed ex innominata quadam animi facultate, quae in genere intentionis vel intendentiae cujusdam habetur, et sepositum velutique seorsum positum intuetur."
of intentiones, and for this and perhaps other reasons, he probably accepted this aspect of Plotinus' thought.

3. Plotinus on the twofold memory

Plotinus' rejection of Aristotle's conception of memory should not lead one to ignore the fact that Plotinus uses a terminology about various epistemological faculties which is similar to that of Aristotle. Plotinus' theory of a twofold imagination, one sensitive and one conceptual, is one case in point, which I shall deal with in this section. Due to Plotinus' twofold notion of imagination, in which sensitive imagination overlaps with the Aristotelian concept of imagination, it is easy to confuse Aristotle's and Plotinus' respective theories, and it is necessary to establish the distinguishing characteristics in order to identify Bruno's sources as they are used in specific contexts.

Plotinus speaks of an image-making power (φανταστικῶν) pertaining to the lower part of the soul, which is directed towards sense impressions. This image-making power corresponds partly to the Aristotelian notion of φαντασία. It is sensitive imagination. But Plotinus also speaks of an image-making power pertaining to the higher part of the soul, turned towards thoughts in Mind. This is conceptual


2 PLOTINUS IV iii [27] 31.1-2, in tr. Ficino, p. 395.19-21: “Verum si imaginationis memoria est, utraque vero anima meminisse dicitur, due quodam erunt imaginandi virtutes.” See also PLOTINUS IV iii [27] 29, tr. Ficino, pp. 393.59-394.36. In Aristotle the term imaginatio, or φαντασία, had only been used to denote a faculty inserted between sensation and intellect; see ARISTOTLE, De memoria et
imagination, which is absent in Aristotle's psychology. Whereas the image-making power in the lower part of the soul produces mental images of sense objects, the corresponding power in the higher part of the soul produces a "picture of the thought", that is, a "picture" of the Ideas contemplated in Mind. The contemplation of Ideas in Mind is not automatically apprehended in human consciousness. In order to be "remembered", the Ideas contemplated in Mind have to be articulated through "verbal expression" (λόγος), that is, a concept. That is what is meant by "a picture of the thought". Plotinus explains this as follows: "The intellectual act is without parts and has not, so to speak, come out into the open, but remains unobserved within, but the verbal expression (λόγος) unfolds its content and brings it out of the intellectual act into the image-making power (φανταστικόν), and so shows the intellectual act as if in a mirror, and this is how there is apprehension and persistence and memory of it." Gerard O'Daly makes the following point in relation to IV iii [27] 30.1-7: "Now if the λόγος is the vehicle of recollecting and expressing Ideas, we might reasonably infer that λόγος and remembered image are, for Plotinus, a fortiori essential to philosophical discourse. If we do not recall the λόγος we cannot discuss Ideas." Hence the relation of language to thought becomes a key issue in Plotinus' account of memory. The function of language is, then, not to describe an empirical reality, but to summon abstract Ideas.

reminiscencia i 450a22-25, and id., De anima iii 8 432b7-10. For sensitive imagination in Plotinus, see WARREN, 'Imagination in Plotinus', pp. 277-281. For conceptual imagination, see ibid., pp. 281-285. There is a discussion of conceptual imagination in its own right in PLOTINUS I iv [46] 4.1-36 (= tr. Ficino, pp. 31.65-32.46).

1 WARREN, 'Imagination in Plotinus', p. 282.
Implied in Plotinus' theory of conceptual imagination is Plotinus' re-interpretation of Plato's theory of knowledge as recollection.\(^1\) Plotinus does not regard the intellectual soul's memories as a recollection of prenatal knowledge, but rather as a recalling of that which the highest part of the soul knows eternally by direct intuition.\(^2\) Contrary to Plato, Plotinus holds that that part of the human soul remains in the intelligible world, even when part of the soul is embodied in the sensible world. The problem for Plotinus is, therefore, not how to recall prenatal knowledge, but how to use this part of the soul which has never descended from the intelligible world. Human beings can do so, unless they have fallen victims of the body.\(^3\) To do so is, Plotinus thinks, to return to our true self, to actualise it and to become what we truly are.

Plotinus' theory of memory is connected to his conception of the origin of the human soul. According to Plotinus, memory arises when a soul abandons Mind and descends. Souls animating the celestial bodies do not have memory. They do not have to exercise memory, since they are turned towards Mind in eternal and perfect contemplation.\(^4\) (Incidentally Bruno repeats this idea.\(^5\)) When embodied, Plotinus

\(^1\) For Plato's theory of recollection, see PLATO, *Phaedo* 72e3-77a5. For Plotinus' concept of recollection, see BUNDY, *The theory of imagination*, pp. 121-122, 125-126; WARREN, 'Memory in Plotinus', pp. 256-258; MCCUMBER, 'Anamnesis as memory of intelligibles in Plotinus', pp. 160-167 (qualifying Warren's interpretation of recollection in Plotinus); O'DALY, 'Memory in Plotinus and two early texts of St. Augustine', pp. 467-469; WALLIS, *Neoplatonism*, pp. 79-81; BLUMENTHAL, *Plotinus' psychology*, pp. 96-97.

\(^2\) PLOTINUS IV iii [27] 25.10-35 (= tr. Ficino, pp. 390.36-391.7).


\(^5\) BRUNO, *Causa* ii, p. 125: "Questo non solo viene attestato nè l'anima del mondo, ma anche di ciascuna stella, essendo (come il detto filosofo vole [i.e. Plotinus, as mentioned ibid., ii, p. 123]) che tutte hanno potenza di contemplare Idio, gli
holds, the human soul stretches itself further downwards from Mind towards the lower ontological levels of Soul and the sensible realm. Memory, as a recollection of the intelligible world of Mind, may arise again in the human soul.\footnote{1} The human soul can thus be described as having two inclinations, one upwards towards the One and one downwards towards sensible bodies — and in this sense it is double. Plotinus underlines, however, that the soul is an indivisible unity, even though it is possible to divide it into parts for the sake of explanation.\footnote{2}

Ficino retains three important characteristics of Plotinus’ theory of memory in his commentary on the \textit{Enneads}. Ficino comments that the description of the soul being “double” is valid as a poetical description, i.e. he realises that Plotinus’ distinction between the two souls is solely a way of explaining a doctrine and that the soul is a unity. One inclination of the soul, Ficino explains, is rational, i.e. the intellectual soul, the other is irrational, i.e. the sensitive soul. The former derives from the “craftsman himself of the world”, by which he may mean God. The latter derives from the natural world.\footnote{3}

\begin{flushright}
principii di tutte le cose e la distribuzione de gli ordini de l’universo: e vôle che questo non accade per modo di memoria, di discorso e considerazione"
\end{flushright}

\footnote{1}{PLOTINUS IV iv [28] 5.1-31 (= tr. Ficino, pp. 400.21-401.2).}

\footnote{2}{PLOTINUS IV ii [21] 1.1-76 (= tr. Ficino, pp. 361.31-363.25). For Plotinus’ division of the soul into a rational and an irrational part, see BLUMENTHAL, \textit{Plotinus’ psychology}, p. 50. Plotinus also employed a tripartition of the soul, following a Platonic scheme (desiring, spirited and rational parts of the soul) as well as an Aristotelian scheme (vegetative, sensitive and intellective parts of the soul). For the faculties within these tripartitions, see ibid., pp. 21-44, 103, 135.}

\footnote{3}{FICINO, \textit{In Plotinum} IV iii [27] 27, p. 392.51-65: “Opinio quasi poetica esse geminas in homine animas per substantiam inter se differentes. Rationalem quidem ab ipso mundi opifice, irrationalem vero a mundi vita.” Ficino comments on PLOTINUS IV iii [27] 27.1-25 (= tr. Ficino, pp. 392.50-393.23). For Ficino’s idea of the two inclinations of the soul, see KRISTELLER, \textit{Il pensiero filosofico di Marsilio Ficino}, pp. 422-437.}
Second, corresponding to these two inclinations of the soul, there are two imaginative powers (imaginatio). One is connected with the intellectual soul, another with the sensitive soul. Intentionality (animadversio) is important in both of these powers.¹

The third Plotinian characteristic in Ficino’s doctrine of memory is that Ficino identifies two memories, one superior, and one inferior.² Ficino explains that the inferior is bound to the senses of the body.³ The superior, on the other hand, “at the same time comprehends signs of the intelligibles and the forms of sensible things”.⁴ In Ficino’s translation of Plotinus the objects of the higher part of imagination, conceptual imagination, are called “concepts” (notiones).⁵ This is no coincidence, for Plotinus explicitly connects the “image-making power” of the higher imagination with

---


⁴ Ibid., IV iii [27] 31, p. 395.16-18: “Quae quidem superior [memoria], qua comprehendit intelligibilium notas simul, et sensibilium formas, declarat in nobis animal esse unum: et quando egreditur corpore, si alteram sibi educatione subegerit, vilia quidem mandat oblivioni, honestiora resumit.” FICINO, Theologia platonica xv 16, vol. 3, p. 83.10-28, also makes a distinction between two memories, one of the senses (sensus) and one of the intellect (mens), which may reflect this distinction in Plotinus. The possible implications of this twofold notion of memory have been ignored in studies on Ficino’s concept of memory. CASTELLI, ‘Marsilio Ficino e i luoghi della memoria’, pp. 385-386, for instance, points out Aristotle’s De memoria et reminiscencia as Ficino’s important source.

⁵ PLOTINUS IV iii [27] 30.1-16 (= tr. Ficino, pp. 394.50-395.9).
the higher memory. Higher imagination and memory are both directed towards the same kind of object, that is, concepts. When there is harmony between the two parts of the soul, Plotinus says, then the images (αἱ ἑισαγαγίαι, translated into Latin by Ficino as imaginationes) of the higher and the lower imagination will be experienced as one image (τὸ φάντασμα, translated into Latin by Ficino as phantasma). Then concept and mental image derived from sensation will become one. This particular sense of phantasma is distinct from the sense of the term in Aristotle’s psychology, though the different senses of the same term may cause confusion.

We can summarise the findings of this section as follows. Plotinus’ doctrine of a double imagination and a double memory differs from the psychology of Aristotle, and it implies that the content of imagination and memory is irreducible to sense data. Imagination and memory do use sense data, Plotinus agrees with Aristotle, but they are also, Plotinus adds, disagreeing with Aristotle, directed at the higher intelligibles. Ficino repeated Plotinus’ doctrine in his Plotinus commentary, and other works besides.

4. Bruno’s stance towards Aristotle’s and Plotinus’ theories of memory

Bruno had received an Aristotelian education with the Dominicans at Naples before his European peregrinatio. This presumably included the study of Aristotle’s De anima, for he later taught this work for two years in Toulouse before arriving in Paris in

---

Therefore it is not surprising that on some occasions Bruno affirms the Aristotelian arguments for knowledge's, and ultimately memory's, dependency upon sense impressions, arguments which he assigns to Aristotle, or, generically, to Peripatetics.²

Bruno’s works, however, show that he followed the three features in Plotinus’ doctrine of memory, which he knew from Ficino’s Latin translation of Plotinus and from Ficino’s commentary on it. First, Bruno affirms explicitly the idea of two inclinations of the human soul.³ Second, he picks up on the distinction between the rational and the irrational imaginations, citing Ficino’s commentary on Plotinus’ Enneads almost verbatim.⁴ Plotinus embraced the idea of a twofold imagination,

---


3. BRUNO, Sigillus ii 5, pp. 198.17-199.1; Furori i 4, ii 1, pp. 189.11-19, 297.12-18; De monade iii, p. 356.11-27. For the first reference to the Furori, see SARAUW, Der Einfluss Plotins, pp. 36-37.

4. BRUNO, Sigillus i 32, pp. 174.22-175.3: “Duplicem subinde in nobis esse imaginationem considerato: primam quidem in anima ratiocinante experimur, discursionis iudiciique compotem, rationique quodammodo similem; secundam vero in anima, seu vita, in nobis racione carentem, ab hac impressam, quaie quidem imaginatio non tam ratione utitur et discursione, quam fertur instinctu quodam circa corporis passiones, et tanquam communis sensus principium est sensuum reliquorum.” Cf. FICINO, In Plotinum III vi [26], pp. 300.54-301.1: “Animadverteres iterum duplicem in nobis imaginationem: primam quidem in anima racionali
Bruno says explicitly. On another occasion Bruno says that mental images (phantasmata) may summon "non-sensible forms", by which he may mean Ideas in Mind. This statement may have been inspired by Plotinus' doctrine of the image-making power pertaining to the higher soul. Ficino’s comment about the twofold imagination of the soul has been missed in some important studies comparing Bruno’s and Ficino’s psychology, an omission that would explain why Bruno’s adherence to a Plotinian doctrine of a twofold imagination has not been pointed out in the literature on Bruno.

Does Bruno also pick up on Plotinus’ doctrine of a twofold memory? Bruno was using Plotinus’ theory of vision in IV vi 1, as quoted on p. 111 n. 2 above. This shows that Bruno knew IV vi 1, and therefore knew his doctrine of memory. In the

1 BRUNO, Sigillus i 32, pp. 175.13-176.1.
2 Ibid., i 25, p. 167.24-28: “Phantasmatum igitur (quorum speculatio necessaria fertur) concinnare species oportet, ut felix in actibus succedentium potentiaram habeare; adaptantur autem, cum tales redduntur, quae per se ipsas valeant formas non sensibiles accire.” See also ibid., ii 8, p. 201.19-26, where Bruno provides an example of the cognition of intelligibilia through sensibilia perceived by phantasmata. For the role of phantasmata in Bruno’s mnemonics, see SPRUIT, Il problema, pp. 150-154. Spruit, too, underlines the function of phantasmata in evoking ideas (e.g. ibid., p. 150).
3 See pp. 113-114, 120 above.
Lampas triginta statuarum, dating from Wittenberg 1587, Bruno makes a statement which I am not quite sure how to interpret, but which may embrace Plotinus' theory about the double nature of memory. There Bruno says that one part of memory is a "sensitive power", "called fantasy by the Peripatetics". Another part, Bruno continues, is an "intellectual power", "which retains images perceived by reason and intellect, and which in some way is the Mind (mens) itself." "Mind" (mens) is the term by which Ficino had translated Plotinus' term "νοῦς".

Bruno, as mentioned above, knew the Enneads IV vi 1 in Ficino's Latin translation. On the following page in Ficino's translation, where IV vi 3 occurs,

1 AQUILECCHIA, 'Bruno, Giordano', p. 660; TIRINANZI, 'Nota ai testi', in BOM, p. LXXV.

3 The three hypostases (the One, Mind and Soul: τὸ ἕν, νοῦς, ψυχή) are described in Plotinus V i [10] 10.1-4. It reads in Ficino's translation, p. 491.16-21: "Iam vero demonstratum est oportere super ens esse unum, quale desiderabat ratio demonstrare, quantum scilicet de rebus talibus demonstrari possit: esse autem post ipsum unum ens atque intellectum: tertio denique loco naturam animae." These three hypostases also exist, somehow, in the human soul; see Plotinus V i [10] 10.5-31. In Ficino's translation, p. 491.31-35, the central lines, in which 'mens' appears, run as follows: "Est igitur nostra insuper anima divinum quiddam, alteriusque naturae, qualis est universa natura animae: perfecta vero est, quae mentem (translated from "νοῦς") habet, sed mens altera quidem in ratiocinando versatur, altera vim ratiocinandi suppeditat."

4 See p. 111 n. 2 above.
Bruno could have found Plotinus' idea that through the memory of the intellectual soul, the human soul is transformed into the intelligible world, that is, Mind. Thereby the human soul becomes itself, returning to its true, eternal and immobile self. Plotinus writes as follows:

But, being in the middle [of the sensible and intelligible worlds], it [the soul] perceives both, and is said to think the intelligibles when it arrives at memory of them, if it comes to be near them; for it knows them by being them in a way: for it knows, not because they settle in it, but because it has them in some way and sees them and is them in a rather dim way, and becomes them more clearly out of the dimness by a kind of awakening, and passes from potentiality to actuality.¹

Bruno may be thinking of this union with Mind in his account of the double nature of memory in the *Lampas triginta statuarum*. There he says that the memory of the intellectual soul is in some way Mind itself.² Aristotle's doctrine on memory, unlike Plotinus', did not speak of human memory becoming identical with Mind. This suggests very strongly that Bruno integrated in his art of memory Plotinus' subtle account of the memory of the sensitive and the intellectual soul.

The observations do not yield any definitive answer to the question about Bruno's use of Aristotelian and Plotinian doctrines of memory. They do, however, suggest that Bruno used Plotinus' doctrine of memory, and the ancillary doctrines on the soul and imagination, when they fitted into his aims. Lastly, as we shall see in the last two sections of this chapter, if we assume that Plotinus' doctrine of memory inspired, at least in part, Bruno's mnemonics, it becomes understandable why Bruno insisted that his mnemonic works concerned noetic ascent and not just retention of sense data.

² BRUNO, *Lampas* §244.1-6, p. 1230 (= BOL, vol. 3, p. 141.18-22), as quoted on p. 121 n. 2 above.
5. Bruno’s use of Plotinus’ idea on noetic ascent through memory

Descent, Plotinus asserts, originates from the One, on which all being depends. Now within that structure the individual human soul has the potential to ascend noetically.¹ The form of noetic ascent which Plotinus advocates does not entail the practice of rites and sacraments traditionally associated with religion.² Instead, Plotinus specifies contemplation as the means of achieving mystical union with the One. Memory can be a means for such a mystical unification.

Through the memory of the intellectual soul, Plotinus claims, it is possible to reach the intelligible realm of Ideas, the Mind. Plotinus says that the soul is situated in a privileged ontological position. It is “the rational principle of all things, and the nature of soul is the last and lowest rational principle of the intelligibles and the beings in the intelligible world, but first of those in the whole world perceived by the senses.”³ His idea of human memory, especially that of the intellectual soul, is determined by this potentially elevated state of the human soul. Memory accordingly becomes a means by which the human soul gains access to the intelligible world, that is, returns to its true eternal and immobile self. Plotinus explains these matters in the quotation on p. 122 above. Memory in the intellectual soul, therefore, is a form of noetic ascent, and this may be what Bruno has in mind in the *Lampas triginta statuarum*, as mentioned on the same page above.

In *De umbris* we find another passage which may support the possibility that Bruno integrated into his mnemonics Plotinus’ idea of noetic ascent through memory. Here Bruno describes the human soul’s ascent from individuals to species, and from


³ PLOTINUS IV vi [41] 3.6-8, tr. A. H. Armstrong (= tr. Ficino, p. 454.18-20).
species to one supreme genus, in much the same way as he does in the *Sigillus*.\(^1\) The next thing he does in *De umbris* is to explain this noetic ascent by means of the hierarchy of intelligences, which leads to a supreme One, transcending the forms. Bruno drew the idea of this hierarchy from the *Liber de causis* as we shall see later.\(^2\) Bruno asserts that even though the ancients knew that memory could proceed from many memorable species of individuals to a single species of many memorable things, they did not teach this.\(^3\) What Bruno seems to be saying here is that his mnemonics differs from traditional forms of mnemonics — possibly those of Cicero, Quintilian and their offshoots — because it includes, in addition, a theory of noetic ascent to the One through memory. Seen from this hypothetical perspective, Bruno fuses two distinct traditions, the Neoplatonic doctrine of noetic ascent through a hierarchy of being, and the art of memory. This Neoplatonic element and his doctrine of memory derive, as we have seen, from Plotinus and Ficino.

Another aspect which corroborates Bruno’s debt to Plotinus’ doctrine of memory, is the role of sensibilia in Bruno’s mnemonics. Their role is to gain access to the intelligible world: “Remember, therefore, that what we must examine is not those things that are in us, but the things themselves through those things which are in us. For although an image immediately manifest to the soul, we should direct our attention by looking, so to speak, not so much at it as through it.”\(^4\) Is Bruno here referring to

\(^{1}\) BRUNO, *De umbris* §28.9-11, p. 31. Cf. id., *Sigillus* ii 22, p. 213.21-27, as quoted on p. 85 n. 1 above.

\(^{2}\) Id., *De umbris* §28.11-15, p. 31. For the relationship of this passage to the *Liber de causis*, see p. 167 n. 5 below.

\(^{3}\) BRUNO, *De umbris* §28.15-17, p. 31: “Porro si antiquitas novit quomodo proficiat memoria, a multis speciebus memorabilibus ad unam multorum memorabilium speciem se promovendo, ipsum certe non docuit.”

\(^{4}\) Id., *Sigillus* i 28, pp. 169.27-170.2: “Memento igitur, non ea quae sunt in nobis, sed res ipsas per ea quae sunt in nobis esse inspiciendas; quamvis enim animae praesens adsit imago, non tanquam ipsam, sed tamquam per ipsam aspicientes intendamus animo.”
the *phantasmata* produced by the Plotinian higher imagination, which articulate Ideas in Mind? If it is correct to read Bruno’s idea of memory as derived from Plotinus’, then Bruno’s art of memory is not about retaining and combining retained sense experiences. It is, instead, about the operations of the soul which summons the intelligible in the memory of the intellectual soul. This Bruno could have learnt from Plotinus’ ambiguous notion of *phantasma*, which may derive from Ideas in Mind as well as from sensation, or simply be experienced unified in the harmonious soul.


Bruno’s treatment of the Golden Chain in his mnemonic works supports the contention that he regards memory as a means of noetic ascent. In *De umbris* he states that “if you are able to ponder [with perhaps an obscene *double entendre*: “fondle”] that Golden Chain which is imagined to be stretched from heaven and right down to earth (just as descent from heaven is made possible through you), you will easily be able to return to heaven through an ordered [noetic] ascent.” He then presents a poem featuring the figures of the zodiac. This poem contains literary images and is called an ‘artful connection’, perhaps because the figures depicted from the zodiac are in physical contact with each other. For instance, the Ram hits Taurus with its head. Taurus, in turn, attacks the Twins, and so forth. It is a means of evoking in memory the metaphysical order, that ‘Golden Chain’, passing through man’s soul. The ‘artful connection’, Bruno continues, established through the series of star constellations in

---

1 Id., *De umbris* §34.2-7, p. 34: “Certe si ... cathenam illam auream quae e caelo fingitur ad terram usque tensa contractare valebis, sicut e caelo per te potest factus esse descensus, facile ad caelum per ordinatum ascensum remeare valebis.” See also ibid., §33.2-4, pp. 33-34.
the poem, greatly lightens the burden of memory. Hence Bruno interprets the Golden Chain as a mnemonic device which facilitates noetic ascent.

The ultimate source of the expression ‘Golden Chain’ may well be the uses in Homer and the Neoplatonist Macrobius (fl. c. AD 400). Sturlese mentions the latter. But there is a more likely source, ignored by Sturlese and other Bruno scholars, namely, pseudo-Dionysius (c. AD 500), who interprets the Golden Chain as a symbol for prayer. To pray, pseudo-Dionysius explains, is to climb up the Golden Chain extending from the highest heaven to earth. Aquinas, Cusanus and Ficino were all familiar with this particular meaning of the Golden Chain as prayer. They all used the expression to describe some sort of noetic ascent towards God through prayer.

---

1 Ibid., §34.8-10, p. 34: “Per hanc artificiosam connexionem magnum experiri possumus memoriae relevamen, quae valet etiam nullam ad invicem per se retinentia consequentiam memoriae ordinata presentare.” For this role of the Golden Chain, see SPRUIT, *Il problema*, pp. 89-91. In *De compositione* Bruno adds two tables to the explanation of this poem. There the tables have twenty and twenty-four places respectively. They may have been intended to demonstrate how the poem could be used to memorise. Bruno does not explain how the poem relates to these tables; see BRUNO, *De compositione* III 6, pp. 295.8-296.4.


4 For the Golden Chain symbolising invocation by prayer, see AQUINAS, *In librum beati Dionysii De divinis nominibus expositio* iii 1, §§238-244, p. 76; CUSANUS, *Sermo vi*, §31.33-36, p. 115; FICINO, *In Dionysium Areopagitam De divinis nominibus* iii 1, p. 1049.10-37. BRUNO’s comment on the Golden Chain in *De umbris* §34.2-7, p. 34, as quoted on p. 125 n. 1 above, resembles Ficino’s commentary closely, though the verbal similarities are not conclusive. Cf. FICINO, *In Dionysium Areopagitam De divinis nominibus* iii 1, p. 1049.13-16: “Finge catenam
Unlike to pseudo-Dionysius, Aquinas, Cusanus and Ficino, Bruno does not interpret the Golden Chain in his mnemonic works as a prayer through which it is possible to approach God. Nor does he say anything on this occasion about invoking the Trinity, as they had done. Nor does he identify the chain with Divine Providence, as, again, they had done. Bruno strips the metaphor of these orthodox connotations.

Instead, Bruno presents the poem featuring the figures of the zodiac. This poem is intended, he says, as a means to evoke in memory that metaphysical order — the Golden Chain — which passes through man's soul. By using a poetic depiction of a chain of stars, Bruno follows, Sturlese argues, the usage of two sixteenth-century mnemonic treatises recommending readers to organise the things to be remembered in a 'chain', though not a Golden Chain. In those two treatises the chain is a mnemonic device used to order mnemonic images into a series. Sturlese may be right, but there is an additional possibility, suggested by verbal similarity, that Bruno used Ficino's commentary on pseudo-Dionysius. This explains why Bruno speaks of the Golden Chain and not just the chain, as Sturlese's sources do.

---

1. SPRUIT, *Il problema*, p. 90 n. 176, refers Bruno's comment on the Golden Chain to this passage in Ficino's commentary, and to Macrobius' Neoplatonic use. For the use of pseudo-Dionysius among Renaissance authors, see MONFASANI, 'Pseudo-Dionysius the Areopagite in mid-quatrocento Rome', pp. 189-219.

In his *Explicatio* Bruno explains that the Golden Chain in *De umbris* has two related purposes, judgement, in the sense of understanding a metaphysical cause, and retention. He says about the first purpose:

In the thirteenth intention of the book *De umbris idearum* you have an explanation of the chain, which has two uses: [first,] it helps judgement itself since through this chain we know the cause of things, inasmuch as contemplating the levels of beings in a definite order, we understand the true and distinctive essence of each thing placed, so to speak, in a centre. ¹

The Golden Chain, then, is a mnemonic device for joining entities in a scale of being, helping us to understand the “cause of things”. In the *Sigillus* Bruno similarly speaks of noetic ascent as an intellectual movement upwards in a hierarchy of causes, ultimately aiming at an understanding of one single and first cause.² The “essence of each thing” is, Bruno says in the quotation above, “placed in a centre”. Further, the scale of being set out by means of the Golden Chain, Bruno goes on in the quotation above, is continuous. He says this by speaking about the levels of being as if they are

---

¹ BRUNO, *Explicatio*, p. 123.18-23: “Catenae explicationem habes in intentione decimateritia libri *De umbris idearum* [= §§34-35, pp. 34-35], quae quidem dupliciter usuvenire valet, utpote ad ipsum iudicium, cum per hanc rerum habeamus rationem, qua certa serie gradus entium contemplantes intelligamus veram distinctamque cuiusque essentiam veluti in centro quodam esse consistentem”.VASOLI, ‘Umanesimo e simbologia’, p. 294, gives a passing commentary on this passage; CLUCAS, ‘Amorem’, pp. 10-13, argues that this comment in Bruno’s *Explicatio* elucidates the idea of “concatenation” in its parallel ontological, noetic and logical senses.

² BRUNO, *Sigillus* ii 22, pp. 213.21-214.6, as quoted on p. 85 n. 1 above.
a series of interlocked rings, where the top of the relatively lower level touches the bottom of the level above it.¹

As Bruno says in the *De umbris*, the Golden Chain is not only a means of joining entities in a scale of being. It is also a means of noetic ascent.² When describing return towards the One, he latches on to the image of the continuous grades of being and explains that this return takes place by means of a “contracted similitude”, that is, by turning away from things on the same ontological level as ourselves and assimilating ourselves to higher ontological levels.³ Accordingly, he says, a person who is able to conceive the “order with its levels” with his or her mind, will “contract” a “similitude” of the macrocosm, different from the one that he has by nature.⁴ In the last chapter we saw how Bruno regards the contraction of *intentiones* as a means of ascending noetically. These *intentiones* he identifies with reasons (*rationes*) and shadows of Ideas (*umbrae idearum*).⁵ In his last comment in *De umbris* on the Golden Chain he makes clear that the concatenation set out in the Golden Chain may take place in regard to shadows of Ideas.⁶ Hence there is some reason to believe that the kind of noetic

---


² Id., *De umbris* §34.2-7, p. 34.

³ Ibid., §29.2-4, p. 32: “Ad proximi quidem superius proximum inferius per aliquos gradus contracta similitudine promovetur, quos certe gradus cum nactum fuerit omnes, iam non simile, sed idem cum illo dicendum erit.” ‘Similitude’ is also employed in id., *Furori* i 5, p. 225, as quoted on p. 95 n. 2 above, where Bruno explains the human soul’s preparations for noetic ascent.

⁴ BRUNO, *De umbris* §55.9-12, p. 48: “Quem ordinem cum suis gradibus qui mente conceperit, similitudinem magni mundi contrahet aliam ab ea quam secundum naturam habet in se ipso.” For this comparison, see also ibid., §30.2-5, p. 32.

⁵ Id., *De compositione* i 1, p. 94.14-18, as quoted on p. 92 n. 3 above.

⁶ Id., *De umbris* §36.2-5, p. 35: “Ascensus quidem qui fit per connexa atque concathenata, in proposito umbrarum idealium, non est per catenam similibus
interpretation of contraction dealt with in the preceding chapter — focusing on the Sigillus and the Eroici furori — is reflected in Bruno’s treatment of memory in De umbris. If interpreted in this manner, the first purpose of the Golden Chain in De umbris is to facilitate contemplation leading to the soul’s ascent into the intelligible realm. This interpretation agrees with Bruno’s comment in De umbris that the reader should ascend noetically through Plotinus’ “ladder” (schala).  

Read in this way, Bruno has presented a natural rather than supernatural, interpretation of the Golden Chain. He is leaving behind the idea that the Golden Chain depends on prayer to, and elevation by, God, as found in the thoughts of pseudo-Dionysius, Aquinas, Cusanus and Ficino. Instead, he is transforming it into a metaphor of a mental activity exclusively involving human faculties. Human understanding, Bruno holds, can represent the order of nature poetically by the Golden Chain, and this understanding is to be regarded, if my interpretation of Bruno’s comments on the Golden Chain in the De umbris is correct, as a form of noetic ascent.

Bruno’s original treatment of the metaphor of the Golden Chain is also in agreement with his rejection of the “magic of the desperate”, the “desperate” being those who strive to invoke “gods, demons and heroes” through “prayers, consecrations, fumigations, sacrifices, dress of certain kinds and ceremonies”. These “desperate” people become “receptacles and instruments” of the intruding god or demon or hero, thus appearing “wise”, but only until a drug is taken and they return to their former, uninspired selves. For Bruno, Christian prayer is, therefore, an example of magic of this kind.

constantem annulis, ratione quae concipitur ex proxime dictis, atque deinceps enunciandis.”

1  Ibid., §72.2-7, p. 56.
Leaving aside this implicit polemic in Bruno's treatment of the Golden Chain, his presentation of it in De umbris remains problematic. He claims that the ontological structure of being and the nature of noetic ascent coincide. But how does he ensure such a coincidence, if the chain is only a mnemonic device, constructed apparently without bothering about the ontological structure? Sturlese's solution, that the mnemonics of De umbris is reducible to a mental experimentation with letters whose relationships are "arbitrary signs" (segni arbitrari), does not fit Bruno's frequent assurances that ontological descent follows the same pattern in reverse as noetic ascent. Indeed Bruno states this in his De umbris. On the other hand, as Sturlese points out, in De umbris Bruno underlines that the only criterion for the selection of star images is a conventional one, namely whether or not individual use of the memory system can associate personal passions to the images.

1 Id., De umbris §34.2-7, p. 34. For other references to Bruno's conception of the unified nature of descent and noetic ascent, see p. 11 n. 1 above.
2 STURLESE, 'Introduzione', p. LXXI. STURLESE, 'Arte della natura e arte della memoria in Giordano Bruno', pp. 130-131, qualifies this view by saying that the inventions with signs in Bruno's mnemonics are not completely arbitrary, but must be ordered into a system which is an "efficacious organism" (organismo efficace) in a rhetorical delivery. For the inventions of such an "efficacious organism" must be able to please or impress the reader or the listener.
3 BRUNO, De umbris §34.2-7, p. 34.
4 STURLESE, 'Introduzione', p. LXXII n. 82, where Sturlese points out BRUNO, De umbris §164.2-9, p. 122. The same point is made in STURLESE, 'Per un'interpretazione', p. 955. We could add in support of Sturlese's interpretation that Bruno states on one occasion that the images employed by him in De umbris are only intended as a proposal; see BRUNO, De umbris §159.4-6, p. 117; and similarly ibid., §§210.3, 222.15-19, pp. 159, 175). This weakens Yates' thesis about an astrological correspondence between star image and star. See Yates' analysis of the practice of the mnemonic images in Bruno's De umbris, in YATES, Giordano Bruno and the Hermetic tradition, pp. 195-199; id., The art of memory, pp. 199-224. For Sturlese's criticism of Yates, and her alternative analysis of the role of these mnemonic images, see STURLESE, 'Introduzione', pp. LVI-LXXIII; id., 'Per
However, in order to do justice to Bruno’s own words about a unified nature of descent and noetic ascent, we may look out for another answer to the puzzle concerning the role of the mnemonic images in *De umbris*. Is another answer, then, to be found in Bruno’s conception of memory? Memory does not depend solely on sense data, but also entails that the structure of reality is somehow present in human memory, albeit not necessarily contemplated actively. The answer, or one answer, may be here. Memory’s experimentation, even with “arbitrary signs”, as Sturlese calls them, may open up the contemplation of an ontological structure which, although subjectively discovered, has an independent and objective existence.\(^1\) Such an

\(^1\) Apart from the references in the mnemonic works already given to support this interpretation, we also find Bruno stating his belief in innate ideas corresponding to the ontological structure as it is defined through contraction; see BRUNO, *Acrotismus*, pp. 93.19-94.3: “Cum vero in sequenti parte dicit [Aristotle], innatam esse nobis viam, ex notioribus nobis, ad notiora naturae: unde ab universalibus, confusis, hoc est universis, totis, confusis, contractis, compactis, indistinctis, veluti commixtis, ad particularia, partes, simplicia, distincta, absoluta, pura, immixa, a consideratione videlicet et contemplatione per modum contractionis et impuritatis, ad contemplationem absoluti, solius, nudi, atque puri.” Although VASOLI, ‘Umanesimo e simbologia’, p. 275, does not take the possibility of a Plotinian notion of memory into consideration in relation to Bruno’s mnemonics, I agree, at least in principle, with him when he states about the relationship between sensible mnemonic images and the intelligible reality which they must evoke: “la mnemotecnica deve offrire il modo di apprendere in immagini intuitive anche le supreme verità sensibili e di racchiudere nei limiti dell’ordine imposto ai suoi elementi la stessa architettura schematica dell’intero universo.”
interpretation would make Bruno's claim of a unified nature of descent and noetic ascent comprehensible.

Bruno's doctrine of noetic ascent through memory, presented in this chapter, agrees to a large extent with his account of the fifteen contractions in the *Sigillus* in the first chapter. In his account of the fifteen contractions Bruno described and criticised at considerable length noetic ascent facilitated through food and melancholy (contractions eleven, twelve and fourteen). Noetic ascent, he said in the fourteenth contraction, may be initiated by melancholy, but is not dependent on it. Likewise, Bruno dismissed the role of emotions in his account of noetic ascent (contractions five to eight). Noetic ascent through memory, which Bruno favours, clearly has nothing to do with misguided contractions of these kinds. Nor, it should be admitted, does Bruno mention noetic ascent through memory in his accounts of the first and the fifteenth contractions, in which Bruno praises the solitary man and the contemplative philosopher respectively. His praise of these two types of men, nevertheless, conforms with his Neoplatonically inspired account of memory as a means of noetic ascent inasmuch as the activity of memory is a contemplative act, possibly also a solitary one. There are, besides, several other Neoplatonic elements in Bruno's account of the fifteen contractions. In the third contraction (*contractio horizon
tis in centrum*) Bruno drew on Neoplatonic sources, in particular Plotinus and the *Liber de causis*. In the theoretical account of noetic ascent introducing the fifteen contractions in the *Sigillus*, as explained on pp. 40-41 above, and in the account of noetic ascent through memory, we also find Neoplatonic sources, Plotinus again being conspicuous. Plotinus' idea of noetic ascent through the intellectual soul's memory, and indeed Bruno's familiarity with his doctrine of memory, may explain why Bruno regarded memory as a powerful means of noetic ascent, and possibly why he wrote several mnemonic treatises.
PART TWO

SOURCES OF BRUNO'S CONCEPT OF CONTRACTION
CHAPTER 5

PHYSIOLOGICALLY INDUCED CONTRACTION

1. Ficino's notion of physiologically induced contraction

Bruno discusses melancholy, as we have seen in Chapter 1 and 3, as a form of physiologically induced contraction in the soul in the Sigillus and in the Eroici furori. Where does this come from? Yates and Ingegno have interpreted Ficino as a source. In this chapter I shall outline Ficino's theory of physiologically induced contraction as a means of noetic ascent, and discuss Yates and Ingegno's interpretation.

The term 'contraction' occurs in a physiological sense in classical Latin. The Latin noun contractio derives from the verb contraho, ultimately deriving from the verb traho. Its denotes a process of drawing together or compressing. In Cicero we find the physiological meaning of the term, for instance "a contraction of the nerves (of the parts of the body)" (contractio nervorum [membrorum]), or simply contractio, denoting a bodily contraction. This meaning also occurs in Biblical Latin.

In classical Latin a psychological meaning of contraction occurs, e.g. contractio animi, designating dejection or depression. Cicero also used 'contraction' with this last meaning. Similarly he used the diminutive contractiuncula to denote a slight

---

1 For Yates' interpretation, see the references on pp. 138 n. 2, below. For Ingegno's interpretation, see the references on p. 141 n. 5 below.
2 For examples of this use, see CICERO, Pro Sestio viii 19; id., De natura deorum II lx 150; id., De officiiis I xli 146.
3 1 Liber Samuhelis 14.19.
4 CICERO, Tusculanae disputationes I xxxvii 90; ibid., IV vi 14.
mental depression.¹ ‘Contraction’ or its cognates were used in this sense by different medieval authors. An example is Augustine, who, in a work about instructing pagans in Christian doctrine, advised the preacher to rid himself of gloomy moods in order to appear joyful to the audience.²

I shall now pass on from these uses of ‘contraction’ in classical Latin to another use which is far more important to my argument, namely Ficino’s use of the term in one of his accounts of noetic ascent. Our starting point is the classical and medieval physiological theory of the four humours, deriving from Galen (129-199), among others. In Ficino’s interpretation of it, the humour melancholy and the contraction of spiritus that it induced became a central theme in his conception of noetic ascent. Ficino gave an original treatment of melancholy in De vita, finished for publication in 1489.³ The aim of De vita is how to care for one’s health. The first book is dedicated to the care and health of learned people; the second gives advice about how to obtain a long life; and the third is a combination of the two, about obtaining a life both healthy and long.⁴ The theme of melancholy is treated in the first book (most importantly in chapter 2-6); its celestial procurator, Saturn, is described in the third book.

In the first book of De vita, Ficino defines spiritus as an instrument for learned people’s intellectual labour. Spiritus is “a vapour of blood — pure, subtle, hot and clear.”⁵ Through the blood’s motion in the body, spiritus is distributed to the entire body, including the brain, and is used by the soul in the exercise of the interior and

---

¹ Ibid., III xxxiv 83.
² AUGUSTINE, De catechizandis rudibus liber unus x 14, cols 321-322.
³ On Ficino’s theory of melancholy, see KLIBANSKY et al., Saturn and melancholy, pp. 254-274; WALKER, Spiritual and demonic magic, pp. 4-5; KRISTELLER, Il pensiero filosofico di Marsilio Ficino, pp. 225-228.
⁴ FICINO, De vita prooemium, lines 25-32, pp. 102-104.
⁵ Ibid., i 2.11-13, p. 110: “Instrumentum eiusmodi spiritus ipse est, qui apud medicos vapor quidam sanguinis purus, subtilis, calidus et lucidus definitur.” For Ficino’s notion of spiritus, see WALKER, Spiritual and demonic magic, pp. 3-6, 10, 12-13, 25-27, 38-40, 44-48, 76.
exterior senses. As vapour from the blood, spiritus is a semi-corporeal and a semi-incorporeal link between soul and body.

Spiritus affects the lower faculties, not the higher faculties of the soul such as imaginatio, ratio and mens. However, spiritus may encourage imagination, and thereby provide an initial stimulus for discursive reasoning, which in turn may stimulate mind’s non-discursive contemplation. In De vita Ficino associates this spiritus of the individual with cosmic spirit (spiritus mundi). Cosmic spirit is the fifth element, which Ficino sometimes call aether, penetrating the entire universe. It thus provides the medium whereby the superlunary stars and planets, or more precisely their rays, influence the sublunary world, and notably for present purposes, an individual’s spiritus. The superlunary aether (superlunary fire), by virtue of the celestial region’s motion, mixes with the air in the sublunary region, which thereby becomes heated, making what is traditionally called sublunary fire. There is thus a

1 FICINO, De vita i 2.13-15, p. 110: “Atque ab ipso cordis calore ex subtiliori sanguine procreatus volat ad cerebrum; ibique animus ipso ad sensus tam interiores quam exteriores exercendos assidue utitur.” For the notion of spiritus here employed, see WALKER, ‘The astral body’, p. 120. For the inner and outer faculties of the senses, see also PARK, ‘The organic soul’, pp. 465-469.

2 KLIBANSKY et al., Saturn and melancholy, p. 265.

3 FICINO, De vita iii 22.1-44, pp. 362-364. For imaginatio, ratio and mens in Ficino’s De vita, see KLIBANSKY et al., Saturn and melancholy, pp. 265-266. For the relationship between imaginatio, ratio and mens in Ficino’s Theologia platonica, see VASOLI, ‘La ratio nella filosofia di Marsilio Ficino’, pp. 223-224.

4 For the relationship between imaginatio and spiritus, see FICINO, De vita iii 22.18-31, p. 364. Similarly ibid., iii 22.4-11, p. 362 (the “vapores”, mentioned ibid., iii 22.7, p. 362, can be spiritus as defined in the passage ibid., i 2.11-13, p. 110, as quoted on p. 136 n. 5 above). For imaginatio in Ficino’s thought, see WALKER, Spiritual and demonic magic, pp. 6, 15, 21.

5 For Ficino on spiritus mundi, see WALKER, Spiritual and demonic magic, pp. 8, 12-13, 16, 22-23, 32-34, 45, 47-48, 52-53.


7 FICINO, De vita iii 2.89-94, iii 22.108-115, pp. 254, 368.
continuum between superlunary fire (air warmed and mixed with aether) and air. Animals' bodies, including human bodies, produce spiritus partly through inhaling and purifying air, and partly from digesting food, etc.\footnote{Ibid., iii 3.1-42, iii 4.1-69, pp. 255-257, 259-263. For this theme, see WALKER, \textit{Spiritual and demonic magic}, pp. 12-13.} This doctrine of spiritus provided the foundation of Ficino's idea of magic.\footnote{FICINO, \textit{De vita} iii 26.49-63, 77-84, pp. 386, 388. Yates regarded spiritus and cosmic spirit as fundamental to Ficino's magic, which she conceived of as inseparable from Hermeticism; see YATES, \textit{Giordano Bruno and the Hermetic tradition}, pp. 11-83. In her interpretation of mnemonic images as magical, cosmic spirit is considered central; see id., \textit{The art of memory}, pp. 155-159. For an account of the relationship between spiritus and cosmic spirit in Ficino's thought, see INGEGNO, \textit{Cosmologia}, pp. 126-142. Ingegno claims, like Yates, that Bruno adopted Ficino's conception of spiritus and cosmic spirit and the relationship between them (ibid., pp. 160-167). COPENHAVER, 'Scholastic philosophy and Renaissance magic in the \textit{De vita} of Marsilio Ficino', pp. 525-530, argues that Galen is the source to Ficino's idea of stones preparing the human spiritus for reception of celestial influence (FICINO, \textit{De vita} iii 12.28-31, pp. 298-300 [= \textit{Opera}, p. 547.2-5]). Yates' interpretation of Ficino's magic as founded on Hermeticism has been criticised by Copenhaver, who instead suggests scholastic and Neoplatonic sources as the theoretical backbone of Ficino's magic; see COPENHAVER, 'Renaissance magic and Neoplatonic philosophy', pp. 351-369; id., 'Iamblichus, Synesius and the Chaldean oracles', pp. 441-455.} Moreover, the spiritus of the human body can also be exposed to the influence of certain stars by pursuing deeds governed by those stars, for instance. Contemplation, for instance, makes the soul susceptible to Saturn.\footnote{FICINO, \textit{De vita} iii 2.67-72, p. 252.} Lastly, each of the three faculties in the human soul — imaginatio, ratio and mens — can be brought in tune with the influence of various stars, and thereby aided through sympathy.\footnote{WALKER, \textit{Spiritual and demonic magic}, pp. 14-16.}

This theoretical framework will help us understand Ficino's comments about contraction in other works. He uses the word in two senses. He uses it, first, in a
noetic (i.e. mystical) sense. In Ficino’s letter to Lorenzo dei Medici, already cited in Chapter 3, Ficino affirms that affective understanding is superior to intellectual understanding of God. By intellectual understanding “we contract”, that is, we limit, “His [God’s] greatness according to the capacity and comprehension of our mind (mens)”.1 The second sense occurs in Ficino’s account of the humours. Humours, that is, corporeal fluids, can affect spiritus directly and thereby indirectly affect the function of interior and exterior senses. Besides taking care of the spiritus, learned people should also look after their humours, Ficino says in De vita. Here he builds on the physiological doctrine of Hippocrates (ca. 460-370 BC) and Galen about the four humours: sanguis (pure blood), phlegma or pituita (phlegm), cholera (red bile, also called yellow bile), and atra bilis (black bile) or melancholia.2 The movement of humours, which may affect the spiritus, is described by Ficino as a contraction. When discussing noetic ascent in his Theologia platonica, he presents various ways in which the mind can free itself from the body in order to ascend towards God. He asserts of one of them that it “derives from the contraction of melancholy, which separates the soul from external affairs, so that the soul is just as disengaged in a man who is awake as it normally is in a man when he is asleep.”3 Seen in isolation, this statement suggests that noetic ascent depends on the contraction of melancholic humours. However, Ficino is careful to avoid such a conclusion in De vita. He states that

---

1 FICINO, Le lettere, 1.115.181-185, as quoted on p. 97 n. 2 above.
2 For the classical doctrine of humours, see KLIBANSKY et al., Saturn and melancholy, pp. 3-15. For its later adaptations, see SIRAISI, Medieval and early Renaissance medicine, pp. 104-109.
3 FICINO, Theologia platonica xiii 2, vol. 2, p. 219.22-25: “Tertius vacationis modus fit ex melancholici humoris contractione animam ab externis negotiis sevocantis, ut anima tam cavet [or rather ‘vacet’ as in Opera, p. 294.27] homine vigilante, quam solet dormiente quandoque vacare.” AGrippa, De occulta philosophia iii 55, p. 567.24-28, followed Ficino’s observation. The statement of Ficino is noted by Ingegno (see references on p. 152 n. 1 below). I shall discuss Ingegno’s use of this statement on pp. 152-153 below.
spiritus, which can be affected by humours, may trigger imagination and thereby indirectly the higher faculties (reason and mind), but that mind’s contemplation of the divine is not reducible to the effect of spiritus.¹ Whether Ficino’s account is consistent on this score is open to debate.

The humour melancholy was of particular interest to Ficino, since it was essential to intellectual work. According to the pseudo-Aristotelian Problemata “all those who have excelled in whatever faculty, have been melancholics.”² Plato agreed, Ficino held, since he stated in the Theaetetus that intelligent people were prone to exuberant excitement and frenzy (furor).³ Democritus (ca. 460-357 BC) also concurred, Ficino holds.⁴ “Our Plato”, Ficino adds, seems to have asserted in Phaedrus that “without madness (furor) one knocks at the doors of poetry in vain”. Most importantly, Ficino asserts, this Platonic frenzy occurs only in melancholics.⁵ Here Ficino translates the Greek word for frenzy, μανία, as furor. However, in the passage from the Phaedrus, Plato did not identify μανία with melancholy. The connection between the two was probably invented by Ficino, who hoped thereby to unite the Platonic doctrine of divine inspiration with the physiological theory of the humours.⁶

Ficino mentions three physical causes for the state of furor, namely celestial, natural and human. At birth the celestial influence from the planets Saturn and

¹ See pp. 137-138 above.
² FICINO, De vita i 5.3-5, p. 116: “Quod quidem confirmat in libro Problematum Aristoteles, omnes enim inquit viros in quavis facultate praestantes melancholicos extitisse.” For the source, see PSEUDO-ARISTOTLE, Problemata xxx 1 953a10-19.
³ FICINO, De vita i 5.5-7, p. 116: “Qua in re Platonicum illud quod in libro De scientia scribitur confirmavit, ingeniosos videlicet plurimum concitatos furiososisque esse solere.” Clark and Kaske cite PLATO, Theaetetus 144a5-b2.
⁴ FICINO, De vita i 5.7-8, p. 116.
⁵ Ibid., i 5.8-12, p. 116: “Quod quidem Plato noster in Phaedro [245a1-8] probare videtur, dicens poeticas fores frustra absque furore pulsari. Etsi divinum furorem hic forte intelligi vult, tamen neque furor eiusmodi apud physicos aliis unquam ullis praeterquam melancholicis incitatur.”
⁶ KLIBANSKY et al., Saturn and melancholy, p. 259.
Mercury induces a melancholic nature, since both produce something "cold and dry" in us. For those not born under these celestial circumstances, or for those wanting to enhance such a privileged birth, the two other causes — natural and human — can be supplied by intellectual labour, particularly philosophy. These natural and human causes also imply, however, that the learned should take precautions not to succumb to physical pleasures that might withdraw the soul from the desired state of a tempered melancholy.

Such a powerful theory of melancholy was naturally entangled with Ficino’s solution to the Neoplatonic question of the relation between the ‘one’ and the ‘many’, especially his notion of noetic ascent towards unity, in which the influence of Saturn was important.

2. Bruno’s criticism of physiologically induced contraction

Bruno uses the term ‘contraction’ in a physiological sense, above all in the fifteen contractions of the Sigillus. Some Bruno scholars, notably Ingegno, equate Ficino’s physiological interpretation of contraction with contraction in the strictly noetic sense in Bruno’s philosophy, i.e. the idea that the philosopher can ascend through the ontological hierarchy to the purely intelligible realm. As we have seen, in some of

---

1 FICINO, De vita i 4.22-48, p. 114.
2 Ibid., i 7, pp. 122-128.
3 E.g. id., Theologia platonica xviii 5, vol. 3, pp. 196-197.
5 INGEGNO, Cosmologia, pp. 251-256, especially p. 251; id., La sommersa nave, pp. 90-91; id., Regia pazzia, pp. 133-143, especially p. 133 n. 71. Ingegno’s identification is reaffirmed in MANCINI, La sfera infinita, p. 67 n. 152, but rejected in SPRUIT, Il problema, pp. 141 n. 118, 148-149. STURLESE, ‘Le fonti’, p. 116, follows
Ficino's works contractions of this kind are employed to explain noetic ascent, namely through physiologically contracted humours, especially black bile, or melancholy. Bruno employs 'contraction' in this physiological sense too, but the critical question is whether or not Bruno regards such physiological contraction as sufficient to ascend noetically, and which theological framework he employs it in.

In the fifteen contractions in the *Sigillus*, Bruno criticises the kind of contraction facilitated by black bile or melancholy (the second, eleventh and fourteenth). He reinforces his criticism in the fourteenth contraction, where he speaks of the intrusion of a foreign spirit, produced by an excessive concentration of melancholy. However, it should be remembered that Bruno does not mention Ficino's theory of *spiritus* or melancholy in these three contractions. He may be thinking of later adaptations of Ficino's theories of *spiritus* and melancholy or, just possibly, ones independent of Ficino.

What is, by comparison, Bruno's view of the relationship between spiritual ascent and melancholy? His treatment of contraction in this sense, as we have seen in Chapters 1 and 3, shows that, although Bruno was very critical of noetic ascent facilitated solely through melancholy, he does not entirely exclude the physiological theory from his account of noetic ascent. For, as he says in the eleventh contraction, even "more noble souls" who manage to contemplate the divine can be assisted by melancholy. However, their success is not due to their melancholy, but to their superior intellect. Similarly, those who fail to undertake such contemplation do so because of their inferior intellectual capacity. In itself melancholy is insufficient, although it can provide a starting point of contemplation if well balanced. Intellect, on
the other hand, is paramount in Bruno.\(^1\) In this way, then, the noetic and physiological meanings of contraction denote related rather than distinct concepts.

Ficino’s account in *De vita* of the relationship between *spiritus*, on one hand, and the higher faculties of the soul, on the other, could be described similarly.\(^2\) Hence Bruno’s criticism may not be directed against Ficino, but against those who employed a theory of *spiritus* and melancholy like the one presented by Ficino. In particular Bruno’s criticism may aim at those who had adapted Ficino’s physiological theory of melancholy but ignored its philosophical setting. Ficino may even have been aware of this danger himself, for on one occasion he warns his reader, that Saturn will be “most hostile” to those charlatans who simulate a contemplative life but do not practise it.\(^3\)

Bruno’s view of balanced melancholy, as necessary but insufficient unless aided by intellectual powers, is maintained in the *Lampas triginta statuarum*. There melancholy is regarded in relation to cognition.\(^4\) In this context Bruno does not speak explicitly about noetic ascent towards the One, but he does mention the interior and exterior faculties, all of which relate to noetic ascent as he describes it elsewhere. Among the faculties whose function depends on melancholy, we thus find an ordered

---

Ingegno’s general assertion that the fifteen contractions in the *Sigillus* (i 35-49) are inspired by Ficino. STURLESE, ‘Le fonti’, p. 144, also follows Ingegno when she points out FICINO, *Theologia platonica* xiii 2, vol. 2, pp. 215.8-18, as the source for BRUNO, *Sigillus* i 45, p. 187.16-21.

1. BRUNO, *Sigillus* i 45, p. 189.6-14, as quoted on p. 33 n. 3 above.
2. See pp. 136-137 above, especially p. 136 nn. 3 and 4.
3. FICINO, *De vita* iii 22.39-41, p. 364: “Nullis vero Saturnus est infensor quam hominibus contemplativam vitam simulantibus quidem nec agentibus.”

143
series of faculties, namely, sensation (*sensus visus* and *sensus auditus*), imagination (*phantasia*), reason (*ratio*), intellect (*intellectus*) and mind (*mens*). Bruno refers to the same four faculties in his description of noetic ascent in the *Sigillus*, though without mentioning melancholy as starting point for their work.

Reason builds, Bruno says in the *Lampas triginta statuarum*, on sensation but turns sense impressions into concepts. Intellect intuits in a simple "contracted" vision what reason discerns in a fragmented way. This role of intellect and its contraction is similar to Bruno’s description of noetic ascent in the *Eroici furori*. Mind, Bruno continues in the *Lampas triginta statuarum*, is the culmination of cognition progressing from sensation to intellect. It is, he says elsewhere, an intuition like that of intellect, but unlike that of intellect it is not based on an immediate conception of reason’s discursive work.

From this passage in the *Lampas triginta statuarum* we may gather that Bruno — even though he does not explicitly relate these faculties to the Neoplatonic scheme of hypostases there — regards melancholy and the contractions it induces as a starting point for the human soul’s ascent to Mind. Melancholy, if balanced, provides the initial impulse, which is complemented by the work of sensation, imagination,

---


2. The four faculties are listed in id., *Sigillus* i 31, p. 172.18-23. Their respective roles in noetic ascent are described ibid., i 31-34, pp. 172.23-180.18, as described on pp. 40-41 above.


5. See id., *Furori* i 3, p. 137, as quoted on pp. 93 n. 2, 94 n. 2 above; ibid., i 4, p. 155. Similarly in id., *Infinito* i, p. 61, as quoted on p. 121 n. 2 above.


reason, intellect and mind. Here intellect's contraction of concepts is distinct from the contraction induced by melancholy, although these two senses of contraction are related, namely inasmuch as the latter may provide an initial stimulus to the former. From this distinction we can make sense of Bruno's criticism of the second, eleventh and fourteenth contractions in the _Sigillus_, since they are based exclusively on the effects of physiologically induced contractions.

The last part of soul's movement towards the One is not completed by the rational faculties, but is the One which comes to the human soul, commonly described as ecstasy. In the _Lampas triginta statuarum_ Bruno also lists ecstasy as a state dependent upon the initial impulse of melancholy, adding, on this occasion, that in such a state the human being is brought out of the sense world and driven towards the intelligible world.¹ This description of ecstasy as a noetic ascent from the sensible world into the intelligible world resembles that of Iamblichus' contemplation in the _Eroici furori_, the possible model of the fifteen contractions.² However, Bruno does not use the term 'ecstasy' there.³

Finally, faith, understood as philosophical and not as theological faith, is also related to melancholy in the _Lampas triginta statuarum_.⁴ As we have seen in Chapter 1, Bruno's preference for philosophical faith over theological faith, that is, for human

¹ _Id., Lampas_ §245.1-4, p. 1232 (= _BOL_, vol. 3, p. 142.3-6): "Est estasis, upote facultas ad extrahendum a sensibus, a praesentibus, et appulsus ad superiora, et continuatio quaedam rationis humanae cum intelligentia divina seu daemoniaca, sive bona sive mala illa sit." Other faculties and mental states are described ibid., §§241.1-244.11, pp. 1226-1230 (= _BOL_, vol. 3, pp. 140.4-141.27).

² _Id., Furori_ i 1, p. 327, as quoted on p. 25 n. 4 above.

³ Cf. _id., Sigillus_ i 46, p. 190.3-14, where 'ecstasy' is applied in an unfavourable manner. 'Ecstasy' is not included in Bruno's description of contraction in the noetic sense: ibid., ii 22, pp. 213.21-214.6, as quoted on p. 85 n. 1 above. Ecstasy is scorned in the twelfth contraction; see ibid., i 46, pp. 189.15-190.5, as quoted on p. 34 n. 1 above.

⁴ _Id., Lampas_ §245.12-27, p. 1232-1234 (_BOL_, vol. 3, p. 143.1-16). For the distinction between philosophical and theological faith, see p. 28 above.
experience over Scripture and revelation, is important to his conception of noetic ascent. He uses the theory of melancholy and of physiologically contracted humours to subvert Christian theology. This theological framework of Bruno was foreign to Ficino’s ideas of noetic ascent, since Ficino claimed that faith, in the traditional theological sense, we may assume, is a prerequisite of noetic ascent.

Although, therefore, Bruno and Ficino use the theory of melancholy for quite different purposes, we may assume that Ficino, and possibly Agrippa, were among Bruno’s sources for his theory of melancholy. Bruno does not acknowledge Ficino as a source in this context, but this proves little. His widespread, if unacknowledged, use of Ficino’s works is well known. There is, however, another, possible common source, common to Ficino and Bruno, which scholars have not taken into consideration, namely the medieval, physiological doctrine of the six non-naturals.

This doctrine was built on the physiological theories of Galen, though not formulated by Galen himself. The doctrine is one of three complementary doctrines on physical health, the two other doctrines being the so-called naturals and praeternaturals. The naturals are the seven things which are vital to physical life and health, namely elementa, complexiones, compositiones, membra, virtutes and spiritus. The praeternaturals are those things which harm health, namely morbus, morbi causa and accidentia morborum sequentia. The six non-naturals are “things necessary” to health, “necessary” in the sense that “a creature cannot live at all without them” or, at least, “not live well without them”. They include air, food and drink,

---

1 See p. 28 above.
2 Cf. Ficino’s reflections on faith in relation to noetic ascent in FICINO, *In Epistolas Pauli* proemium, p. 425.29-31, as quoted on p. 37 n. 5 above.
3 E.g. Bruno’s use of Ficino’s commentary on Plotinus’ theory of noetic ascent, as noted by Sturlese in relation to BRUNO, *De umbris* §72.2-7, p. 56.
4 I am indebted to Guido Giglioni for pointing out this possibility to me.
5 OTTOSSON, *Scholastic medicine and philosophy*, p. 254.
6 Ibid., p. 254.
7 Ibid., pp. 254-255.
sleep and waking, motion and rest, evacuation and repletion, and the passions of the mind.\textsuperscript{1}

Of the six non-naturals, air and passions of the mind gave rise to philosophical questions. The element air was considered a medium through which celestial influence somehow reached the earth.\textsuperscript{2} The passions of the mind may affect the physical state, but also the state of the soul and its ability to contemplate, which is of particular importance to the philosopher.\textsuperscript{3} Through the passions, such as fear, anger, shame, hope etc., the \textit{spiritus} can be affected, which in turn can influence the contemplative faculties.\textsuperscript{4}

Within this framework of the six non-naturals, some medieval commentators accommodated a doctrine of Avicenna (980-1037). The doctrine of Avicenna says that matter is naturally obedient to the soul. If, for instance, a patient believes that he or she will be well or sick, the matter of the body obeys, at least to some extent, the wish of the soul, that is, the form transmitted by the soul.\textsuperscript{5} This was how the effects of magic could be explained.\textsuperscript{6} The effects of incantations could likewise be explained within Avicenna's theory, or as the effect of the faith of the soul, which acts on the body through \textit{spiritus}. Moreover, the effects of incantations may be caused by God or by angels, evil spirits, or celestial intelligences.\textsuperscript{7}

Bruno does not refer to the doctrine of the six non-naturals in relation to his notion of contraction. Nor does he follow its overall schemes. Nevertheless there are some interesting parallels. Five of Bruno's fifteen contractions deal with the effects of passions in the move from multiplicity to unity through contemplation, namely the

\begin{itemize}
  \item \textsuperscript{1} Ibid., pp. 253-254.
  \item \textsuperscript{2} Ibid., pp. 256-259, especially p. 258.
  \item \textsuperscript{3} Ibid., pp. 259-264.
  \item \textsuperscript{4} Ibid., p. 263.
  \item \textsuperscript{5} Ibid., p. 264.
  \item \textsuperscript{6} Ibid., p. 265.
  \item \textsuperscript{7} Ibid., pp. 266-267.
\end{itemize}
fifth (faith), the sixth (filial piety), the seventh (fear), the eighth (again, fear) and the
ninth contraction (desire). In the eighth contraction, Bruno states that the contraction
in question is caused by spiritus. Moreover, four other contractions, namely, the
second, the eleventh, the twelfth and the fourteenth, deal with the impact of various
kinds of spiritus on the contemplative mind, in particular spiritus caused by
melancholy. Even though these four contractions are not easily placed within the
categories of the six non-naturals, they build on a theory of spiritus and their effects
on contemplation, which is similar to the one employed in the doctrine of the six non-
naturals as regards the passions.

It is, then, possible that Bruno’s fifteen contractions were not only inspired by the
theory of physiologically induced contraction advanced in Ficino’s Theologica
platonica xiii 2, but also by the doctrine of the six non-naturals. It is also possible that
Ficino’s theory itself was derived from this physiological theory, but this is a question
I shall leave for the Ficino scholars. If Ficino or Bruno did take up the theory of the
six non-naturals, Galen was probably its source, directly or indirectly. In the case of
Bruno, Galen may have been mediated through the physiological doctrine of the six
non-naturals.

---

1 BRUNO, Sigillus i 39, i 40, i 41, i 42, i 43, pp. 183.13-184.7, 184.9-20, 184.22-
185.18, 185.20-186.14, 186.16-22.

2 Ibid., i 42, p. 185.20-24: “Contractione etiam, quae a subito timore ad arcem cordis
aliasque internas partes spiritum contrahente vel impellente provenit, fit ut a plerisque
morbis aegroti convalescant, sicut a contrariis causis enascentes contraria ratione
curari credimus consequenter.”
3. Interpretations of Bruno’s fifteen contractions in the *Sigillus sigillorum*

Mersenne was among the first to attack Bruno’s infinite and heterodox cosmology on the grounds that it led to irreligion and deism. He did so in his *L’impiété des déistes* from 1624. Less known is it that in the same work Mersenne also attacked the fifteen contractions in Bruno’s *Sigillus*, reporting each contraction and stating his criticism of the first five contractions in strong terms. Bruno’s treatment of miracles, raptures, prophecies, revelations, faith and imagination in these five contractions led Mersenne to assert that Bruno destroyed the “foundations of true religion”. The ultimate reason for this, Mersenne announces, was that Bruno “did not believe at all in Christian faith, and in the divine”.¹ In his attack on Bruno’s doctrine, Mersenne treats Bruno in a patronising tone rather than arguing with him. That Bruno does not believe in “the divine” is obviously not true, on the contrary, although he undoubtedly conceived of it in a heretical way.

---

¹ MERSENNE, *L’impiété des déistes* i 10, pp. 232-234: “Ce meschant homme a encore esté pire que Cardan, comme sçavent ceux qui le hantoient lors qu’il estoit à Paris, et comme tesmoigne le livre qu’il a intitulé *Sigillus sigillorum*, dans lequel il met quinze sortes de contractions à ce qu’il puisse sapper les fondements de la vraye religion: car dans la premiere il rapporte les miracles de nostre Seigneur à la qualité du lieu; les ravissemens ecstastiques des saints en l’air à l’imagination, et à la melancholie dans la 2 espèce de ses contractions; dans la troisième, il veut que la prophétie vienne par le racourcy qu’on fait de l’horizon au centre; dans la quatriesme, il feint que les revelations arrivent par la force de la grande attention. La cinquiesme passe au delà de Cardan, qui disoit que le transport des montagnes surpassoit les forces de la nature, car il veut que cela se puisse faire par une affection de foy, ou plustost d’imagination, de presomption, et de sole creance, comme on verra si on le lit attentivement, car pour ce qui est de la foy chretstienne, et divine, il n’en croit point.” Mersenne mentions, but does not criticise the remaining contractions (ibid., i 10, pp. 234-235). I am indebted to Claudio Buccolini, who, in his paper at the *Lettre Bruniane* in Rome in October 1999, drew my attention to this passage of Mersenne.
When Clemens turned to the fifteen contractions in the *Sigillus* more than two centuries later, in 1847, he reported the first, eleventh and thirteenth contraction, and translated the twelfth contraction into German.\(^1\) He repudiated Bruno for his heterodoxy from time to time from a Christian viewpoint but he tempered his contempt on this occasion, striving to decipher the veiled terms used by Bruno. He suggested, for example, that Bruno was alluding to Francis of Assisi (1181/1182-1226) in the thirteenth contraction when he says that imagination, if stirred, can produce a bodily wound.\(^2\) The important point is, Clemens assured his readers, that Bruno did not doubt the miraculous events recorded in these fifteen contractions. Bruno was instead questioning the love for the Saviour, which was the source and cause of the various states of contraction described in the fifteen contractions.\(^3\)

Clemens' interpretation is unconvincing. In the fifteen contractions Bruno mentions Christ explicitly once only, comparing him with Zoroaster, Lull, Paracelsus and others who intensified their intellectual abilities through solitude. In this passage love of Christ is not indicated by Bruno as a cause of contraction.\(^4\) Bruno may, however, be alluding to Christ in the twelfth contraction when he speaks of the “death of some Adonis”, who is the object towards which the person in ecstasy, caused by melancholy, directs his attention.\(^5\) But even in this case, love of Christ — if he is indeed meant — does not cause the contraction, as Clemens claimed. Love of Christ is, instead, the desired result for those inflicting this condition upon themselves. Although Clemens' work did much in its time to reinstate Bruno as a serious

\(^1\) Clemens, Giordano Bruno, pp. 175-177.
\(^2\) Ibid., p. 177. For Francis of Assisi Clemens refers to Bruno, *Sigillus* i 47, p. 190.14-18.
\(^3\) Clemens, Giordano Bruno, p. 177: “Der Angriff ist daher lediglich gegen die Quelle und die Ursache jenes Zustandes, d. h. gegen die Liebe zu dem gekreuzigten Heilande gerichtet.”
\(^5\) Ibid., i 46, p. 190.5: “alicuius Adonidis mortem”. For the context, see ibid., i 46, pp. 189.16-190.14. 
philosopher, his reading forces Bruno's *Sigillus* into a Christian mould for which there is no textual basis in Bruno's works. This distortion prevented him from understanding the philosophical implications of Bruno's idea of contraction in its noetic sense.¹

Bruno's fifteen contractions also attracted the enthusiasm of Frances Yates. Yates read Bruno from a very different viewpoint, one free of Christian prejudices. She interpreted the fifteen contractions in the *Sigillus* i 35-49 as "religious experiences", claiming that there Bruno follows and develops Agrippa's magic.² She referred the first contraction to Agrippa's *De occulta philosophia* iii 55, dealing with the importance of solitude to religious leaders, and the twelfth to the fifteenth contractions to *De occulta philosophia* iii 4, where Agrippa — according to her reading — distinguished religion based on divine, genuine magic from religion based on superstition. Her interpretation is suspect on two counts. First, Yates simply ignored the remaining contractions. Second, she ignored Bruno's theoretical introduction to the fifteen contractions (*Sigillus* i 31-34, as described on pp. 40-41 above). There Bruno does not adhere to Agrippa, who is not even mentioned. His source is Plotinus, whose theory of noetic ascent through the Neoplatonic system Bruno explicitly praises. Further, if we are to speak about "religious experience" in relation to the fifteen contractions, it is certainly not an "experience" based on faith, hope, fear and the intervention of supernatural beings in any Christian sense. Instead it is a "religious experience" based on the individual's rational faculties as they endeavour to comprehend unity in the intelligible realm.

Ingegno, by and large, followed Yates' interpretation. He saw Bruno's magic in opposition to the doctrines and ceremonies of Christianity, and contended that in the fifteen contractions of the *Sigillus* and in his works on magic Bruno had picked up the

---

notion of contraction from Ficino’s *Theologia platonica* xiii 2.\(^1\) Ingegno refers to a passage from *Theologia platonica* xiii 2 in corroboration, describing how the contraction of melancholy can lead to noetic ascent. I have cited and translated the passage above.\(^2\) The kind of contraction Ficino describes is based on a non-rational process, which, as we have seen, Bruno contrasts with contraction produced by noetic ascent. And, as we have also seen, it is a contraction with which Ficino similarly contrasts noetic ascent, though unnoticed by Ingegno.\(^3\) Ingegno is sensitive to Bruno’s strong reservations in the fifteen contractions about noetic ascent through melancholy, but he nevertheless maintains that this passage in Ficino, *Theologia platonica* xiii 2, was the source for Bruno’s idea of noetic ascent, and that what he conceived as Ficino’s main problem, to balance the good and bad effects of melancholy, is central to Bruno too.\(^4\) Hence this aspect of Bruno’s *Sigillus* seemed to Ingegno to support Yates’ overall thesis.

There are four problems with Ingegno’s interpretation. First, even though Bruno may well have been familiar with Ficino’s use of the term ‘contraction’ in the *Theologia platonica* xiii 2, we cannot be sure that this passage of Ficino was Bruno’s only source. Ficino draws on a physiological tradition of contraction going back to Galen, and Bruno could have derived his ideas of contraction in this sense from an intermediary source. The doctrine of the six non-naturals, discussed in the previous section, may be another source for the fifteen contractions in the *Sigillus*, similarly ignored by Ingegno. Second, Ingegno does not consider that, even though Bruno agrees that melancholy might initiate noetic ascent, it is not in itself sufficient, even if

---


3. See my discussion of this passage on pp. 139-140 above.

4. The ambivalence of the theory of melancholic humours is pointed out in INEGNO, *La sommersa nave*, pp. 91-92.
balanced, to produce noetic ascent, but must be assisted by the work of the rational faculties.\footnote{1} This oversight by Ingegno is related to a third problem with his interpretation, namely, that he does not contextualise Bruno’s doctrine of melancholy within his epistemology. Fourth, Ingegno ignores the fact that Bruno’s account of the fifteen contractions subverts Christian theology, and excludes, by implication, among other things, the traditional theological notion of faith. Ficino’s version of noetic ascent, on the other hand, does not conflict with notions of faith.

More recently, Sturlese has reaffirmed Ingegno’s interpretation of Bruno’s notion of contraction. She agrees with Ingegno that the fifteen contractions in the \textit{Sigillus} are inspired by Ficino, as Ingegno had explained, and her work on the possible sources to these fifteen contractions are accordingly coloured by this perspective.\footnote{2} She compares nine of the fifteen contractions in the \textit{Sigillus} with passages from Ficino’s \textit{Theologia platonica} xiii 1-5, namely contraction one, two, six, eight, nine, ten, eleven, thirteen and fifteen.\footnote{3} Three of the comparisons are very compelling, since specific names and expressions are used in the same sense in the respective passages of Bruno and Ficino.\footnote{4}

In addition, however, to the criticism I have already raised in relation to Ingegno’s interpretation, there are at least three problems raised by Sturlese’s comparisons and by her conclusion, that the fifteen contractions of the \textit{Sigillus} derived from \textit{Theologia platonica} xiii 1-5. First, none of the passages from the \textit{Theologia platonica} voice the scepticism against \textit{furore} generated by melancholy which we have seen in the eleventh, the twelfth and the fourteenth of Bruno’s fifteen contractions.\footnote{5} Bruno may

\footnote{1 Cf., for instance, \textsc{Bruno}, \textit{Sigillus} i 45, p. 189.6-14, as quoted on p. 33 n. 3 above.}
\footnote{2 For her agreement with Ingegno’s interpretation, see \textsc{Sturlese}, ‘Le fonti’, p. 116.}
\footnote{3 For her suggestions for sources to the fifteen contractions, see ibid., pp. 141-145. They are listed in the notes to the individual contractions in Chapter 1, pp. 17-39 above.}
\footnote{4 \textsc{Sturlese}, ‘Le fonti’, pp. 141-142 (third contraction), 143 (ninth contraction), 145 (fifteenth contraction).}
\footnote{5 Ibid., pp. 141-145.}
well have used Ficino's doctrine of melancholy in Ficino's *Theologia platonica*, but if so, it is important to acknowledge that he changed many details, incorporated ideas from other sources (some of which we cannot identify) and used it for completely different purposes to Ficino. Second, her comparisons of the sixth and the eight contraction (caused by filial piety and fear) with Ficino's treatment of the same psychological notions in his *Theologia platonica*, may be explainable by the fact that both Bruno and Ficino refer to the physiological tradition of the six non-naturals in which such passions of the mind are treated.\(^1\) In that case Ficino would not necessarily be Bruno's only source. Third, even though Sturlese manages to identify a parallel use of certain names in the third contraction of the *Sigillus* and in Ficino's *Theologia platonica* xiii 2, she does not provide a comparable quotation from Ficino's *Theologia platonica* for Bruno's expression, "contraction of the horizon into the centre".\(^2\)

As in the case of Ingegno, I think that Sturlese is correct in comparing Bruno's texts with Ficino's. But one has to ask the critical question how they used the terms in order to acknowledge potential differentiation and disagreement. The case of contraction in the physiological sense, in particular when applied to melancholy, suggests that, although Ficino and Bruno shared a terminological framework, that did not hinder them from articulating rather distinct philosophical outlooks in agreement with their theological orientations.

---

1 Cf. ibid., pp. 142-143.
2 For her comparison of this third contraction with Ficino's *Theologia platonica*, see ibid., pp. 141-142.
CHAPTER 6

THE SCHOLASTIC TRADITION OF CONTRACTION

1. The historical background of the Liber de causis

The concept of contraction had been used as a theory of individuation in the scholastic commentary tradition concerning the Liber de causis. This work, also known as the Liber Aristotelis de expositione bonitatis purae, is a Latin translation of an Arabic work probably composed in the ninth century.¹ The Latin translation was made in the twelfth century, possibly by Gerard of Cremona and subsequently revised by Guindisalvi.² The author of the Liber de causis draws, among other sources, on Proclus' Elements of theology, Plotinus' Enneads and the pseudo-Aristotelian Theology, the latter two probably in the Arabic versions.³

¹ For the alternative title, see Pattin, 'Introduction', pp. 91-92. For the idea that the Latin version of Liber de causis is translated from an Arabic version, see ibid., p. 92. For the discussion of the date of its composition, see ibid., pp. 92-93.
³ For Proclus' Elements of theology as a source, see Costa, 'Le fonti e la struttura del Liber de causis', pp. 1-17; id., 'Esse quod est supra eternitatem', pp. 47-52. For the Arabic version of Plotinus' Enneads as a source, see ibid., pp. 17-29; id., 'Esse quod est supra eternitatem', pp. 42-47. For the use of the pseudo-Aristotelian Theology, see id., 'Le fonti e la struttura del Liber de causis', pp. 17-21, 24-26. For the differences between key doctrines in the metaphysics in the Liber de causis and those of Plotinus and Proclus respectively, see id., 'Le fonti e la struttura del Liber de causis', pp. 30-31. For the influence of the Liber de causis in the Arabic world, see Taylor, 'The Kalâm fi maḥd al-khair (Liber de causis) in the Islamic philosophical milieu', pp. 37-52. For the influence of the Latin version of pseudo-Aristotle's
The *Liber de causis* was falsely attributed to Aristotle, among many others, until Aquinas, in his commentary to the *Liber de causis*, written in 1272, observed the borrowings from Proclus and questioned Aristotle's authorship. He had been able to make this identification because he had consulted the Latin translation of Proclus' *Elements of theology* made by William of Moerbeke (ca. 1215-1286) in 1268. The recognition of influences from Plotinus' *Enneads* and the *Theology* of pseudo-Aristotle, on the other hand, is much more recent and is still not clear in every detail.

In this chapter I shall not consider the sources of the *Liber de causis*. I shall instead make a few bibliographical observations regarding the reception of the work and its commentaries in the Renaissance, and introduce the philosophical doctrines in the *Liber de causis* which became central in the scholastic discussions of the theory of individuation articulated through the concept of contraction. I shall argue that even though scholastic authors used contraction in different senses, it was the distinctive features of Giles' interpretation that are recognizably Bruno's source for his interpretation of ontological contraction.

Both before and after Aquinas' discovery the *Liber de causis* was an important metaphysical work. In 1255 the work was even made part of the required reading for students at the University of Paris. They were obliged to devote seven weeks to a course on the *Liber de causis*. The work was also an important and institutionalised text for Dominicans in the thirteenth century. Bruno, to note in passing, was a

---


1 For Aquinas' attribution, see COSTA, "Philosophus in libro De causis", pp. 611-612. For other attributions by scholastic philosophers before Aquinas, see ibid., pp. 633-644.

2 AQINAS, *Super Librum de causis expositio* proemium, p. 3.1-5. For Aquinas' identification of sources, see ELDERS, 'Saint Thomas d'Aquin et la métaphysique du Liber de causis', p. 429.

3 ZWAENEPOEL, 'Introduction', p. 15.
Dominican. Since this Order, and the Aristotelianism which it fostered, remained very important in Renaissance philosophy, it would be interesting to know how and to what extent the Liber de causis continued to exert influence in this period. We know that Cusanus as well as Cardinal Bessarion (1403-1472) both owned a manuscript of the treatise, that Pico commented upon it in his Conclusiones, that Ficino considered it a work belonging to the Platonic tradition, and, as we shall see in the next chapter, that Cusanus’ adversary, the Heidelberg professor John Wenck (d. 1460), wrote a commentary on the Liber de causis and referred to the Liber de causis in his attack on Cusanus’ De docta ignorantia. Still other commentaries on the Liber de causis were written in the Renaissance.

The bibliographical information provided by Taylor, Cranz, Schmitt and Knox about the Liber de causis proved that the work was popular in the late Middle Ages and in the Renaissance — even after its chief source, Proclus’ Elements of theology, had

---

2 MS Cues 195 contains the Liber de causis on fols 1r-34v. It was, in fact, Aquinas’ commentary on the Liber de causis, see p. 201 n. 1 below. BARDENHEWER, ‘Zur Geschichte der lateinischen Uebersetzung’, pp. 300, 290 n. 4, claims that Bessarion’s hand is detectable in a MS of the Liber de causis, including commentaries by Albert, Aquinas and Giles, held at the San Marco library. This MS is listed as Lat. Z. 288 (coll. 1839) in Cento codici bessarionei, pp. 86-87. We find explicit references to the Liber de causis in PICO, Conclusiones 6>1-10, pp. 460-464, and likewise in FICINO, Responsio, p. 46, line 39. For the Liber de causis in the works of Cusanus, Pico and Ficino, see KRISTELLER, ‘Proclus as a reader’, p. 196. For some references to, or paraphrases of, the Liber de causis up to the seventeenth century, see BARDENHEWER, ‘Zur Geschichte der lateinischen Uebersetzung’, pp. 204-302. The MS containing Wenck’s In Librum de causis is held at the Stadtbibliothek in Mainz, in MS 610, fols 2r-38v, as recorded in TAYLOR, ‘The Liber de causis’, p. 83. For Wenck’s reference to the Liber de causis see p. 214 n. 1 below. Neither Bardenhewer nor Kristeller have called attention to Wenck’s commentary in the above mentioned texts. Nor have they paid attention to the Renaissance commentaries; see p. 159 n. 3 below.
become available through various Latin and vernacular translations. Taylor lists two hundred and thirty seven Latin manuscripts of the Liber de causis circulating in the Middle Ages. And Cranz lists fifteen printed editions of Gerard of Cremona's Latin translation of the Liber de causis in the sixteenth century. Of these ten were published in or before 1576, when Bruno left the Dominican order in Naples, and eight out of these ten were published in Venice. The uses of the Liber de causis in Renaissance philosophy have not yet, however, been studied.

For the Latin commentaries on the Liber de causis the bibliographical information is even scantier. We know that commentaries were produced by the following late thirteenth-century authors: (i) Roger Bacon (ca. 1214 - ca. 1292), who wrote his commentary between 1241 and 1245; (ii) pseudo-Henry of Ghent, who wrote his commentary between 1245 and 1255; (iii) Aquinas, who wrote his commentary in 1272; (iv) Siger of Brabant (ca. 1240 - ca. 1284), who wrote his commentary between

---

1 Cf. KRISTELLER, 'Proclus as a reader', p. 196, who has asserted that "its vogue [i.e. of the Liber de causis] seems to have declined after Proclus's own Elements of theology had become known directly." Kristeller's assertion may be true, but it still needs to be pointed out that at least fifteen editions of the Liber de causis came out in the sixteenth century.

2 TAYLOR, 'The Liber de causis', pp. 68-80.

3 CRANZ, A bibliography, p. 169. See also SCHMITT and KNOX, Pseudo-Aristoteles latinus, pp. 18-20.


5 In MAHONEY, 'Metaphysical foundations of the hierarchy of being', pp. 166-179, the Liber de causis is pointed out as one source to scholastic theories of hierarchies of being in the thirteenth century. But apart from a brief assertion about a reference of Agostino Niño (1469/1470-1538) to the Liber de causis (ibid., p. 198), the treatise is not considered in the context of Renaissance metaphysics (ibid., pp. 186-204).
Several other commentaries were produced before 1500, some by unidentified authors. In the Renaissance at least four commentaries were written: (i) a commentary by Wenck, as already mentioned; (ii) a commentary by Ludovico of Ferrara (d. 1459); (iii) a commentary by Jacob of Gostynin (d. 1506) dating from 1490; and (iv) a commentary by Jérôme of Hangest printed in 1515. The commentaries by Wenck and Ludovico were not available in print in Bruno’s lifetime, and he would not, in all probability, have known them. The commentary of Jacob of Gostynin, printed just once in Krakow in 1507, was far removed from Bruno’s European itinerary, and it is unlikely that he would have come across it. The commentary by Jérôme of Hangest was printed in Paris in 1515. I have not been able to see a copy, so it remains a possibility that Bruno used it.

Which printed commentaries would Bruno have been likely to come across?

Among the scholastic authors, Bruno almost certainly knew the commentaries by

---

1 For the datings I rely on the following secondary sources. For Bacon’s commentary, see COSTA, “Philosophus in libro De causis”, p. 614. For pseudo-Henry’s commentary, see ZWAENEPOEL, ‘Introduction’, p. 15. For Aquinas’ commentary, see SAFFREY, ‘Introduction’, pp. XXXIII-XXXVI. For Siger of Brabant’s commentary, see WIPPEL, ‘Siger of Brabant’, p. 768. For Giles’ commentary, see PUNTA and TRIFOGLI, ‘Giles of Rome’, p. 77.

2 TAYLOR, ‘The Liber de causis’, pp. 81-84.

3 For the three first commentaries, see TAYLOR, ‘The Liber de causis’, p. 83. No copies of LUDOVICO OF FERRARA, Commentaria in Librum de causis, are known (TAYLOR, ‘The Liber de causis’, p. 83). JACOB OF GOSTYNIN, In Librum de causis, is held at Krakow, Bibl. Uniwersytetu Jagiellonskiego, MS 505, fols 148-[189]. It was printed in Krakow in 1507 (TAYLOR, ‘The Liber de causis’, p. 83). JÉRÔME DE HANGEST, Liber de causis, was printed by Berthold Rebolt in Paris in 1515. None of the three first commentaries are included in the list of commentaries listed in PATTIN, ‘Introduction’, pp. 122-130. The commentary of Jérôme of Hangest is not included in TAYLOR, ‘The Liber de causis’, pp. 81-84.
Albert and Aquinas from his early formation as a Dominican.\(^1\) An anonymous commentary attributed to pseudo-Henry, *Quaestiones in Librum de causis*, extant in one manuscript, now MS h.II.1, is held in the Real Biblioteca of El Escorial. It was written in the thirteenth century and the beginning of the fourteenth century.\(^2\) We can ignore this version since it was not printed in Bruno’s lifetime. We find a commentary on the *Liber de causis* of Albert in his *De causis et processu universitatis a prima causa*, composed between 1265 and 1272, that is, a few decades after the *Quaestiones*.\(^3\) *De causis et processu universitatis a prima causa* is divided into two books, of which the second is a commentary on the *Liber de causis*.\(^4\) Fauser lists


\(^2\) For this MS, see ZWAENEPOEL, ‘Introduction’, pp. 6-7. For the attribution to pseudo-Henry, see ibid., pp. 15-19. For this commentary of pseudo-Henry, see also COSTA, ‘‘Philosophus in libro *De causis’’’, pp. 618-622. Pseud-Henry singled out Aristotle as the author, Costa argues, because the theme of first principle in Aristotle’s *Metaphysics* XII is also dealt with in the *Liber de causis*; see COSTA, ‘‘Philosophus in libro *De causis’’’, pp. 639-644. Even after Aquinas had identified Proclus’ *Elements of theology* as a source, GILES, *Super authorem De causis, Alpharabium Proaemium*, Y, regarded the *Liber de causis* as a supplement to Aristotle’s *Metaphysics*. For Aristotelian ideas discussed in the *Liber de causis*, see COSTA, ‘‘Philosophus in libro *De causis’’’, pp. 644-648.

\(^3\) For the dating, see GUAGLIARDO, ‘‘Introduction’, p. XI.

\(^4\) According to Pattin, Albert comments on *Liber de causis* i-vi(vi) in II i, on *Liber de causis* vi(vii)-xiv(xv) in II ii, on *Liber de causis* xv(xvi)-xviii(xix) in II iii, on *Liber de causis* xix(xx)-xxiii(xxiv) in II iv, on *Liber de causis* xxiv(xxv)-xxxii(3xxii) in II v. For the division in Albert’s commentary, see PATTIN, ‘‘Introduction’, pp. 122-123.
thirty eight manuscripts of, or extracts from, this work.\(^1\) It was printed in 1517.\(^2\) Aquinas' commentary, *Super Librum de causis expositio*, is known through fifty manuscripts listed by Saffrey, of which eighteen belong to Italian libraries, including one library in Naples.\(^3\) Saffrey also lists one incunabulum from 1493.\(^4\) We can add at least three printed editions in the sixteenth century, two printed at Venice in 1507 and 1551 respectively, and one at Rome in 1570-71.\(^5\)

The relatively high number of manuscripts of Giles' commentary, recorded by Taylor, suggests that Giles' commentary had also been popular before the sixteenth century.\(^6\) Giles' commentary was printed together with the text of the *Liber de causis* in Venice in 1550, one year before one of the publications of Aquinas' commentary.\(^7\) However, there may well exist sixteenth century editions of other commentaries which I am not aware of.\(^8\) Further bibliographical research will have to be done in order to establish the printing history of the commentaries during the sixteenth century.

---

1 FAUSER, 'Prolegomena', pp. VII-XII.
2 ALBERT, *De causis et processu universitatis a causa prima*, in *id., [Parva naturalia]*. Heirs of Ottaviano: Venice, 1517, fols 186-230\(^v\). For Albert's *editio princeps*, printed in Venice in 1517, see FAUSER, 'Prolegomena', pp. XXIX-XXX.
3 SAFFREY, 'Introduction', pp. XL-LII. The MS in Naples is held in the Biblioteca Nazionale (ibid., pp. XLV-XLVI).
4 Ibid., p. LII.
5 For the edition in Rome in 1570-1571, see ibid., pp. LIII-LIV. For the two other Venice editions, see CRANZ, *A bibliography*, nn. 107.755 (1507), 108.219 (1551).
6 TAYLOR, 'The *Liber de causis*', p. 81, lists thirteen MSS.
7 For a comparison between the 1550 edition and the earlier MSS of Giles' commentary on the *Liber de causis*, see PATTIN, 'Introduction', pp. 124-125.
8 In the catalogue at the British Library I have checked the titles indicated in the catalogue under the heading "single works", and looked through the actual editions listed in the catalogues under "Two or more works" of Roger Bacon, Siger of Brabant or Giles of Rome. I have also checked the following catalogues for fifteenth- and sixteenth-century editions: *The National Union Catalog*; *The First Printed Catalogue of the Bodleian Library 1605*; *Catalogue of Books Printed on the*
If the information presented here is representative, then the sixteenth century printed editions that Bruno would be likely to have come across would be Albert's commentary published in 1517, Aquinas' commentary — published at Venice in 1507 and 1551, and at Rome in 1570-1571 — and the one by Giles, published in Venice in 1550. This does not, of course, exclude the possibility that Bruno knew of one or more of the other commentaries through manuscripts or reports by intermediary authors. Given the availability of Giles' commentary and the popularity of the Liber de causis, it is quite likely that Bruno read Giles' commentary. This is confirmed by correspondences between Giles' commentary and Bruno's works, as we shall see.

There is, therefore, good reason to look out for traces of influences in Bruno's thought from precisely Albert's, Aquinas' and Giles' commentaries on the Liber de causis. (For Bruno's knowledge of Giles, see Appendix I.)

2. Contraction and the doctrines of the Liber de causis

The Liber de causis is a short work consisting of thirty one commented propositions, or thirty two, depending on the division of the work. It sets out a hierarchy of being, stretching from the highest ontological level, the primary cause, to the lowest ontological level, nature. From a pedagogical point of view it must have been an exceptional introduction to metaphysics for university students and others with a reading knowledge of Latin and some interest in lofty speculation. In a fairly simple Latin and with several pedagogically useful repetitions, it introduces core notions in a metaphysical system without going into great detail. These qualities are its strength and its weakness. They are its strength insofar as its brief comments stimulate the reader to work out how the propositions could be interpreted. They are its weakness

Continent of Europe, 1501-1600 in Cambridge Libraries; Verzeichnis der im deutschen Sprachbereich erschienenen Drucke des XVI. Jahrhunderts.
as far as its vague ideas do not leave the reader with a fully articulated and concise metaphysical system with great explanatory power.

The most important concepts in the hierarchy of being presented in the *Liber de causis* emerge through the distinction between primary and secondary causes. The First Cause is a creative cause which gives being (*esse*) to everything, whereas a secondary cause is a formal cause which, among other things, imparts motion and generation to sensibilia. The First Cause is more efficacious than the secondary cause. If a secondary cause recedes, the First Cause will subsist.\(^1\) First Cause is prior to eternity, since it creates eternity.\(^2\) Being, the product of First Cause, descends into time through the lower hypostasis dependent upon First Cause and Mind (*intelligentia*) — Mind is dependent upon First Cause and also timeless —, namely the hypostasis Soul (*anima*).\(^3\) The hypostasis Soul, then, exists “on the horizon of eternity from below and above time”.\(^4\)

Cristina d’Ancona Costa has argued that this phrase became popular in thirteenth-century philosophy. It derived, not from Proclus, but from a passage in the Arabic *Theology* of pseudo-Aristotle, in which the following formulation from Plotinus’ *Enneads* is paraphrased: “Soul ... lies, so to speak, on the frontier (ê^γέχοτος) of the intelligible”.\(^5\) The expression used in the *Theology* of pseudo-Aristotle for ‘frontier’,


\(^2\) Ibid., ii 20, 23, p. 138. For this doctrine and its sources, see COSTA, “‘Esse quod est supra eternitatem’”, pp. 41-62.

\(^3\) PSEUDO-ARISTOTLE, *Liber de causis* ii 25-26, ed. Pattin, p. 139.

\(^4\) Ibid., ii 22, p. 138: “Esse vero quod est post aeternitatem et supra tempus est anima, quoniam est in horizonte aeternitatis inferius et supra tempus.” For the interpretation of this image by Giles, see BARDENHEWER, ‘Zur Geschichte der lateinischen Uebersetzung’, pp. 292-294.

Costa points out, is the Arabic expression *fi ufqi*, which means 'horizon'. As mentioned, Bruno uses the image of 'horizon' in his accounts of noetic ascent, notably in the third contraction in the *Sigillus*. This passage in the Latin *Liber de causis* may well be among Bruno's direct or indirect sources for this analogy.

A possible interpretation of Bruno's use of 'horizon' in the third contraction in the *Sigillus* might be as follows. Bruno asserts that some men are able to intuit what is going on at distant places by means of a "contraction of the horizon into the centre". 'Horizon' may, as conjectured in Chapter 1, symbolise the hypostasis Soul, as in the *Liber de causis*, and 'centre' may symbolise the hypostasis Mind in the Neoplatonic system. By a "contraction of the horizon into the centre" Bruno might, then, be describing a turning of an individual soul towards Mind, which is its 'centre', i.e. he may be describing noetic ascent, which moves or "contracts" the individual soul to Mind. When individual souls turn towards Ideas in Mind, they comprehend that on which other things at the same and lower ontological levels depend, e.g. events at distant places. Consequently, men who achieve this can intuit what is occurring at places beyond the reach of the sense organs. If this suggestion is correct, then Bruno intended to give a metaphysical explanation of a form of understanding that might otherwise be accounted for by means of supernatural interferences or miracles. An explanation of this kind agrees with Bruno's tendency in the fifteen contractions to propose natural causes for effects traditionally ascribed to supernatural ones. It would also be in line with the Neoplatonic framework in which he places the fifteen contractions when he introduces them at the *Sigillus* i 31-34, as described on pp. 40-41 above.

But let us return to the *Liber de causis*. The conception of First Cause as the prime cause in a hierarchy of causes is probably derived from the Neoplatonic doctrine of the

---

1 Costa, "'Esse quod est supra eternitatem'", pp. 58-59.
2 For the third contraction, see pp. 19-24 above.
over-flowing of the One.¹ In the Liber de causis, the First Cause’s endowment of being is explained as creation (creatio).² Pagan Neoplatonism is given creationistic connotations. However, the doctrine of creation ex nihilo is not mentioned explicitly. The degree to which the Liber de causis conforms with this doctrine depends on the interpretation of the terms ‘being’ (esse) and ‘creation’ (creatio). Beierwaltes points out that the creation in the Liber de causis is impersonal and independent of the free will of a creator, and that it does not take place in time. Both points conflict with the Christian doctrine of creation ex nihilo.³ Finally, it is said in the Liber de causis, that First Cause is pure goodness, which is ultimately received by nature.⁴ This idea may derive from Neoplatonic philosophy, where the Good is identified with the One.⁵

In the Liber de causis, three ontological levels, or emanations, are causally dependent upon First Cause, namely Mind (intelligentia), Soul (anima) and nature (natura).⁶ According to Costa, this system of hypostases derives from Plotinus’ metaphysics, not from that of Proclus.⁷ In the Liber de causis Mind is an intellectual substance caused directly by First Cause.⁸ Mind then causes the Soul, which in turn

---

⁵ Wallis, Neoplatonism, p. 59.
⁶ For the Neoplatonic sources for these hypostases, see Costa, ‘Le fonti e la struttura del Liber de causis’, pp. 15-17, 30-31.
⁷ Ibid., pp. 15-17.
causes nature.\textsuperscript{1} Even though First Cause is ultimately the causal origin of the sensible universe, individuation occurs only in Mind, Soul and nature, since First Cause is pure being (esse), whereas Mind, Soul and nature combine form (forma) and being (esse). The combination of form and being is described with an untranslated Arabic expression, yliathim, designating something composed.\textsuperscript{2} Finally, God is said to govern (regere) intelligences, which depend upon First Cause.\textsuperscript{3} Thereby Christian monotheism is reinforced. This idea presumably occurs in the Arabic original. Also Islam is monotheistic.

The transmission of forms from Mind to nature is described in proposition ix(x). There the term 'intelligentia' is employed in two senses. First, it denotes the first emanation from First Cause, the hypostasis Mind. Second, it is used to describe intellectual substances comprising forms, intelligences.\textsuperscript{4} The latter are of two kinds. Some comprise "less universal forms" (formae minus universales) and some comprise "more universal forms" (formae plus universales).\textsuperscript{5} Proposition ix(x) in the Liber de causis is based on proposition 177 in Proclus' Elements of theology. Dodds explains about the latter proposition that the hierarchy of intelligences is parallel to that of genera and species. Hence, each higher intelligence will contain one genus, implicitly several species, and each of the more numerous lower intelligences will contain one

\textsuperscript{1} Ibid., viii(ix) 85, p. 156. For the intermediary role of Mind and its Neoplatonic sources, see COSTA, 'La doctrine de la création “mediante intelligentia” dans le Liber de causis et dans ses sources', pp. 212-232. For some scholastic interpretations of the doctrine, see ibid. pp. 209-212.

\textsuperscript{2} PSEUDO-ARISTOTLE, Liber de causis viii(ix) 90, ed. Pattin, p. 157: "Et intelligentia est habens yliathim quoniam est esse et forma et similiter anima est habens yliathim et natura est habens yliathim. Et causae quidem primae non est yliathim, quoniam ipsa est esse tantum." For this doctrine of yliathim and its sources in regard to First Cause, see COSTA, "‘Cause prime non est yliathim’”, pp. 327-349.

\textsuperscript{3} PSEUDO-ARISTOTLE, Liber de causis xxii(xxiii) 173-174, ed. Pattin, pp. 183-184.

\textsuperscript{4} Ibid., ix(x) 92, p. 158.

\textsuperscript{5} Ibid., ix(x) 92, p. 158.
species. The Liber de causis explains that the degree of universality of forms contained in intelligences is according to the mode of being of the various forms. The lower intelligences thus exist in a “particular mode” (per modum particularem), whereas the higher intelligences exist in a “universal mode” (per modum universalem).

The intelligences comprising less universal forms, the ‘inferior intelligences’, are thus distinguished from those comprising more universal forms, the ‘superior intelligences’. This subdivision of intelligences is determined by the ontological proximity to the First Cause. The superior intelligences are more proximate to the One (unum) whereas the inferior are more remote. As a consequence, superior intelligences have more unity and power than inferior intelligences, and the former are more restricted in number than the latter. Ultimately the ontologically lower position of the inferior intelligences is explainable by their limited capacity to receive (recipere) universal forms. Due to the limited power of inferior intelligences, they have to separate and divide what they receive, and cannot, therefore, receive universal forms in their completeness.

Bruno refers on several occasions to this distinction between higher and lower intelligences. Furthermore, as we have seen in Chapter 3, he discusses contraction as

---
1 DODDS’ note in PROCLUS, Elements of theology, p. 292.
2 PSEUDO-ARISTOTLE, Liber de causis ix(x) 93, ed. Pattin, p. 158.
3 Ibid., ix(x) 94-95, pp. 158-159.
4 Ibid., ix(x) 98, p. 160. The Plotinian doctrine of reception according to the capacity of the recipient appears in PROCLUS, Elements of theology prop. 173, pp. 150.22-152.7. It presupposes the principle articulated ibid., prop. 177, pp. 156.1-9, 156.16-20. For this doctrine in Plotinus, see p. 60 n. 1 above.
5 In the following passage Bruno uses the distinction between higher and lower intelligences, though he increases the number of ontological steps; see BRUNO, De umbris §28.9-15, p. 31: “Novit quidem et docuit antiquitas quomodo proficiat discursus hominis a multis individuis ad speciem, a multis speciebus ad unum genus
descent and noetic ascent through genera and species in the hierarchy of being.\(^1\) Insofar as the distinction between higher and lower intelligences in the *Liber de causis* is parallel to that between genera and species, his concept of contraction, as descent and ascent, concerns this distinction between intelligences in the *Liber de causis*.

It is precisely in relation to this proposition ix(x) in the *Liber de causis* that we find the notion of contraction, namely, in discussions of the reception of forms in inferior intelligences from superior intelligences. The term *contractio* is not employed in this or any other of the propositions of the *Liber de causis*.\(^2\) But in proposition 177 of Proclus’ *Elements of theology*, on which proposition ix(x) in the *Liber de causis* is based, the Greek equivalent of the Latin verb *contraho*, συντέλλω, occurs. In the Greek text of *Elements of theology* this Greek verb appears as a participle attributed to ascendens; insuper quomodo infima intelligentiarum per omnes formas intelligat species distincte, inferioris distincte per plures atque multas formas ipsas omnes species concipiunt, superiores per pauciore, suprema per unam, et ipsum quod est supra omne non per formam aliquam.” Forms in intelligences are also referred to ibid., §52.13, p. 44. For the higher and lower intelligences mentioned in the quotation, see PSEUDO-ARISTOTLE, *Liber de causis* ix(x) 92-94, ed. Pattin, p. 158. Sturlese may be referring inaccurately to the first passage in the *Liber de causis* in her note to *De umbris* §28.11-15, p. 31, where she gives “10(9)” instead of “9(10)”. Bruno retained this notion of intelligences later in his philosophy, including this distinction between higher and lower intelligences; see BRUNO, *Causa v*, pp. 295-297; id., *Summa*, pp. 109.16-27, 114.27-115.4, 125.11-126.8. He rejected the popular idea of nine intelligences governing each of the respective nine spheres; see id., *Furori arg.*, p. 41. For Bruno’s notion of ‘intelligence’, see SPRUIT, *Il problema*, pp. 230-234, 300-316. SPRUIT, ibid., pp. 307 n. 106, 309 n. 113, mentions Aquinas’ commentary to proposition iv and ix(x) of the *Liber de causis* as part of the background of Bruno’s notion of intelligence. For Arabic sources to Bruno’s notions of higher and lower intelligences, see id., ‘Motivi peripatetici’, pp. 393-398.

\(^1\) BRUNO, *Sigillus* ii 22, pp. 213.21-214.6, as quoted on p. 85 n. 1 above.

\(^2\) Here I rely on *Liber de causis* as the text appears in Pattin’s edition, including the variations indicated in the apparatus.
those Ideas which are more akin to the One, “while their number is relatively contracted” (τὰ θεωρίας ἀναλόγως τὸν ὑπερτυπότητον). An example may clarify this language. Whereas the superior intelligence contains the Idea of trees as a genus, this Idea is implicitly present in the Ideas of specific species of trees, for example that of an oak. One superior intelligence thus indirectly comprises numerous inferior intelligences, and the superior intelligences are therefore more restricted, “contracted”, with regard to number than the inferior intelligences. In Moerbeke’s Latin translation of 1268, the participle in Proclus’ text is translated as an adjective (quantitate contracta) describing the relatively limited number of forms in superior intelligences compared to the number of particular forms in inferior intelligences.

In his Quaestiones, pseudo-Henry used ‘contraction’ in his commentary on the Liber de causis. This is the earliest use of the noun contraction I have found in the scholastic tradition. If it is correct that this work of pseudo-Henry dates from 1245–1255, and Moerbeke’s translation of Elements of theology from 1268, then pseudo-


2 PROCLUS, Elementatio theologica prop. 177.6-9, tr. Moerbeke, p. 87: “Superiores [intellectus] quidem enim potentii utuntur maioribus, unialiores secundis existentes; inferiores autem, multiplicitati magis, minuunt potentias quas habent. Que enim uni magis congenera, quantitate contracta, potentia que post ipsa excedunt; et que ab uno remotius e converso.”

3 PSEUDO-HENRY, Quaestiones in Librum de causis theorema 4.28-31, qu. 25, p. 61: “Praeterea, cum dicitur quod est esse primum creatum, aut est sermo de esse universaliter sumpto, aut de esse contracto ad intelligentiam, aut aliquid alius. Non de esse contracto, quia de isto esse dicit in commento quod nihil est latius eo, quod non est esse intelligentiae.” See also ibid., theorema 4.79-81, resp. ad qu. 25, p. 63: “Ad illud quod quaeritur: aut est sermo in theoremate de esse universaliter sumpto aut contracto, dicendum, ut arguitur, quod non de esse contracto sed universaliter sumpto ad quodlibet creatum.”

169
Henry could not have taken the term from Moerbeke's translation. It may simply have been a commonly used term in theories of individuation. Be this as it may, it was not Moerbeke's Latin translation which put the term 'contraction' at the centre of the scholastic tradition revolving around the Liber de causis. It may well, as we shall see shortly, be one of the last medieval commentators on the Liber de causis, Giles, who popularised the term.

The concept of contraction, even in its ontological sense, was used in various meanings, sometimes by the same author. In the subsequent part of this chapter I shall describe some examples of four different meanings of ontological contraction, make some comparisons with Bruno's use of the term, and finally argue that Giles is Bruno's most likely source.

3. Essence contracted into existence

(i) Pseudo-Henry

The commentary Quaestiones in Librum de causis attributed to pseudo-Henry, composed between 1245 and 1255, as mentioned above, is organised as a discussion of each proposition in the Liber de causis. The quaestiones made in relation to each proposition are discussed in the scholastic fashion.²

Pseudo-Henry claims that the theory of individuation in the Liber de causis, which he assumes is of Aristotelian origin, is explicitly preferred by him to the Platonic theory of individuation through participation in Ideas. This is because, he says, Plato's doctrine of Ideas cannot account for generation and change in nature. Generation and

---

1 For the date of Moerbeke's translation, see SAFFREY, 'Introduction', pp. XXXIII-XXXIV. For the date of pseudo-Henry's commentary, see ZWAENEPOEL, 'Introduction', pp. 14-15.

2 For a description of the MS, see ibid., pp. 7-19.
change could, however, be explained by the different kinds of forms that, according to “Aristotle” in the Liber de causis, exist in the superior and inferior intelligences.\(^1\) Aristotle had criticised Plato on this score in the first book of his Metaphysics.\(^2\) In order to justify his claim, pseudo-Henry refers to the seventh book of Aristotle’s Metaphysics, dealing with generation, probably VII vii-ix. This and other references to Aristotle probably reflects the author’s misconception that the Liber de causis has an Aristotelian origin.

Pseudo-Henry introduces ‘contraction’ in relation to the Liber de causis, proposition iv, entitled Prima rerum creatarum est esse. In Quaestio 24, concerning proposition iv, he asks whether being is created or not.\(^3\) It is not, he first argues. Since being has to be being of something, it cannot be being in itself.\(^4\) In his next quaestio he continues this objection, stating that being (esse) must be “assumed” (sumptum) or “contracted” (contractum) into Mind or some other entity.\(^5\) In the replies

---

1 PSEUDO-HENRY, Quaestiones in Librum de causis, theorema 3, resp. ad qu. 23.48-54, p. 59: “Sic immateriale potest transmutare materiale, ut intelligentia corpus caeli, ut anima spiritum aut proprium corpus. Loquendo de transmutatione secundo modo, sic habet veritatem et intelligitur ad litteram VIIus Metaphysicae. Est enim sermo ibi de generatione naturali, quam Plato dicebat esse ab Ideis, quae, secundum Aristotelem et commentum Averrois ibidem, non habent virtutem transmutandi aliquo modo materiam.”

2 ARISTOTLE, Metaphysics I ix 991a8-991b9.

3 PSEUDO-HENRY, Quaestiones in Librum de causis theorema 4.5, qu. 24, p. 60: “Et est prima quaestio utrum esse sit creatum.”

4 Ibid., theorema 4.12-13, qu. 24, p. 60: “Esse autem non est per se existens, sed in illo cuius est esse, cum sit actus entis.”

5 Ibid., theorema 4.28-31, qu. 25, p. 61, as quoted on p. 169 n. 3 above.
to *quaestiones* 24 and 25, however, he modifies this view by distinguishing between being that is 'being universally' and being that is 'contracted' to whatever created entity.\(^1\)

(ii) Aquinas

Aquinas' *Super Librum de causis expositio* was composed in the first half of 1272, four years after William of Moerbeke's Latin translation of Proclus' *Elementatio theologica* was finished in 1268.\(^2\) Aquinas warns his reader in the *Proemium* to his commentary that we find only "extracts" (*excerptus*) of Proclus' *Elements of theology* in the *Liber de causis*. The *Elements of theology*, he says, contains a much more ample and extensive exposition of the ideas propounded in the *Liber de causis*.\(^3\) Aquinas was already familiar with the treatise when he composed his *De ente et essentia*, between 1252 and 1256, where he draws important metaphysical ideas from it and mentions it by name.\(^4\) The philological discoveries made possible through Moerbeke's Latin translation of Proclus' *Elementatio theologica* in great measure shaped Aquinas' commentary on the *Liber de causis*.

---

1. Ibid., theorema 4.79-81, resp. ad qu. 25, p. 63, as quoted on p. 169 n. 3 above.
3. AQUINAS, *Super Librum de causis expositio* proemium, p. 3.5-10.
4. E.g. id., *De ente et essentia* iv, p. 32.3-4.
For Aquinas the *Liber de causis* should not, as pseudo-Henry held, be harmonised with Aristotle's thought. Instead he subjects it to textual and philosophical criticism. As a result he distinguishes the ideas in the *Liber de causis* from those of Aristotle. Aquinas identified thirty seven of the two hundred and eleven propositions in Proclus' work, often documented with quotations from Moerbeke's translation. This textual criticism is accompanied by a thorough philosophical analysis, in which the *Liber de causis* is corrected against works by Aristotle, Augustine and pseudo-Dionysius.

Aquinas does not use the term *contractio* in the same contexts of the *Liber de causis* as pseudo-Henry, notably in relation to proposition iv, which deals with 'being'. Nor does Aquinas use the term, or its cognates, elsewhere in his commentary. This omission assumes some importance when we compare Aquinas' discussion of the philosophical themes treated by pseudo-Henry in his commentary on proposition iv of the *Liber de causis*, namely the ontological status of 'being' (*esse*). This problem has profound implications for theories concerning the relationship between God and nature and for theories of individuation. Aquinas' position differs from that of pseudo-Henry in regard to proposition iv in the *Liber de causis*, as we shall see shortly, and that may be the reason why he omitted the notion of contraction. This conjecture is supported by the fact that Aquinas was not shy of using 'contraction' in his theory of individuation in the *Summa theologiae*, written about the same time as his commentary on the *Liber de causis*.1

Proposition iv in the *Liber de causis* asserts that "the first of created things is being (*esse*) and there is nothing else created before it".2 Aquinas points out that this is a rephrasing of Proclus' *Elements of theology*, proposition 138, which he cites from

---

1 E.g., id., *Summa theologiae* 1a, qu. 44, art. 2, resp., vol. 4, p. 458, as quoted on p. 50 n. 6 above.

2 PSEUDO-ARISTOTLE, *Liber de causis* iv 37, ed. Pattin, p. 142: "Prima rerum creatorum est esse et non est ante ipsum creatum aliud."
Moerbeke's translation. In Proclus' text it is stated that "of all the deified things which participate in the divine character, the first and highest is being itself (τὸ ὑπό)." The words τὸ ὑπό in the Greek text are ambiguous philosophically. They can be translated into the Latin infinite esse, 'being', thereby denoting 'being' generally. Alternatively, however, they can be translated as "existing entity" (ens). The twelfth-century Latin translation of the Liber de causis made from an Arabic text uses esse; Moerbeke chooses ens.

In his Liber de causis commentary Aquinas refers to, but does not follow, Moerbeke's ens. In this particular case he follows Liber de causis' esse. Aquinas asserts, therefore, in his commentary on proposition iv to the Liber de causis that "being itself came to be superior to all other created things". Aquinas' comment

---

1 AQUINAS, Super Librum de causis expositio iv, p. 27.11-14: "Et hanc etiam propositionem Proclus in suo libro ponit cxxxviiiam, sub his verbis: 'Omnium participantium divina proprietate et deificatorum primum est et supremum ens.'"

2 This quotation is from PROCLUS, Elementatio theologica prop. 138.1-2, tr. Moerbeke, p. 69, which reads in Boese's edition: "Omnium participantium divina proprietate et deificatorum [sic deificatorum] primum est et supremum ens." For this question of being in Aquinas' commentary, see translator's note in AQUINAS, Commentary on the Book of causes, p. 30 n. 12.


4 For the introduction of the term into medieval Latin, see GABRIEL, 'Sein', cols 175, 186.

5 PSEUDO-ARISTOTLE, Liber de causis iv 37, ed. Pattin, p. 142, as quoted on p. 173 n. 2 above. Cf. PROCLUS, Elementatio theologica prop. 138.1-2, tr. Moerbeke, p. 69, as cited on p. 174 n. 1 above. For the rendering of τὸ ὑπό in the Liber de causis, see COSTA, 'La doctrine de la création "mediante intelligentia" dans le Liber de causis et dans ses sources', p. 214.

6 AQUINAS, Super Librum de causis expositio iv, p. 29.3-5: "Et ex hoc concludit [i.e. the author of the Liber de causis] quod, propter illud quod dictum est, ipsum esse
differs from that of pseudo-Henry, as the latter formulates it on one occasion in the Quaestiones.\footnote{ Cf. PSEUDO-HENRY, Quaestiones in Librum de causis theorema 4.12-13, qu. 24, p. 60, as quoted on p. 171 n. 4 above.} Being, pseudo-Henry said in his commentary on the Liber de causis, following broadly a Neoplatonic line, is contracted with the forms in intelligences, which in turn are contracted into created entities.\footnote{ PSEUDO-HENRY, Quaestiones in Librum de causis, theorema 4.79-81, resp. ad qu. 25, p. 63. See quotation on p. 169 n. 3 above.} "Those things that are less common" than being, Aquinas continues in his comment upon proposition iv in the Liber de causis, are "related to the more common [i.e. being] by means of some addition."\footnote{ AQUINAS, Super Librum de causis expositio iv, p. 29.7-8: "nam ea quae sunt minus communia videntur se habere ad magis communia per modum additionis cuiusdam."} Separate substances like intelligences and souls consist of being and essence (essentia), and are therefore what is rendered in the Latin version of the Liber de causis with an Arabic expression, yliathim, meaning universality.\footnote{ PSEUDO-ARISTOTLE, Liber de causis viii(ix) 90, ed. Pattin, p. 157.} This denotes, according to Aquinas, entities composed of being (esse) and form (forma).\footnote{ AQUINAS, Super Librum de causis expositio ix, p. 64.6-15. He also proposed this interpretation, citing the Liber de causis viii(ix) 90, ed. Pattin, p. 157, in his De ente et essentia iv, p. 31.18-32.6.} Aquinas explains that yliathim is derived from the Greek word hyle (ιλαθη), matter, since separate substances too are composites, like corporeal substances, which are composed of form and matter.\footnote{ For an examination of Aquinas’ claim, in particular Aquinas’ equation of the Arabic term yliathim with matter (ιλαθη), see TAYLOR, ‘Hylomorphic composition’, pp. 506-513. For the doctrine and the sources of yliathim in the Liber de causis viii(ix), see p. 166 n. 2 above.} However, separate substances
are not composed of matter and form, but of being and form, Aquinas says.\textsuperscript{1} His interpretation at this point is, then, governed by his refusal to attribute potentiality, and hence matter, to intelligible entities, a position which inspired his axiomatic distinction between essence and existence. Elsewhere Aquinas rejects explicitly the idea that intelligences and souls are composed of form and matter, and assigns this opinion, which he finds repugnant, to Avicebron's \textit{Fons vitae}.\textsuperscript{2}

(iii) Giles

Giles composed his \textit{Super de causis} between 1289 and 1291, almost two decades after Aquinas had written his commentary on the \textit{Liber de causis} in 1272.\textsuperscript{3} Unlike pseudo-Henry's and Aquinas' commentaries on the \textit{Liber de causis}, Giles' commentary has not yet been published in a modern critical edition. Giles was Aquinas' pupil from 1269 to 1272. He was familiar with this work of his master, whose interpretation he discussed.\textsuperscript{4} Giles also knew of Aquinas' identifications of a substantial number of propositions from the \textit{Liber de causis} with propositions from Moerbeke's Latin translation of Proclus' \textit{Elements of theology}, which was probably also accessible to Giles.\textsuperscript{5} He mentions Proclus throughout the commentary, referring in almost every proposition to propositions in the \textit{Elements of theology}.\textsuperscript{6}

\begin{enumerate}
\item\textsc{AquinA}, \textit{Super Librum de causis expositio} ix, p. 64.9-13.
\item Id., \textit{De ente et essentia} iv, pp. 29.32-30.7.
\item See \textsc{Punta} and \textsc{Trifogli}, 'Giles of Rome', p. 77.
\item \textsc{Hocdez}, 'Introduction', in \textsc{Giles}, \textit{De esse et essentia}, pp. 46-48. For Giles' disagreement with Aquinas in regard to the \textit{Liber de causis}, see \textsc{Trapè}, 'Il neoplatonismo', pp. 52-54; \textsc{Nash}, 'Giles of Rome', pp. 81-82.
\item For Giles as a pupil of Aquinas, see \textsc{Nash}, 'Giles of Rome', p. 57.
\item For Giles' use of Proclus in his commentary on the \textit{Liber de causis}, see ibid., pp. 81-82.
\end{enumerate}
Even though he probably knew, through Aquinas, that Aristotle was not the author of the *Liber de causis*, Giles nevertheless regarded the *Liber de causis* as a supplement to the discussion of the ‘first principle’ in Aristotle’s *Metaphysics*. Clearly, Giles did not perceive Aristotle and the Neoplatonist Proclus as irreconcilable, but he saw them as engaged in the same metaphysical discussion about the first cause and first principle of the universe, despite their different opinions and arguments.

The Venice 1550 edition of Giles’ commentary, the last edition to be published, came out with an unusually detailed index running over thirty eight pages, about a fifth of the entire volume. The index lists philosophical terms used in the work. Each term is provided with a short definition and reference to the respective propositions in Giles’ commentary. The index, and in particular its form, suggests that it was used as a philosophical dictionary. The term ‘contraction’ is not listed separately in the index — possibly because it denotes relationships between ontological levels or ontological entities rather than the levels or entities themselves, which are listed. However, the term features frequently in his explanatory comments on the theory of individuation of the *Liber de causis*, especially in his comments on the first ten propositions.

Pseudo-Henry used the notion only a few times in his commentary on the *Liber de causis*. Aquinas had not used it at all in his commentary but only in contemporary or almost contemporary works. Giles, on the other hand, embraced the term and used it to explain all levels of individuation. He had also used the term in his theory of individuation in his earlier *De esse et essentia*, though less frequently but still in

---

1 Giles, *Super authorem De cauis, Alphabium* proemio, Y. For this passage, see Costa, ‘Le fonti e la struttura del *Liber de causis*’, p. 1 n. 1; Trapé, ‘Il neoplatonismo’, p. 50.

2 Giles, *Super authorem De causis, Alphabium* i, ii, iv, v, vi, vii, ix, x, xiv, xviii, xxii, fols 4v (lines 25-31), 5r (lines 28-31, 39-42), 8v (lines 38-44), 8r (lines 9-18), 15r (lines 16-20), 16v (lines 14-18), 20v (lines 19-24, 35-42), 23r (lines 10-11), 23v (lines 14-18, 23-25), 25v (lines 18-21, 34-44), 35v (lines 30-41), 36v (lines 30-36), 37r (lines 32-37, 42-46), 38v (lines 38-44), 47r, (lines 44-46), 62r (lines 41-44), 74r (lines 14-20, 28-36), 74v (lines 41-44).
relation to the *Liber de causis.*\(^1\) Of the three authors, and the *Liber de causis* itself, Giles was certainly the one who made contraction a key notion in discussions concerning the *Liber de causis.*\(^2\) In Giles' commentary, the notion is almost exclusively employed in the ontological sense of individuation. It concerns the four ontological levels, namely God, intelligences, souls and particulars composed of matter and form. Giles also employs the term in his account of how the Neoplatonic doctrine of reception according to the capacity of the recipient should be understood on the three last mentioned ontological levels.\(^3\)

According to the *Liber de causis*, God creates the lower levels in the hierarchy of being through intelligences, which, in turn, create Soul and nature.\(^4\) How does Giles use contraction in his account of that hierarchy of being?

---

1. The notion contraction is used in id., *De esse et essentia* theorema 1, pp. 2.13-17, 4.1-3 and theorema 4, p. 16.1-10. He mentions the *Liber de causis* ibid., theorema 1, p. 4.11-17 and theorema 3, pp. 13.16-14.3. For the concept contraction in Giles' *De esse et essentia*, see PETERSON, ‘Cardinal Cajetan and Giles of Rome’, pp. 434, 437. Peterson ignores the concept contraction in Giles' commentary on the *Liber de causis*.

2. This observation agrees with Vescovini's emphasis on Giles' role in the development of the notion contraction in Cusanus' theory of individuation in the *De docta ignorantia*. See VESCOVINI, ‘Introduzione’, p. 27. However, Vescovini states this point in general terms without citing specific references to 'contraction' in Giles' works.


When commenting upon God, the First Cause, Giles follows Aquinas' interpretation of the Liber de causis and identifies Him with pure being (esse purum).¹ As such, God is not contracted with anything, Giles says.² This is in agreement with Aquinas' distinction between existence and essence. God is, therefore, Giles says, similar to a light source (lux) which is distinct from its manifestations as colours (colores) when contracted (lux contracta) into sensible particulars. Similarly, God is pure being existing above time, and He gives being to lower hypostases without being diminished Himself.³

(iv) Pico

In the Renaissance Pico challenged the distinction between being and essence that Aquinas proposed in his interpretation of proposition iv in the Liber de causis. In his Conclusiones Pico warns the reader that even though the author of the Liber de causis

---

¹ For God as pure being; see Giles, Super authorem De causis, Alpharabium ii, iv, ix, xxvi, fols 8v (line 13), 16v (lines 35-36, 40-42), 35v (lines 25-26), 89v (lines 2-3). For Giles on God as pure being in his commentary on the Liber de causis, see TRAPÉ, ‘Il neoplatonismo’, pp. 59-61; NASH, ‘Giles of Rome’, p. 90.

² Giles, Super authorem De causis, Alpharabium ii, fol. 8v, lines 40-42: “Propter quod sciendum quod est dare unum verum Deum qui est ipsum esse purum non determinatum ad aliquod praedicamentum, non contractum ad aliquod genus entium.” Similarly ibid., ii, iv, vi, x, fols 8v (line 13), 16v (lines 42-43), 23v (lines 15-18), 36v (lines 33-35). This usage is similar to that of Aquinas, Quaestiones quodlibetales quodlibetum 3, qu. 1, art. 1, pp. 71-72; see quotation on p. 187 n. 2 below.

³ Giles, Super authorem De causis, Alpharabium ii, fol. 8v, lines 1-18. Ibid., ii, fol. 8v, lines 11-13: “Sicut ergo album, et universaliter color dicunt lucem contractam: propter quod lux non est color, sed super color, lux non est alba sed super alba, sic omnis perfectio infra esse videtur [i.e. the author of the Liber de causis] dicere quoddam contractum esse, ideo Deus est ipsum esse purum non contractum”.

179
claims that "being, which is the first created thing, exists above Mind, you should not believe that as a hypostasis it is distinct from Mind." Hereby Pico probably means, as Proclus, that the hypostasis Mind indirectly contains being, one of the three elements in the triadic subdivision of the hypostasis Mind, being-life-Intelligence.

(v) Bruno

On rare occasions Bruno rejects Aquinas' distinction between existence and essence, as Pico had done. However, Bruno does not do so for the same reason as Pico, but in order to defend his conception of living matter according to which being and essence are unified, though logically distinct. In the Summa terminorum metaphysicorum Bruno follows the expression used by the Liber de causis and Aquinas of God, saying that he "gives being" (dat esse). This position seems to suggests that Bruno maintained the scholastic idea of being, ultimately of God as a transcendent category. However, Bruno's position does not conform to scholastic doctrine, since Bruno has

1. Pico, Conclusiones 6>4, p. 462: "Quamvis dicat Abucaten [the assumed author of Liber de causis] quod esse, quod est primum creatum, est super intelligentiam, non credas tamen illud secundum hypostasim esse distinctum ab intelligentia." Pico is probably writing against PSEUDO-ARISTOTLE, Liber de causis iv 37-38, ed. Pattin, p. 142: "Prima rerum creatarum est esse et non est ante ipsum creatum aliud. Quod est quia esse est supra sensum et supra animam et supra intelligentiam, et non est post causam primam latius neque prius creatum ipso."


3. E.g. BRUNO, De immenso viii 9, p. 310.9: "Adde, quod est nusquam distincta essentia ab esse". To distinguish these two concepts in regard to nature, Bruno adds in this context, is to mistake a logical distinction for an ontological one (ibid., viii 9, p. 310.10-18).

4. Id., Summa, p. 67.3-4: "Deus ... omnibus dat esse". See also ibid., pp. 86.11-16, 99.4-6.
radically different ideas about which entity is giving being. He holds in *De la causa* that “forms have no being without matter”. The metaphysical structure in which Bruno’s thoughts about contraction develops is reversed, insofar as he does not operate with a transcendent God who gives being and forms, which ultimately shape formless matter, the lowest ontological level. Instead, he places matter — that is, his unified concept of matter — at the summit of the metaphysical structure, claiming that it gives being to forms, and that it co-determines individuation together with forms (see further Ch. 2, Section 4 above). In this respect, Bruno’s stance is unique. He does not comply with scholastic metaphysics, although his own builds on its terminology, though in a revised form. Instead, in the background of his pantheistic conception of matter, he focuses on the ontological and theological potentialities of matter.

4. Superior intelligences contracted into inferior intelligences

Albert’s *De causis et processu universitatis a prima causa*, composed between 1265 and 1272, is not a commentary on the *Liber de causis*. But, as the title indicates, it does deal with the theme of procession from First Cause, and, as already said, its second book is in fact organised as a discussion of the *Liber de causis*. The notion contraction appears in this context. In his *De causis et processu universitatis a prima causa*, Albert explains how the universal forms in the superior intelligences are “contracted” into the particular forms in inferior intelligences, which are ultimately

---

1 Id., *Causa* iii, pp. 189-191: “le forme non hanno l’essere senza la materia”. See also ibid., v, p. 277.27-33. For matter as the principle of being, see BLUM, *Aristoteles*, pp. 62-66.

2 See the reference to Pattin’s explanation on p. 160 n. 4 above.
contracted with matter.\textsuperscript{1} Forms of superior intelligences and their relation to forms of inferior intelligences was, as mentioned above, the theme of proposition ix(x) in the \textit{Liber de causis}.

Aquinas does not employ 'contraction' within a Neoplatonic framework of emanation, either in his commentary on the \textit{Liber de causis} or in his \textit{Summa theologiae}. Instead, Aquinas interpreted emanation within a Christian scheme of creation, and interpreted the \textit{Liber de causis} accordingly.\textsuperscript{2} He speaks of an “emanation” from a first principle or first cause.\textsuperscript{3} The hierarchy of being, following an ontological structure of dependency or causation, as in Albert, thus also features in Aquinas’ philosophy. However, the kind of emanation Aquinas has in mind is the Christian one used among scholastics, not Plotinus’. In particular, he equates emanation with the Christian account of creation \textit{ex nihilo}.\textsuperscript{4} There are at least two important differences between Neoplatonic and Thomistic notions of ‘emanation’. For

\begin{enumerate}
\item ALBERT, \textit{De causis et processu universitatis a prima causa} II ii 22, p. 116.24-33: “Et propter hoc quod intelligentiae proprinqueae uni primo et puro minoris sunt quantitatis et maioris simplicitatis, propter hoc etiam sequitur, quod bonitates et formae, quae procedunt ex intelligentiis primis, procedant processione universali unita simplici. Quae cum receptae sunt in secundis, quia in secundis determinantur et contrahuntur, necesse est, quod ab ipsis procedant processione magis particulari et magis composita et contracta et magis et magis ad materiam inclinata.” The term ‘contraction’ is also employed to describe the hierarchy of causes within this theory of procession ibid., II ii 15, II ii 16, pp. 108.73-80, 109.11-15.
\item AQUINAS, \textit{Summa theologiae} 1a ,qu. 45, art. 1-8, vol. 4, pp. 464-477.
\item E.g. ibid., 1a, qu. 45, art. 1, 2 and 4, vol. 4, pp. 464, 466, 468.
\item Ibid., 1a, qu 45, art. 1, resp., vol. 4, p. 464: “Respondeo dicendum quod, sicut supra dictum est [ibid., qu. 44, art. 2], non solum oportet considerare emanationem alicuius entis particularis ab aliquo particulari agente, sed etiam emanationem totius entis a causa universali, quae est Deus: et hanc quidem emanationem designamus nomine ‘creationis’.”
\end{enumerate}
Plotinus emanation is an eternal process.\(^1\) Second, the Christian God cares for His Creation, whereas the creative power of the One does not care for its products.\(^2\)

With regard to intelligences, the intermediaries between God and His Creation, Giles agrees with Aquinas that intelligences consist of being and form exclusively and individuate themselves without matter.\(^3\) In another respect, however, Giles differs from Aquinas' terminology. He says intelligences are "contracted" from being and form and he uses the term to differentiate universal forms from particular forms, the former being "less contracted", the latter being "more contracted".\(^4\) Giles accommodates the idea of intelligences to Aristotelian terminology by asserting that intelligences are contractions from First Cause into genera. These genera are contracted into species, whose forms ultimately are contracted with matter in the individuation of sensible particulars.\(^5\) Hence Giles makes use of the term 'contraction' throughout the hierarchy of being to explain the increasing multiplicity in the descending hierarchy of being.

The individuation of souls is also described by means of the term 'contraction'. Here Giles distinguishes between souls of celestial bodies, which are immaterial, and human souls, which are by nature united with material bodies. Human souls, since

2 For the differences between Plotinus' doctrine of emanation and Christian creation, see ibid., pp. 64-65. For a comparison between Aquinas and Bruno on this point, see GHIO, "Causa emanativa e causa immanente", pp. 529-554.
3 GILES, *Super authorem De causis, Alpharabium* ix, fol. 35\(^v\), lines 35-37: "Forma ergo materialis individuatur per materiam signatam in qua recipitur. Sed forma separata cuiusmodi est natura intelligentiarum individuatur se ipsa." For Giles' theory of individuation of intelligences in his commentary on the *Liber de causis*, see NASH, 'Giles of Rome', p. 90.
4 GILES, *Super authorem De causis, Alpharabium* x, fol. 37\(^r\), lines 32-37, as quoted on p. 178 n. 3 above.
5 For contraction between genera and species, see ibid., vii, fol. 25\(^r\), lines 40-42: "Advertendum tamen quod sicut intelligentia contrahitur ad certum genus, sic contrahitur ad certum speciem, et per certam differentiam."
they are by nature part of a composite body and soul, are finite, unlike the celestial souls or intelligences, which are not. Human souls are "contracted" with matter, i.e. the body, with which they are combined.¹

Up to this point I have chiefly been discussing commentaries on the *Liber de causis*. I shall now turn to other kinds of works. Dietrich of Freiberg (1250-1318/20) follows the doctrine of contraction. He received a philosophical and theological training at the Dominican convent in Freiberg and at the University of Paris.² His philosophy is inspired by philosophers as different as Aristotle, Augustine, Proclus and Averroes.³ As far as we know, he did not compose a commentary on the *Liber de causis*, but he refers extensively to this work.⁴ The manuscripts in which he does so — the *Quaestio utrum in Deo sit aliqua vis cognitativa inferior intellectu*, *De visione beatifica* and *De animatione caeli* — cannot be dated with certainty, but it has been argued that they were written after Dietrich took up a chair in theology at the University in Paris in 1297.⁵

In *De visione beatifica* Dietrich states of "the causal and essential arrangement and order of forms" that "what exists in a higher form as more simple, more noble and more formal, is to be found contractedly and more determined and less perfectly in

---

¹ Ibid., v, fol. 20*, lines 35-39: "Ulterius forte dubitaret aliquis utrum animae nostrae sint compositae ex finito et infinito. Dicendum quod animae nostrae sunt perfectio materiae, et per essentiam uniuntur corporibus, ita quod ex tali anima, et corpore fit unum secundum esse, propter quod natura animarum naturarum non est infinita natura, eo modo quo est infinita natura intelligentiarum et animarum orbium, sed limitatur, et contrahitur et particulatur talis natura ratione corporis in quo recipitur."


³ Ibid., cols 130-134.

⁴ For Dietrich’s references to the *Liber de causis*, see the ‘Index auctoritatum’ in DIETRICH, *Opus omnia*, vol. 4, pp. 333-334. For contraction in Dietrich, see VESCOVINI, ‘Temi ermetico-neoplatonici’, p. 129. For the importance of the *Liber de causis* in Dietrich’s philosophy, see GORIS, *Einheit als Prinzip und Ziel*, p. 299; FLASCH, ‘Einleitung’, pp. XV-XVI.

inferior form". This is reminiscent of the Liber de causis ix(x) 92-93 and in particular of Albert's comment on it. Albert had used the notion contraction in just this manner. Dietrich provides his most elaborate adaptation of contraction in his De animatione caeli. When depicting the "order of dependency of essence", he states "that the causality of some first entity, in whatsoever kind of cause, is determined into a second entity, and the causality of the second entity is contracted and determined into a third entity, and in this way there is thereafter a causal procession, according to the degree and order, from the first entity right to the last entity, where the causal process comes to an end". In the subsequent paragraph he offers a more detailed account of each of the three causes. The first entity is that from which essences emanate, and this entity is separate from all. The emanation from this first entity should not be understood as a transformation of existing things, but rather as a "flowing down" of essences. The 

1 DIETRICH, De visione beatifica IV iii 1, §4, p. 112: "Ad quod ulterius considerandum, quod in dispositione et ordine causali essentiali formarum ad invicem duo attenduntur: unum videlicet, quod illum, quod est formalius et simplicius et nobilius in superiore forma, contracte et magis determinate et minus perfecte inventit in inferiore, sicut in exemplo Libri de causis accipere possimus de ente, vivo, rationali, sicut etiam se habent intellectivum, cogitativum, imaginativum, sensitivum." According to the editor, Mojsisch, Dietrich refers to PSEUDO-ARISTOTLE, Liber de causis i, ed. Pattin, p. 135.

2 Cf. ALBERT, De causis et processu universitatis a prima causa II ii 22, p. 116.4-34.

3 DIETRICH, De animatione caeli iv, §3, pp. 15-16: "Est et alius ordo essentialis dependentiae, qui attenditur in unoquoque genere causae secundum se, inquantum videlicet causalitas alicuius primi in quocumque genere causae determinatur in secundum, et causalitas secundi contrahitur et determinatur in tertium et sic deinceps secundum gradum et ordinem causalis processus a primo usque ad extremum, ubi est status."

4 Ibid., vii, §1, p. 17: "Unus modus consistit in eo, quod entia per suas essentias emanent modo simplici ab aliquo principio omnino separato, quod est intellectus per essentiam et intellectus in actu per essentiam; et dico 'modo simplici', quia non per motum vel quamcumque transmutationem, sed per simplicem defluxum totalis essentiae rei sic emanantis."
second and third entities, Dietrich explains, cause the individuation of particulars.\(^1\) Dietrich is quick to seek the authority of Scripture when defining this emanation, mentioned in connection with the First Cause. He thus states that First Cause is the “word of God”.\(^2\)

None of Dietrich’s manuscripts were printed until the twentieth century, so it is unlikely that Bruno read these works.\(^3\) Albert and Dietrich did not follow the use of ‘contraction’ which we saw in Moerbeke’s Latin translation of Proclus’ *Elements of theology*, namely, to describe the relatively limited number of superior intelligences compared with the more numerous inferior intelligences. Instead, they used the term to describe descent from superior to inferior intelligences. Bruno’s use of ‘contraction’ is, in turn, distinct from that of Albert and Dietrich in this respect. Whereas Albert and Dietrich had used the concept to describe procession downwards in the hierarchy of being, from superior to inferior intelligences, Bruno uses the concept contraction to describe ascent as well as descent, noetic ascent being an important aspect of the former.\(^4\)

5. Matter contracted by form

Aquinas applies ‘contraction’ to substances placed lower in the hierarchy of being than simple substances, that is, corporeal hylomorphic substances. He denies that it applies to angels, which he identifies with intelligences. “An angel does not have a form in

---

\(^1\) Ibid., viii, §§1-4, pp. 19-20.

\(^2\) Ibid., vii, §2, p. 18: “De isto modo causalis processus praeter hoc [i.e. emanation explained ibid., vii, §1, p. 17, as quoted on p. 185 n. 4 above], quod scriptura veritatis eloquitur dicens omnia facta esse in verbo Dei, Ioann. 1 et Hebr. 11: ‘Fide intelligimus aptata esse saecula verbo Dei’”. The Biblical references are to Secundum Iohannem 1.1-4 and to Ad Hebraeos 11.3.

\(^3\) FLASCH, ‘Einleitung’, p. IX n. 3.

\(^4\) Cf. BRUNO, *Sigillus* ii 22, p. 214.6-19, as quoted on p. 42 n. 1 above.
matter; it is not limited or contracted through any matter, like natural forms [i.e. forms in matter, also known as corporeal forms]. Nor does contraction occur in God. By contrast Aquinas attributes contraction to material things in the *Summa theologiae*. Aquinas thus applies the term ‘contraction’ to the lowest level in the hierarchy of being, the level where matter exists. He states that “matter is contracted through form into a defined species; in the same way, the substance of a given species is contracted to a delimited mode of being by an accident superimposed on it, as, for instance, ‘man’ is contracted by ‘white’.” This is the standard use of the term ‘contraction’ in scholasticism and its offshoots.

Aquinas’ use of contraction presupposes the Aristotelian conception of matter as pure potentiality, which is actualised, that is, given existence and essence, through form. Bruno rejects, as we have seen in Chapter 2, this Aristotelian notion of matter, and the scholastic notion of ‘contraction’. In order to convey his attribution of active as well as passive potentiality to matter, Bruno does not follow Aquinas’ usage, but turns instead towards a usage found in Giles, according to whom matter co-determines individuation together with form.

---


2. AQUINAS, *Quaestiones quodlibetales quodVibetum S*, qu. 1, art. 1, pp. 71-72: “Cum autem Deus sit ipsum esse subsistens, manifestum est quod natura essendi convenit Deo infinite absque omni limitatione et contractione; unde eius virtus activa se extendit infinite ad totum ens, et ad omne id quod potest habere rationem entis.”

3. Id., *Summa theologiae* la, qu. 44, art. 2, resp., vol. 4, p. 458, as quoted on p. 50 n. 6 above.
6. Matter and form contracted interdependently

With regard to corporeal entities, the lowest level, Giles follows Aquinas’ usage inasmuch as Giles too speaks of matter and form being united, “contracted”. Giles constantly qualifies this idea, however, by insisting that the individuation taking place through such a contraction depends upon matter (*ratione materiae*).\(^1\) Giles therefore speaks of a “double limitation” (*duplex limitatio*) in his theory of individuation of particulars, one dependent upon form, another upon matter.\(^2\) This double determination, as Girolamo Trapé explains, helps Giles to account for the differentiation among individuals belonging to the same species, for instance, to explain why the blades of grass differ.\(^3\)

In the *Liber de causis* the doctrine of reception according to the capacity of the recipient is both stated generally and more specifically in relation to higher and lower

---

\(^{1}\) E.g. GILES, *Super authorem De causis, Alpharabium* iv, fol. 16\(^v\), lines 32-35: “Sic albedo si esset separata esset infinita albedo, et quaelibet forma separata (secundum hunc ordinem quem videmus) de se non determinatur ad specialem modum illius formae: Sed si determinatur et contrahitur hoc est ratione materiae in qua recipitur.” The same role is attributed to matter ibid., iv, ix, xxii, fols 16\(^v\) (lines 29-31), 35\(^v\) (lines 30-41), 74\(^v\) (lines 14-20). The example of contraction ibid., xxii, fol. 74\(^v\), lines 14-20 is similar to one in AQUINAS, *Summa theologiae* Ia, qu. 44, art. 2 resp., vol. 4, p. 458. For Giles’ view on matter as a principle of individuation, see PETERSON, ‘Cardinal Cajetan and Giles of Rome’, pp. 434-437; TRAPÉ, ‘Il neoplatonismo’, pp. 57-58.


\(^{3}\) TRAPÉ, ‘Il neoplatonismo’, p. 80.
intelligences. The doctrine derives from Proclus' *Elements of theology*, proposition 142, which probably derives from Plotinus’ *Enneads* VI iv-vi. In the *Liber de causis* reception takes place according to the potency (*potentia*) of the recipient. Giles uses the term *capacitas* rather than *potentia*. The doctrine was phrased in the *Liber de causis* as valid for all entities, but the only ontological level to which it was applied was that of intelligences. The distinction between universal and particular forms, the *Liber de causis* says, is a result of the varying capacities of the respective intelligences to receive forms. Giles reaffirms the general validity of the doctrine. But, contrary to the *Liber de causis*, he pays particular attention to the implications of this doctrine on the lowest ontological level, matter in corporeal entities. Neither his emphasis upon this Neoplatonic doctrine nor its sources has been pointed out in the literature, slight as it is, on his commentary on the *Liber de causis*.

---

2. Ibid., Pattin's note p. 185 note 'e'.
3. LEE, 'The doctrine of reception', pp. 82-97.
5. Cf., e.g., GILES, *Super authorem De causis*, Alpharabium v, fol. 20v, lines 22-24: "Unde illud esse non manet in sua plenitudine, sed contrahitur et particularum secundum capacitatem eius in qua recipitur." See also ibid., v, fol. 20v, line 50 to fol. 21v, line 3; xxii, fol. 76v, line 40 to fol. 77v, line 3.
7. For the doctrine applied to the relationship between God and all, see GILES, *Super authorem De causis*, Alpharabium xxii, fol. 74v (lines 41-44). For the doctrine applied to celestial souls, see ibid., v, fol. 20v (lines 19-24). For the doctrine applied to matter, see ibid., iv, xxii, fol. 16v (lines 29-35), 74v (lines 14-20).
8. TRAPÉ, 'Il neoplatonismo', pp. 49-86; NASH, 'Giles of Rome', pp. 57-91; PETERSON, 'Cardinal Cajetan and Giles of Rome', pp. 434-437; PUNTA and TRIFOGLI, 'Giles of Rome', pp. 72-75. The presence of the doctrine is mentioned very briefly in TRAPÉ, 'Il neoplatonismo', pp. 79-80. For the sources of the Neoplatonic doctrine of reception according to the capacity of the recipient, see p. 60 n. 1 above.
Did Giles interpret the "potency" of the recipient exclusively as a passive potency, as Aquinas and Aristotle had done?\(^1\) Giles speaks of a "double individuation" (*duplex limitatio*) for finite entities, where both form and matter determine individual substance, but he does not assign active potentiality to matter. Matter is passive, but, as such, it is accessible to, or can receive, individuating forms in different ways. Hence Giles is not claiming, as Bruno, that matter has 'active potentiality', or, as he puts it, that "one is matter, one is the potency by which all that exists, exists in act".\(^2\) Giles' statement about a *duplex limitatio* is nevertheless of particular interest in relation to Bruno's idea of a "double contraction" (**duplex contractio**) in his *Sigillus* and *De la causa*.\(^3\) Bruno employs the terms *limitatio* and *contractio* synonymously in his theory of individuation, so the comparison between *duplex limitatio* and *duplex contractio* is revealing.\(^4\)

It is not unlikely that one of Bruno's impulses for his ontological concept of contraction — characterised by an interdependency between matter and form — derives from Giles.\(^5\) The assumption is supported by the fact that the doctrine of


\(^{2}\) BRUNO, *Causa* iv, p. 239, as quoted on p. 69 n. 4 above.

\(^{3}\) Id., *Sigillus* ii 22, p. 214.6-19; *Causa* ii, p. 147.

\(^{4}\) Id., *De immenso* i 1, p. 205.1-4: "per naturae ergo dictamen [desiderium praesentis vitae] vult esse semper, per eam vero (quae est a contractione formae ad hanc materiam, et limitatione materiae ab hac forma) ignorantiam, vult semper esse hoc quod est". In this context Bruno compares the desire of the human soul to ascend towards the One with nature's disposition to actualise itself completely and immediately; both 'desires' suffer from complacency manifested in a satisfaction with the soul's present state. Hence both suffer from "ignorance". The human soul ignores the desire for One and nature the disposition for complete actualisation of all potentialities. It is in the latter's process of actualisation that contraction is used.

\(^{5}\) The possibility of such an early inspiration from Giles in Bruno's *Sigillus* has not been considered in CLEMENS, *Giordano Bruno*, p. 143; MANCINI, *La sfera infinita*, p. 67; MIGNINI, 'La dottrina dell'individuo in Cusano e in Bruno', p. 348. SPRUIT,
reception according to the capacity of the recipient frequently appears in Bruno's Italian and early Latin works.\(^1\) It even found its way into his account of the Egyptians' religion in the *Spaccio*. Nature is venerated as divine according to its varying capacities to receive.\(^2\)

Given Bruno's philosophical propensity towards hylozoism, it is not difficult to see why he was attracted to this doctrine of contraction. By paying attention to the vocabulary through which Giles had discussed the capacity of the recipient, i.e. matter, and by emphasising this aspect, as his concept of matter encouraged him to do, the doctrine became, I believe, the starting point for a philosophical subversion of the traditional relationship between form and matter.

---

*Il problema*, pp. 27, 47 nn. 21 and 22, 109 n. 28, 111 n. 37, 144 n. 132, 283 n. 14, 307 n. 106, 309 n. 113, 313 n. 128, suggests Aquinas' commentary on the *Liber de causis* as a source for Bruno's philosophy in general, but ignores Giles' commentary. Spruit, accordingly, ignores the possibility that Giles’ commentary is a source for Bruno's ontological concept of contraction; see ibid., pp. 147-149, 157-158, 203. Nor has this commentary of Giles been considered in relation to Bruno's concept of ontological contraction in other studies on this concept in Bruno's philosophy; see the references on p. 47 n. 3 above.

\(^1\) See references on p. 61 n. 2 above.

\(^2\) BRUNO, *Spaccio* iii 2, pp. 415, 427.
CHAPTER 7

CUSANUS AND THE SCHOLASTIC TRADITION OF CONTRACTION

1. Interpretations of the relationship between Cusanus and Bruno

In the preceding chapter I have examined the scholastic tradition of contraction and identified Giles as a plausible source for Bruno's ontological concept of contraction. There is, however, another possibility, Cusanus. Is it possible that Bruno took the concept of contraction from him rather than from Giles? At first glance it seems very likely that Cusanus was Bruno's source given that Bruno definitely knew Cusanus' works or some of them. Here I shall examine the possibility that Bruno drew his concept of contraction from Cusanus.

Much attention has been dedicated to Cusanus' influence on Bruno among Bruno scholars. In this chapter, I shall examine Cusanus from two angles. First, I shall outline previous interpretations of the relationship between Cusanus and Bruno. Second, I shall examine previous interpretations, remarkably few, of Cusanus' approach to scholastic notions of contraction, especially as it features in commentaries on the Liber de causis.

In Bruno's Italian dialogues, published during 1584 and 1585, Cusanus' influence is most evident in his cosmology and metaphysics. This was recognised almost immediately. Seventeenth-century thinkers recognised Cusanus' influence on Bruno's cosmology. In his Apologia pro Galileo, published in 1622, Tommaso Campanella (1568-1639) underlined the impact of Cusanus' cosmological ideas on Bruno's
cosmological works. The cosmological element in Bruno's philosophy was noticed again two years later, in 1624, when Mersenne attacked Bruno's heterodox cosmology on the grounds that it led to irreligion and deism.

Mersenne and Campanella were writing in a century when new philosophical ideas, especially cosmological ones, were developing rapidly. This consideration may to some extent explain why Bruno's adaptation of Cusanus' cosmological ideas has been studied. Emile Namer underlined this focus on the cosmological element in Bruno's philosophy when he said of Bruno's cosmological insight that it "was so profound and so all-encompassing that it permitted Kepler and Galileo to orientate their researches and their telescopes, that it furnished Newton with the indispensable framework for a principle of inertia, namely, an infinite universe, without centre or privileged direction".

These claims are arguable. In particular, they ignore the metaphysical and theological principles underlying Bruno's cosmological ideas, principles which were

---


2 We find an explicit criticism of Bruno's infinite cosmology in Mersenne, *L'impiété des déistes* ii 17, pp. 326-342. Mersenne also criticises Bruno's notion of *anima mundi* as leading to magic and cabala (ibid., ii 19, pp. 358-361; the "Il" ibid., p. 358 refers to Bruno). For Mersenne's criticism of Bruno, see Ricci, *La fortuna*, pp. 86-89.

largely foreign to the mechanical world view emerging during the seventeenth century. This is true of the notion contraction. Key Cusanian metaphysical notions, such as the coincidence of opposites, and the closely related pairs of opposites, maximum-minimum, complicatio-explicatio, in some instances provided the speculative premises of Bruno's cosmological conclusions.

It is possible to distinguish three major interpretations of the relationship between Cusanus and Bruno. First, there are studies focusing chiefly on the cosmology and metaphysics in the three Italian dialogues written between 1584 and 1585, La cena, De la causa and De l'infinito, as well as in some later works. This is the most common interpretation. Such studies do not take into consideration the earlier Latin mnemonic writings published in 1582 and 1583, in particular De umbris and the Sigillus. The reception of Bruno in the first part of the seventeenth century may partly explain this.

It is also, of course, a reflection of the simple fact that it is in these cosmological writings that we find solid evidence of Cusanus' influence.

Second, there is a group of studies also dealing with Cusanus' role in Bruno's early Latin mnemonic works. Sturlese's studies belong in this group. She has argued convincingly that in Bruno's De umbris we find Bruno paraphrasing Cusanus' metaphysical principle of the coincidence of opposites. Bruno illustrated this principle with a woodcut taken directly from Cusanus' De beryllo. Sturlese concluded that Bruno knew Cusanus' works by 1582, and that he had read the 1514 or 1565 edition of Cusanus. However, none of these studies on Bruno's mnemonics by Sturlese or others have examined the possible influence of Cusanus on Bruno in regard to the notion of contraction as a theory of individuation.

Third, three studies analyse Bruno's ontological notion of contraction as it appears in his Sigillus and in his De la causa. In Clemens' study of 1847, Cusanus' notion of contraction is compared with that of Bruno as formulated in his Sigillus and De la causa. Clemens identifies Cusanus' De docta ignorantia as the source. Although Clemens' interpretation had the merit of taking Bruno seriously as a philosopher at a time when he was dismissed as an insubstantial and heretical thinker, it was, nevertheless, strongly imbued with Christian prejudices. He refused to see Bruno's adaptation of Cusanus' notion of contraction as anything other than a theory of individuation in matter, in particular in his De la causa and the Sigillus.

1 INGEGNO, Cosmologia, pp. 73, 75; DE BERNART, Immaginazione, pp. 33-37; MADDAMMA, 'Introduzione', pp. 8-9.
2 STURLESE, 'Nicolò Cusano', pp. 955-958.
3 Ibid., pp. 957-958.
4 CLEMENS, Giordano Bruno, p. 143.
5 For contraction ("Zusammenziehung" or "Einschränkung" in Clemens' German translations) in Cusanus' De docta ignorantia, see ibid., pp. 74-80. For Cusanus' notion of contraction in Bruno's idea of contraction, see ibid., p. 143. For Bruno's Sigillus as an example, see ibid., p. 9. For other instances in Bruno's works, see ibid., pp. 17-18.
did not recognize that Bruno’s interpretation of contraction was original. For this reason Clemens also ignored the radical difference between the views of Cusanus and Bruno. Instead, Clemens held that Bruno gave a “less penetrating treatment” of the notion than Cusanus had done. Moreover, Clemens failed to see how Bruno linked this ontological contraction to a noetic one, ultimately leading to Bruno’s unorthodox solution to the problem of the soul’s return to the One. Clemens concludes that Bruno’s “apostasy” from Christianity, and his “hate” of Christianity, i.e. Bruno’s unorthodox idea of God and man’s relation to the divine, was simply caused by a “psychological” defect in the mind of Bruno.2

More recently Mancini has affirmed the validity of Clemens’ study.3 In his study of contraction, Mancini focuses on the same sources as Clemens did, i.e. Cusanus’ De docta ignorantia on the one hand, and Bruno’s Sigillus and De la causa, on the other, maintaining that this work of Cusanus was the source for Bruno’s concept of contraction.4 A third study, by Mignini, also very recent, advanced a similar reading of Bruno’s notion of contraction in De la causa.5 Like Clemens, Mancini and Mignini

---

1 Ibid., p. 143: “Ferner die hiermit zusammenhängende Ableitung der Materie und ihrer durch die Einschränkung (contractio) bestimmten Verschiedenheit, welche überaus bedeutende Lehre von Bruno jedoch keine so tief eindringende Behandlung, als von Cusa, erfuhrt, noch erfahren konnte, weil er ihr keinen Grund anzuweisen wusste”. Clemens was a Catholic who regarded Cusanus as the height of sound Catholic philosophy; see BLUM, ‘Note on the author’, in CLEMENS, Giordano Bruno (reprint), p. VIII.

2 CLEMENS, Giordano Bruno, p. 169: “Ich werde daher ohne Scheu, mit Zugrundelegung der in Bruno’s Schriften selbst enthaltenen Angaben, die Ursachen des Abfalls des Philosophen vom Christenthume und seines bittern Hasses gegen dasselbe psychologisch zu ermitteln versuchen, und lege nur Widerspruch gegen die Absicht ein, mich zum Sittenrichter über Schuld oder Unschuld desselben aufwerfen zu wollen.”

3 MANCINI, La sfera infinita, p. 245 n. 2.

4 Ibid., pp. 67-71, 146-147.

5 MIGNINI, ‘La dottrina dell’individuo in Cusano e in Bruno’, p. 348.
do not explore the differences between Cusanus' and Bruno's treatments of the concept contraction. And, also like Clemens, they do not take into consideration the scholastic tradition of contraction in the commentaries on the Liber de causis. As I have suggested in the previous chapter, Bruno's ontological notion of contraction is indebted to Giles' commentary on the Liber de causis.

2. Bruno's explicit references to Cusanus

The chief problem for any investigation of Cusanus' influence on Bruno's idea of contraction is that Bruno never attributes this idea explicitly to Cusanus. This has not been taken into account in the studies of Clemens, Mancini and Mignini. In fact, Bruno does not mention Cusanus at all in any work published before La cena, written in the early part of 1584 and published later the same year. How, then, do we know that Bruno is adapting Cusanus' idea of contraction? How can we know that this idea does not derive from some other source, possibly common to Cusanus and Bruno?

What conclusions about Bruno's use of Cusanus can then be drawn from Bruno's explicit references to Cusanus? First, from the cosmological dialogues we can say definitely that Bruno knew Cusanus' major work, De docta ignorantia. Furthermore,

1 The identifications examined in relation to this point are mainly, though not exclusively, based on the citations (the testimonia) by Hoffmann and Klibansky in their edition of CUSANUS, De docta ignorantia, p. 177. Hoffmann and Klibansky omitted Bruno's reference to Cusanus in BRUNO, Spaccio (iii 2, p. 379), De lampade combinatoria (praefatio, p. 234.6-9), Oratio valedictoria (p. 17.2-7), and Adversus mathematicos (p. 60.12). The Indice by LEFONS includes these additional references, as well as those mentioned by Hoffmann and Klibansky.

2 AQUILECCHIA, 'Bruno, Giordano', p. 657. See also the discussion of the date of publication of La cena by KNOX, 'An arm and a leg', pp. 166-176.

3 BRUNO, Cena iii, p. 133 states that Cusanus, because of the second book of his De docta ignorantia, CUSANUS, De docta ignorantia ii 12, p. 103.13-14, is among a
Bruno’s reference in his *Spaccio* to the problem of the quadrature of the circle suggests that he probably used the 1565 edition of Cusanus, the only fifteenth- or sixteenth-century edition of Cusanus’ works in which both *De quadratura circuli* and *De docta ignorantia* appeared together.¹

¹ Bruno mentions Cusanus in id., *Spaccio* iii 2, p. 379, and deals with the mathematical problem ibid., iii 2, pp. 379-387. Cusanus’ *De quadratura circuli* was not printed in the Strasbourg 1490 and Paris 1514 and Cortemaggiore 1520 editions. Apart from the Basel 1565 edition, these three editions are the only fifteenth- and sixteenth-century editions held at the British Library. The British Library does not hold a separate fifteenth- or sixteenth-century edition of Cusanus’ *De quadratura circuli*. The latter does appear, however, in the Basel 1565 edition (pp. 1091-1101). I have also checked the following catalogues for fifteenth- and sixteenth-century editions of collected works of Cusanus and *De quadratura circuli*: The National Union Catalog; Catalogue Général des Livres Imprimés de la Bibliothèque Nationale; and the Verzeichnis der im deutschen Sprachbereich erschienenen Drucke des XVI. Jahrhunderts. In addition to British Library editions mentioned above, these catalogues mention that *De quadratura circuli* was printed together with Johann Mueller’s *De triangulis omnimodis libri quinque* (Nuremberg: J. Petrejus, 1533). Cusanus’ *De quadratura circuli* was not included in his *Opuscula theologia et mathematica* (Martin Flach: Strasbourg, c. 1500), which is identical with the 1490 edition mentioned above. Bruno could have learned of *De quadratura circuli* through intermediary reports. Therefore we cannot conclude definitively from the inclusion of *De quadratura circuli* in the 1565 edition that Bruno used this 1565
Now let us turn to the ideas which Bruno picked up from Cusanus. Both references to Cusanus in *La cena* concern astronomical issues, that is, Cusanus' comments on the movement of the earth and the heterogeneous nature of the sun. In *De l'infinito* Bruno also draws on two of Cusanus' cosmological statements in *De doctaignorantia*, namely the possibility that other worlds are inhabited and the nature of light surrounding planets. The reference in the intervening dialogue, *De la causa*, concerns a metaphysical rather than cosmological idea, namely, that of the coincidence of opposites.1 Bruno returns to the mathematical illustration of this idea, the infinite circle being equivalent to an infinite straight line, in the *Adversus mathematicos*.2 Bruno also used the doctrine of the coincidence of opposites in *De umbris*. There Bruno is probably alluding to Cusanus' *De beryllo*, though without mentioning Cusanus explicitly.3 Bruno returned to the principle of coincidence of opposites in the *Spaccio*, where he applied it to the field of ethics.4 Apart from his disagreement with Cusanus in *De immenso* concerning the problem of whether or not the earth is a fiery star like the sun, the references in the later Latin works are either tangential to Bruno's philosophy, or they simply praise Cusanus in general terms, either as an esoteric philosopher inaccessible to ordinary philosophers and theologians, or for his anticipation of Copernicus' ideas.5

There are, however, two passages, one in the *Infinito* and another in the *Oratio valedictoria*, in which Bruno tempers his admiration for Cusanus. In the former he

---

1 BRUNO, *Causa* v, pp. 299-301.
4 BRUNO, *Spaccio* i 1, pp. 57-59.
5 BRUNO refers to Cusanus in *De immenso* iii 9, pp. 381.25-382.3. The disagreement is stated ibid., iv 8, pp. 45.17-46.19. See also Bruno's praise of Cusanus in id., *De lampade combinatoria* praefatio, p. 234.6-9.
complains that Cusanus did not rid himself of all the errors he had imbibed from traditional philosophy and theology. In the second passage he presents Cusanus as a representative of an ecclesiastical establishment that he despised: "Good God, in what respect is Aristotle comparable to this Nicholas of Cusa, who is greater than Aristotle in proportion to the degree he is accessible to very few? About his mind, I would declare that I recognised Nicholas’ mind to be not just equal to, but far superior to Pythagoras’, were I not deterred from doing so by Nicholas’ priestly garb."²

Among all these explicit references, the only one of potential importance in relation to Bruno’s concept of contraction as a theory of individuation is his explicit attribution to Cusanus in *De la causa* of the principle of coincidence of opposites. Bruno employs this principle in *De la causa* in his description of contraction in its ontological sense, as has already been explained in Chapter 2. The origin and subsistence of the universe is characterised by a coincidence of opposites, Bruno holds on the basis of Cusanus’ principle. However, there is at least one important difference between their application of this idea. For, as already said in Chapter 2, whereas Bruno identifies infinite and animate matter as the object of this coincidence, Cusanus identifies God as this object.³ Of course, one can argue that Bruno, like Cusanus, holds that God is characterised by a coincidence of opposites, but then it should be added that whereas

1. Id., *Infinito* iii, p. 197.
2. Id., *Oratio valedictoria*, p. 17.2-7: "Deus bone, ubi illi Cusano adsimilandus [Aristotle], qui quanto maior est, tanto paucioribus est accessibilis? Huius ingenium si presbyteralis amictus non interturbasset, non Pythagorico par, sed Pythagorico longe superius agnoscerem, profiterer."
3. The first principle is formally described as a coincidence of act and potency in BRUNO, *Causa* iii, p. 205. Compare the description of matter ibid., iv, pp. 243-245. For Bruno’s application of the principle of coinciding opposites, see also pp. 74-77 above. My distinction between Cusanus’ and Bruno’ respective application of the principle of coincidence of opposites concurs with MORAN, ‘Pantheism’, pp. 144-145.
‘God’ means the universe itself to Bruno, the word means a transcendent entity to Cusanus.

Even though Bruno uses Cusanus’ idea of coincidence of opposites, we cannot on that basis infer that Bruno also borrowed Cusanus’ idea of contraction, although Bruno must have been familiar with Cusanus’ interpretation of contraction through his reading of Cusanus’ De docta ignorantia. One reason for being cautious in this respect is that Bruno applies his sources freely — his application of Cusanus’ principle of the coinciding opposites to his pantheism is one example. Another reason is that Bruno, though he knew Cusanus’ comments on contraction in the De docta ignorantia, rejected the metaphysical structure to which Cusanus applied the concept, and therefore also Cusanus’ interpretation of the concept itself. Finally, Bruno could have picked up his version of contraction from other sources in the scholastic tradition of the Liber de causis. In the subsequent section I shall examine Cusanus’ concept of contraction as it emerges in his De docta ignorantia, and then compare it with Bruno’s interpretation.

3. Cusanus and the scholastic tradition of contraction

Cusanus was in possession of a manuscript, now MS Cues 195, containing four texts. The first is a work that the MS calls Liber de causis (fols 1r-34v). The MS does not give an author’s name. From the incipit and explicit one can deduce that this work is Aquinas’ commentary on the Liber de causis.1 Cusanus’ possession of Aquinas’

1 The incipit of AQUINAS, Super Librum de causis expositio in MS Cues 195, fol. 1ra, reads: “Sicut philosophus [Aristotle] dicit decimo ethicorum [Nicomachean ethics X vii 1177a12-18] ultima felicitas hominis consistit in optima hominis operatione, que est supreme potentie scilicet intellectus, respectum optimi intelligibilis”; the explicit on fol. 34v reads: “non participat unitatem ab aliquo alio et huius quidem probatio inducitur que premissa est. Et sic finitur liber de causis. Sint deo gratie omnipotenti
commentary on the *Liber de causis* has been noted by several scholars, and the importance of the *Liber de causis* to Cusanus’ ontology has also been pointed out.\(^1\) However, the possible influence of the work and its scholastic commentaries on Cusanus’ thought has never been examined in detail.\(^2\) Second in MS Cues 195 comes Moerbeke’s Latin translation of Proclus’ work, the *Elementatio theologica* (fols 34\(^v\)-66\(^v\)), with Cusanus’ marginal notes.\(^3\) Third is Giles’ *Tractatus de esse et essentia qui est prima omnium causa*. The *incipit* and *explicit* correspond to p. 1.4-6 and p. 145.17-21 of Saffrey’s edition, with a few unimportant differences of wording and word order. Cusanus, like Bruno, was well versed in Aristotelian philosophy. He came across it in his formative years during his studies in Padova (VANSTEENBERGHE, *Le Cardinal*, p. 12) and in Cologne (ibid., p. 15).

\(^1\) For Cusanus’ possession of the MS Cues 195, see KRISTELLER, ‘Proclus as a reader’, p. 196 n. 26; BEIERWALTES, ‘Der Kommentar’, p. 201. For the overall importance of the *Liber de causis* to Cusanus’ ontology, in particular in relation to *De docta ignorantia*, see FLASCH, *Nikolaus von Kues*, pp. 144-145, 578; HAUBST, ‘Albert, wie Cusanus ihn sah’, pp. 167, 170-171, 172. See the references to the *Liber de causis* listed in the indexes of authors in CUSANUS, *De docta ignorantia*, p. 168; id., *De coniecturis*, p. 240.


Finally there is a rather short text by Petrus Philargi, also called Peter of Candia (anti-pope Alexander V, 1409-1410), entitled *Libellus de terminis theologicalibus* (fols 106r-110v). How and when was the manuscript acquired? When did Cusanus study it? What did he make of the doctrines he found in the *Liber de causis*? Which commentators did he know of? How did they influence his ideas of the *Liber de causis*? We shall have to leave these problems aside, and focus on Cusanus’ treatment of contraction in his account of individuation, and, as far as possible, establish his position in the scholastic tradition of contraction.

In *De docta ignorantia* from 1440, Cusanus employs ‘contraction’ as part of his theory of individuation. In the second book Cusanus explains that an absolute unity descendit.” The *incipit* and *explicit* correspond to prop. 1.1-3, p. 3, and prop. 211.7-11, p. 103, of Boese’s edition. Cusanus annotated the text. For Cusanus’ marginal notes, see *Cusanus-Texte. III. Marginalien. 2. Proclus latinus* (ed. Senger), pp. 18-19, 111-121.

1 The *Tractatus de esse et essentia* in MS Cues 195 is Giles, *Theoremata de esse et essentia*. The *incipit* in the MS, fol. 67r, reads: “Omne esse vel est purum per se existens et infinitum vel est participatum in aliquo receptum et limitatum. Volentes de esse tractatum componere ne laboremus in equivoco distinguemus duplex esse”; the *explicit* reads on fol. 105v: “ad genus substantie quod de huiusmodi esse directe nec substantia que est genus nec substantia que est analogum predicatur. Et hec de essentia et de esse dicta sufficient. Laus igitur sit ipsi deo in quo est omne esse qui est trinus et unus in secula seculorum benedictus Amen” The *incipit* and *explicit* correspond to p. 1.2-5 and p. 159.2-7 of Hocedez’ edition, with minor differences.

is made manifold through an individuation, that is, a contraction, into individuals through four interrelated unities:

And in this way we find that there are three universal unities gradually descending to the particular in which they are contracted, so that they may be the particular in act. The first absolute unity enfolds everything in an absolute manner, the first contracted unity enfolds everything in a contracted manner. Their [hierarchical] order entails, however, that the absolute unity should be considered to enfold, as it were, the first contracted unity, so that it enfolds everything else by means of the latter [i.e. by means of the contracted unity]; that the first contracted unity should be considered to enfold the second contracted unity and, by means of the latter, the third contracted unity; that the second contracted unity should be considered to enfold the third contracted unity, which is the last universal unity, and the fourth unity [counting inclusively from absolute unity] from the first, so that, by means of the third contraction, the first unity may arrive at the particular. And so we see how the totality of things is contracted through three steps into this and that particular.1

---

1 CUSANUS, De docta ignorantia ii 6, p. 79.19-28: "Et ita reperimus tres universales unitates gradualiter descendentes ad particulare, in quo contrahuntur, ut sint actu ipsum. Prima absoluta unitas omnia complicat absolute, prima contracta omnia contracte. Sed ordo habet, ut absoluta unitas videatur quasi primam contractam complicare, ut per eius medium alia omnia; et contracta prima videatur secundam contractam complicare, et eius medio tertia contractam; et secunda contracta tertia contractam, quae est ultima universalis unitas et quarta a prima, ut eius medio in particulare deveniat. Et sic videmus, quomodo universum per gradus tres in quolibet particulari contrahitur." 'Ordo' corresponds presumably to 'τάξις', which in Greek Neoplatonism means a series of hierarchically related entities. The Greek term is used in PROCLUS, Elements of theology props 21, 125, 132, pp. 24.5, 110.29, 116.28. On these occasions Moerbeke uses 'ordo' in his translation; see PROCLUS, Elementatio theologica props 21.5, 125.1, 132.1, tr. Moerbeke, pp. 14, 63, 66. See also DODDS' explanation of 'τάξις' in PROCLUS, Elements of theology, pp. 208-209, 267, 270. 'Ordo' is used similarly in another account of contraction, namely in DIETRICH, De animatione caeli iv, §3, pp. 15-16, as quoted on p. 185 n. 3 above.
Here Cusanus describes a series of ontological enfoldings (complicationes), actualised through four ‘unities’, ultimately leading to the individuation of particulars. How does Cusanus explain these unities?

He offers first a mathematical interpretation. The first unity is the absolute unity, which is one; the second unity is the plurality of the universe, ‘unfolded’ from the first absolute unity. This second unity is tenfold, Cusanus continues, since it comprises the ten predicaments. It is, therefore, a tenfold contraction of the first absolute unity.\(^1\) The ten predicaments may be the ten categories which Aristotle held we can predicate of nature (substance, quantity, quality, relation, position, time, being-in-a-position, having, doing, being-affected).\(^2\) The third unity is symbolized by the square of ten, that is, one hundred. Finally, the fourth unity is symbolized by one thousand, which is the cube of ten.\(^3\)

Having provided this mathematical interpretation of contraction, Cusanus adds a second explanation which is more in tune with Aristotelian metaphysics. Without assigning each of these unites explicitly to any of the following notions, he says that the universe is like an ontological hierarchy departing from the “ten most general concepts”, which are contracted into genera, species and, finally, individuals, which are absolute unity in act.\(^4\) What are these “most general concepts”? Are they Aristotle’s

---

1 CUSANUS, De docta ignorantia ii 6, p. 79.10. Here Cusanus refers to his De coniecturis for further clarification. According to the editors, Hoffmann and Klibansky, Cusanus refers to De coniecturis i 7 (especially §§27.17-28.16, pp. 34-35), where Cusanus also provides an epistemological account on the basis of the same series of numbers.
2 ARISTOTLE, Categories iv 1b25-28a4.
3 CUSANUS, De docta ignorantia ii 6, p. 79.10-18.
4 Ibid., ii 6, p. 80.1-7: “Est igitur universum quasi decem generalissimorum universitas, et deinde genera, deinde species. Et ita universalia sunt illa secundum gradus suos, quae ordine quodam naturae gradatim ante rem, quae actu ipsa contrahit, existunt. Et quoniam universum est contractum, tunc non reperitur nisi in generibus explicatum, et genera non reperiuntur nisi in speciebus; individua vero sunt actu, in quibus sunt contracte universa.”
ten categories, also discussed on pp. 86-88 above, the ontological counterpart to the above mentioned ten predicates? Aristotle had listed ten universals, or categories, in his *Categories*, claiming that, on a logical level, nine of them constitute the range of possible predicates of substances (again, substance being one category), and, on an ontological level, that they delineate the possible modes of being of substances.\(^1\) The ten categories thus provide, in Aristotle’s thought, a correspondence between language and reality.

At this point it should be mentioned that Giles had provided terminology which Cusanus may have used in his explanatory comment. Giles had stated that intelligences are contracted into “certain predicates”. Intelligences exist contractedly in genera, which in turn exist contractedly in species, and which are ultimately individuated in the “ten predicates”, that is, we may assume, the traditional ten categories or predicaments. We detect these ten predicaments directly. By contrast we detect the species and genera indirectly, by contemplating nature in its sensible manifestations.\(^2\) Intelligence is intermediary between God, pure act or First Cause, on one hand, and corporeal substances combined of matter and form, on the other hand. Giles also applies contraction to describe the relation between the forms in

---

1. ARISTOTLE, *Categories* iv 1\(^{b}25-2^{a}10.\)

206
intelligences and matter. 1 There is, however, a difference between Giles and Cusanus. In the above mentioned explanation of *De docta ignorantia* ii 6, Cusanus locates the ten categories between the first unity and genera. 2 Giles, on the other hand, locates them on the lowest ontological level, i.e. that of individuals. This difference becomes less marked when we consider Cusanus’ immediate qualification, namely, that the universe is actualised, “unfolded” (*explicatum*), implying that the ten categories only exist in genera, which only exist in species, which, ultimately, only exist in individuals. 3 In this way, the ten categories are also located on the lowest ontological level in Cusanus, as in Giles. On pp. 210-212 below, we shall return to Cusanus’ idea of *explicatio*.

Another difference between Cusanus and Giles is that the latter is reluctant to describe, as Cusanus does, the relation between God and the next lower ontological level as a contraction. God gives being, Giles declares, but is not itself contracted to anything. 4 A further difference between Giles’ and Cusanus’ uses of the term ‘contraction’ in their respective accounts of procession from God is that Giles does not speak of the several ontological levels as unities.

Giles’ use of the concept contraction as a theory of individuation has never been considered as a possible source for Cusanus’ concept of contraction. 5 Was he

---

1 E.g. GILES, *Super authorem De causis*, *Alpharabium* vii, fol. 25r, lines 40-42, as quoted on p. 183 n. 5 above.

2 CUSANUS, *De docta ignorantia* ii 6, p. 80.1-2, as quoted on p. 205 n. 4 above.

3 Ibid., ii 6, p. 80.1-7, as quoted on p. 205 n. 4 above.

4 GILES, *Super authorem De causis*, *Alpharabium* ii, fol. 8r, lines 40-42, as quoted on p. 179 n. 2 above.

5 HAUBST, *Das Bild des Einen und Dreieinen Gottes in der Welt nach Nikolaus von Kues*, pp. 124-129. Haubst, ibid., p. 125, identifies two meanings of contraction in Cusanus thought. First, creation is a contracted being, God being non-contracted. Second, within Creation, form and matter are contracted. Haubst, ibid., p. 125 n. 65, cites the following three sources for Cusanus’ two meanings: (a) LULL, MS Cues 83: *Ex libro de forma Dei*, fols 96r-97r, at fol. 96r, lines 57-58: “generalia contracta in elementis” (= ed. Roth, p. 48, line 13), and at fol. 97r, lines 1-3 (= ed. Roth, p. 48, lines 31-38): “Decem praedicamenta sunt communia ad elementa et ad elementata.
Cusanus’ source? There are significant differences between Giles’ and Cusanus’

Principia enim innata constituunt substantiam communem a qua exexit per accidens
communis qualitas quantitas et cetera. Ipsa autem substantia est contracta in celo
primo, secundario in elementis, tertio in elementatis et sicud substantia est contracta
tripliciter sic similiter praedicamenta accidencium sunt contracta tripliciter. Aliter
non esset ordo formatus neque motus”; (b) DUNS SCOTUS, De primo principio iv,
conclusio 8: “igitur est unum ex eis sicut ex contrahente et contracto, actu et
potentia”; and, most importantly, (c) AQUINAS, Summa theologiae 1a, qu. 7, art. 2.
Haubst is referring to ibid., 1a, qu. 7, art. 2, resp., vol. 4, p. 74; “Si autem sint aliquae
formae creatae non receptae in materia, sed per se subsistentes, ut quidam de angelis
opinantur, erunt quidem infinitae secundum quid, inquantum huiusmodi formae non
terminantur neque contrahuntur per aliquam materiam: sed quia forma creatae sic
subsistens habet esse, et non est suum esse, necesse est quod ipsum eius esse sit
receptum et contractum ad determinatam naturam. Unde non potest esse infinitum
simpliciter.” As regards Duns Scotus, Haubst seems to cite the wrong place. The
quotation occurs in chapter 4, though not in conclusio 8 as Haubst says, but in
conclusio 9 (DUNS SCOTUS, De primo principio iv, conclusio 9, p. 118). Moreover,
even though the correspondence of “contrahente” with “actu”, and “contracto”
with “pontentia” does not conflict with Cusanus’ use of the notion contraction in
his De docta ignorantia ii 6, p. 79.19-28, it does not explain the interrelation of four
unities through contraction in CUSANUS, De docta ignorantia ii 6, p. 79.19-28. For
the concept of contraction as a theory of individuation in Duns Scotus’ philosophy,
see WOLTER, ‘John Duns Scotus (b. ca. 1265; d. 1308)’, pp. 276, 285, 287, 289.
Other authors who have ignored Giles as a possible source for Cusanus include
HOPKINS, Nicholas of Cusa’s metaphysics of contraction, pp. 97-112; MORAN,
‘Pantheism’, pp. 146-152; LEINKAUF, ‘Die Bestimmung des Einzelseienden durch
die Begriffe contractio, singularitas und aequalitas bei Nicolaus Cusanus’, pp. 185-
states briefly that Giles’ notion of contraction is particularly important to the second
book in Cusanus’ De docta ignorantia, though without providing any further
explanation or references. In an earlier article Vescovini had suggested that
contraction in De docta ignorantia derived from the school of Albert and was
available in Dietrich’s and in Duns Scotus’ works. See VESCOVINI, ‘Temi ermetico-
neoplatonici’, p. 129.

208
interpretations of contraction, and, as pointed out above, Cusanus could also have derived the concept from his own manuscript, MS Cues 83, containing excerpts from Lull's Liber de forma dei or from other scholastic sources besides Giles. The notion of contraction was probably a commonly used concept in the philosophical and theological tradition in which Cusanus found himself. This granted, Giles may be among those scholastic philosophers who presented 'contraction' in a way that appealed to Cusanus.

Cusanus' interpretation of contraction does not, unlike Giles', revolve around the Neoplatonic doctrine of reception according to the capacity of the recipient. Giles used contraction to explain that individuation not only depends on form, but also on the matter individuated by form. Cusanus touches briefly on this idea in his De docta ignorantia, though without mentioning 'contraction' or its cognates. But Cusanus does not use the occasion to emphasise the role of the recipient.¹ He speaks, instead, of matter as the passive potentiality, as a possibilitas, receiving forms.² This is also significantly different from Bruno's idea of contraction, in which matter is assigned active potentiality, implying a dialectical relationship between matter and form. This crucial difference between Cusanus' and Bruno's respective interpretations of contraction has been ignored in Bruno studies.³

¹ CUSANUS, De docta ignorantia ii 2, p. 68.23-30: “Communicat enim piisimus (this form is attested in classical Latin: see Lewis and Short and Oxford Latin Dictionary, s.v. ‘pius’) Deus esse omnibus eo modo, quo percipi potest. Cum igitur Deus absque diversitate et invidia communicet et recipiat, ita quod aliter et alterius contingentia recipi non sinat, quiescit omne esse creatum in sua perfectione, quam habet ab esse divino liberaliter, nullum aliud creatum esse appetens tamquam perfectius, sed ipsum, quod habet a maximo, praediligens quasi quoddam divinum munus, hoc incorruptibiliter perfici et conservari optans.”

² E.g. ibid., ii 7, ii 8, pp. 83.7, 85.5-8, 89.22-25.

³ CLEMENS, Giordano Bruno, p. 143; MANCINI, La sfera infinita, p. 67; MIGNINI, ‘La dottrina dell’individuo in Cusano e in Bruno’, p. 348.
Cusanus explains that universals in the genera and species exist *ante rem*, that is, they are ontologically prior to sensible particulars.¹ Above these unities ontologically is the absolute universal, which is God, the first unity.² Within this hierarchy Cusanus follows Aristotelian doctrine, maintaining that the universals are actualised in individuals.³ The universals thus actualised have a potential existence prior to their contraction into individuals.⁴ God, the first unity, is conceived of as having existence independently from that of individuals.⁵

How are we to understand the procession from absolute unity through *complicatio-explicatio*, described in Cusanus' *De docta ignorantia* ii 6?⁶ From time to time Cusanus uses the term 'emanation' about the procession from God to particulars.⁷ This suggests that he adheres to the Neoplatonic idea of the One and its emanation. But Cusanus does not associate the term 'emanation' with 'intelligible matter', 'abiding-procession-return' and other authentic Neoplatonic concepts.⁸ For Cusanus, like Aquinas, emanation primarily denotes a hierarchy of being in which there is a smooth graduation from the highest ontological level (God) to the lowest (Creation).

---

¹ CUSANUS, *De docta ignorantia* ii 6, p. 80.1-7, as quoted on p. 205 n. 4 above.
² Ibid., ii 6, p. 80.23-24.
³ Ibid., ii 6, p. 80.8-10.
⁴ Ibid., ii 6, p. 80.11-15.
⁵ See also ibid., ii 2, p. 65.13-16. On this separation between God and the universe, articulated in Cusanus' interpretation of *contractio*, see BEIERWALTES, ""Primum estdives per se"", pp. 168-169.
⁶ CUSANUS, *De docta ignorantia* ii 6, p. 79.19-28, as quoted on p. 204 n. 1 above.
⁷ Ibid., ii 4, p. 74.25-28: "Quoniam vero dictum est universum esse principium contractum tantum atque in hoc maximum, patet, quomodo per simplicem emanationem maximi contracti a maximo absoluto totum universum prodiit in esse."
⁸ For 'intelligible matter', see p. 65 n. 2 above. As regards the doctrine 'abiding-procession-return', see WALLIS, *Neoplatonism*, pp. 66, 106, 132-133.
There is, however, one crucial difference between Cusanus’ idea of emanation and that of Aquinas. Cusanus does not follow the example of Liber de causis or scholastic philosophers, like Aquinas and Giles, in his account of descending ontological dependencies. According to the Liber de causis and scholastic sources, God creates intelligences, which, in turn, create the hypostasis Soul, which finally creates nature.1 Cusanus objects to this theory of ontological succession that the emanation producing the universe must have taken place through a “simple emanation”.2 This is so, he argues from a logical point of view, for if the parts of the universe were not created together with the universe itself, that is, without separate stages of ontological dependency, then the universe as a whole would lack unity and perfection. Intelligences, therefore, were not created first, then Soul, and then nature, as “Avicenna and other philosophers hold”.3 These “other philosophers” may well include the author of Liber de causis (in particular its proposition viii(ix) 87), Aquinas, Giles and probably many other scholastic philosophers.4

2 CUSANUS, De docta ignorantia ii 4, p. 74.26-27: “per simplicem emanationem”.
3 Ibid., ii 4, pp. 74.28-75.4: “Omnia autem entia, quae sunt partes universi, sine quibus universum — cum sit contractum — unum, totum et perfectum esse non posset, simul cum universo in esse prodierunt, et non prius intelligentia, deinde anima nobilis, deinde natura, ut voluit Avicenna et alii philosophii.”
The tensions between the scholastic tradition of contraction and Cusanus emerge in Cusanus' objection. He took on the terminology provided by the scholastic tradition of contraction, but he rejected the ontological separation between God and the Creation introduced through the idea of intelligences and Soul as intermediaries. In his theory of causation, which revises traditional scholastic doctrine, Cusanus adheres to the traditional idea of God as pure act. But he regards God as one single cause whose effect is unitary, and adequately described through the binary concepts *complicatio-explicatio*, and *maximum-minimum*. The first pair was widely used in twelfth-century Platonism, whereas the latter had been assigned to the idea of ontological contraction and to Proclus' idea of individuation by Giles, among others.¹

Cusanus' criticism of the ontology accompanying the scholastic tradition of the *Liber de causis* is detectable in his well-known polemics with Wenck in the decade following the composition of *De docta ignorantia*.² Between 1442 and 1443 Wenck wrote *De ignota litteratura* in response to this work of Cusanus.³ Cusanus wrote a

---

¹ For the terms *explicatio-complicatio*, see GREGORY, 'The Platonic inheritance', p. 71 n. 52; COUNET, *Mathématiques et dialectique chez Nicolas de Cuse*, pp. 80-84. Giles makes the connection between *contractio* and *maximum* in GILES, *De esse et essentia* theorema 4, p. 16.1-10, of which line 5-10 reads: "et quia omne participatum est esse limitatum et contractum et non habet rationem omnis esse, ab esse puro per se existenti et infinito in quo reservatur omnis ratio essendi et quod est maxime tale, fluit et causatur omne esse participatum quod respectu esse primi est esse secundum quid et contractum."


reply to Wenck’s accusations in 1449 in the *Apologia doctae ignorantiae*, which was printed together with *De docta ignorantia* in three editions of Cusanus’ works in the fifteenth and sixteenth centuries.¹

To Wenck there is one important consequence of Cusanus’ idea of emanation from God, which is of interest to our study, namely that “everything”, i.e. the Creation, still according to Wenck’s interpretation of *De docta ignorantia*, “coincides with God”.² This was, effectively, an accusation of pantheism. In his *Apologia* Cusanus rejects Wenck’s reading.³ Irrespective of the merits of Cusanus’ defence, Wenck’s criticism is valuable to us because it focuses attention on Cusanus’ terminology when he says that the universe is “enfolded” in the Absolute Maximum, God, and that nature is “contracted” and “unfolded” from him.⁴

Seen against the background of the scholastic tradition of the *Liber de causis*, particularly Aquinas’ interpretation of it, it is possible to see what made Wenck voice these criticisms. When Cusanus presents Wenck as an interlocutor in his *Apologia*, he makes Wenck state that God gives being to everything, and is “not contracted”.⁵ Here Cusanus portrays his adversary as an exponent of the scholastic tradition of the *Liber de causis*, according to which God had been described as that which “gives being”, and according to which — following Aquinas and Giles — God was not contracted

---

¹ Ibid., p. 185. Cusanus’ *Apologia* came out in his collected works: CUSANUS, *Opera* (Strassburg, 1490?), fols 206v-212v; id., *Opera* (Paris, 1514), vol. 1, fols 34r-41v; id., *Opera omnia* (Basel, 1565), pp. 63-75.

² WENCK, *De ignota litteratura*, p. 24.19: “Omnia cum Deo coincidunt.”


⁴ WENCK, *De ignota litteratura*, p. 26.27-30: “Haec maximitas absoluta omnia habet in se, et ipsa est in omnibus, quia sua universitate omnia complectitur, quemadmodum natura, quae est contracta, est quasi explicatio omnium quae per motum fiunt.” For contraction, see also ibid., pp. 36.20-29, 37.14-34.

⁵ CUSANUS, *Apologia*, p. 8.16-19: “Unde nee Deus est hoc aut illud, nec caelum nec terra, sed dans esse omnibus, ut ipse sit proprie forma omnis formae, et omnis forma, quae non est Deus, non sit proprie forma, quia formata ab ipsa incontracta et absoluta forma.”
into his Creation. This polemic with Wenck certainly shows that the notion of contraction was at the centre of a vast philosophical and theological problem: how to consider God as the cause of all things, but nevertheless distinct from his effects.

4. Cusanus’ contribution to Bruno’s concept of contraction

What was, then, Cusanus’ contribution to Bruno’s concept of contraction? Bruno seems to have developed his fundamental idea of contraction as a theory of

1 PSEUDO-ARISTOTLE, Liber de causis i 1-8, iv 37, ed. Pattin, pp. 134-35, 142. On God as not contracted, see AQUINAS, Quaestiones quodlibetales quodlibetum 3, qu. 1, art. 1, pp. 71-72, as quoted on p. 187 n. 2 above; GILES, Super authorem De causis, Alpharabium ii, fol. 8r, lines 40-42, as quoted on p. 179 n. 2 above. In his attack on Cusanus’ De docta ignorantia Wenck criticises Cusanus’ alleged view on being and corrects Cusanus with the Liber de causis; see WENCK, De ignota litteratura, p. 34.12-15: “Et valde claudicat huius conclusionis probatio, quod Deus sit cui esse quodlibet quod est[,] est esse [omne id quod est]; cum etiam secundum auctorem Causarum, prima causa sit in quolibet praeterquam quod aliqui miscceatur.” (The comma in the first brackets has been inserted by me; the words in the second pair by Hopkins.) Wenck aims at the following words in CUSANUS, De docta ignorantia i 23, p. 46.22-23: “Unde Parmenides subtilissime considerans aiebat Deum esse, cui esse quodlibet, quod est, est esse omne id, quod est.” That Wenck refers to the author of the Liber de causis when he speaks of “auctor Causarum” has been noted by Hopkins in WENCK, On unknown learning, p. 34 n. 135. There Hopkins refers Wenck’s comment, cited in this note, to PSEUDO-ARISTOTLE, Liber de causis xix, ed. Bardenhwever, p. 181.7-8: “Causa prima regit res creatas omnes praeter quod commisceatur cum eis.” This passage is identical in Pattin’s edition (PSEUDO-ARISTOTLE, Liber de causis xix(xx) 155, p. 177). As already pointed out on p. 157 n. 2 above, Wenck composed a commentary on the Liber de causis. Since it was almost definitely unknown to Bruno, and since Wenck does not explicitly relate the Liber de causis to Cusanus’ use of contraction in his De ignota litteratura, I shall not discuss it further.
individuation between 1582 and 1584, that is, between his *De umbris* and his *Sigillus* and *De la causa*. In the first mentioned work he uses Cusanus’ mathematical illustrations of God as a coincidence of opposites, and of procession from God, and it would be reasonable to expect Bruno to draw on Cusanus’ version of ontological contraction too in this work. Bruno does speak of contraction in the ontological sense in *De umbris*, but in such a way that it is difficult to pin down a source.

There may, however, be at least one allusion to Cusanus’ concept of contraction. In *De umbris* Bruno distances himself from “common philosophy”, that is, predominantly Aristotelian and scholastic philosophy, in which the “efficient principle” is “contracted” into “this” or “that” entity. Instead, he prefers the philosophy of the “eloquent laymen” in which the efficient principle is “intrinsic” — intrinsic, we may assume, to nature — and is sometimes “contracted” into “all” entities, sometimes into “single” entities. In *De la causa* Bruno identifies the efficient cause of the universe with Mind, acting through the World Soul, which is the formal principle of the universal substance. This efficient cause is probably what he means by efficient

---

1 Sturlese, ‘Nicolò Cusano’, pp. 955-958.
2 Bruno, *De umbris* §§29.2-4, 63.2-6, 92.12-17, 94.2-9, 234.14-17, pp. 32, 52, 69, 69-70, 193.
3 Ibid., §94.2-9, pp. 69-70: “Propterea intelligas nos minime alligatos esse communi philosophiae, cum naturae nomen materiae, formaeque adstrinxerit, sed et cum efficiens intrinsecum principium recognoverit, sive sit omnibus commune, sive ad hoc suppositum, vel ad illud fuerit contractum. Unde libentius idiotas loquentes audimus, dum naturam istius hominis cum illius hominis natura comparant: non enim ut universale logicum, vel ad eius similitudinem licet apprehendere naturam, sed ut physicum, quod est tum in omnibus, tum ad singula contractum.” For a discussion of this passage, see Blum, *Aristoteles*, p. 58. For the “eloquent layman”, see Sturlese’s note to Bruno, *De umbris* §94.6, p. 70, in which she refers to Cusanus, *De visione dei* ix, §35, p. 154: “Si igitur humanitatem, quae est simplex et una in omnibus hominibus, respecxero, reperio ipsam in omnibus et singulis hominibus ... Unde haec natura humanitatis quae est contracta”.
4 Bruno, *Causa* ii, p. 113, as quoted on p. 56 n. 2 above.
principle in *De umbris*. In support of this assumption we can add that in *De la causa* Bruno also defined the World Soul as intrinsic to the universe (*artefice interno*), just as he determines the “efficient principle” in *De umbris* as intrinsic.¹

The idea of the efficient principle, in Cusanus’ terminology the Absolute Maximum, being contracted into all particulars, can be found in *De docta ignorantia* ii 6, as already shown.² However, there Cusanus does not speak of the Absolute Maximum, as an efficient principle, being “intrinsic”, as Bruno does on this occasion in *De umbris*. The idea of the Absolute Maximum being contracted into all also features in *De docta ignorantia* ii 5, where Anaxagoras’ dictum *Quodlibet in quolibet* is incorporated into Cusanus’ theory of individuation.³ Bruno may allude to this Neoplatonic doctrine of all-in-all very opaquely in his *De umbris*. He certainly adopts it in later works, but no elaborate adaptation of Cusanus’ metaphysics of contraction occurs in this early work.⁴

This exceptional statement about ontological contraction in *De umbris* does not appear in a fully elaborated theory of individuation. Whether it is indebted to Cusanus is not clear. If we make the assumption that it is, we should also acknowledge that the brief statement in *De umbris* differs from Cusanus’ interpretation of contraction in at least two respects. First, as said, in the key passage from *De docta ignorantia* ii 6, quoted on p. 204 above, Cusanus does not speak of Absolute Maximum as an intrinsic cause, as Bruno does in *De umbris*. Second, the contraction actualised by matter — one part of the so-called double contraction which Bruno describes in the two later works, the *Sigillus* and *De la causa* — is absent in this passage of *De umbris*.

¹ Ibid., ii, p. 117.
² CUSANUS, *De docta ignorantia* ii 6, p. 79.19-28, as quoted on p. 204 n. 1 above.
³ Ibid., ii 5, pp. 76.1-78.29. For the Neoplatonic origin of the doctrine ‘all in all’, see WALLIS, *Neoplatonism*, pp. 54-55.
⁴ For the doctrine ‘all in all’ in Bruno’s philosophy, see BRUNO, *Causa* ii, p. 135 *Infinito* i, pp. 85, 101; *Furori arg.*, ii 2, pp. 15, 389; *Lampas* §64.1-4, p. 1020 (= BOL, vol. 3, p. 42.22-24); *Sigillus* ii 3, p. 196.15-19; *De immenso* v 9, pp. 146.1-149.12. For the doctrine ‘all in all’ in Bruno, see SPRUIT, *Il problema*, p. 144.
The second point raises the question of whether Bruno was inconsistent or whether he changed, or developed, his thoughts about contraction between De umbris, published in 1582, and the Sigillus and De la causa, published over the following two years. I believe the latter is the case. The affinities between contraction in the discussed passage in De umbris and contraction in Cusanus' De docta ignorantia ii 6 could then be read as an indication of Bruno's admiration of Cusanus' polemics against Aristotelian and scholastic philosophy — though without implying that Bruno shared Cusanus' interpretation of contraction.¹

The main source for Bruno's concept of contraction was not, however, Cusanus, despite his several references to him. For Bruno upheld an interpretation of contraction involving a dialectical relationship between matter and form, which is absent in Cusanus' De docta ignorantia, the key work for Cusanus' idea of contraction. Giles, on the other hand, had proposed such a dialectical interpretation of contraction through his emphasis on the Neoplatonic doctrine of reception according to the capacity of the recipient, i.e. matter. Bruno revised the idea of matter through his reading of Plotinus' Enneads II iv, conflating intelligible and corporeal matter and emphasising the active potentiality of matter. Bruno incorporated Cusanus' principle of coincidence of opposites into this idea of matter. On the basis of Giles' concept of contraction and Bruno's own interpretation of Plotinus' notion of matter, Bruno could give a pantheistic account of the relationship between unity and multiplicity which was distinct from the Christian version Cusanus had presented in his De docta ignorantia.

5. Cusanus' Christology

Cusanus not only drew on the scholastic tradition of contraction in his theory of individuation, he also accommodated it to his theology. Having distinguished between

¹ Cf. STURLESE, 'Nicolò Cusano', pp. 954-958; id., 'Per un'interpretazione', pp. 961-962.
God, the Absolute Maximum, and the universe, the contracted maximum, in the first two parts of *De docta ignorantia*, Cusanus sets out in the third and last part of the work to solve the question of how the Creation returns to unity with its creator.

Cusanus makes it clear that it must be some sort of being which, unified with the Absolute Maximum, is eventually capable of providing such a return to union with the creator, and he states that such an entity “would have to be a contracted maximum, that is, God and creature, the absolute and the contracted, and this by a contraction which could only subsist in itself in the subsistence of the Absolute Maximum.” Moreover, he maintains that only a hypostatic union of God and a creature of this kind can ensure a form of contraction which unites Absolute Maximum and the universe.

The creature suitable to be elevated to a union with Absolute Maximum must neither be an inferior nor a superior being, i.e. it must not be totally deprived of intelligence, as an animal, on the one hand, nor a pure intelligence, as an angel, on the other hand. Man, Cusanus writes, is such a being which is “raised above all the works of God and placed little lower than the angels”, since he is endowed with both intellectual and sensible natures. He continues: “Hence this nature is one that would, if united with the Absolute Maximum, be the universe’s fullness of perfections of all and everything, so that in this very humanity all things would reach their highest level.” Consequently, and precisely because of man’s reason, Cusanus extols “the ancients” who called man

---

1 CUSANUS, *De docta ignorantia* iii 2, p. 124.14-17: “sed necessario foret maximum contractum, hoc est Deus et creatura, absolutum et contractum, contractione, quae in se subsistere non posset nisi in absoluta maximitate subsistente.”
2 Ibid., iii 2, p. 125.15-17.
3 Ibid., iii 3, pp. 125.24-126.7.
4 Ibid., iii 3, pp. 126.29-127.6: “Humana vero natura est illa, quae est supra omnia Dei opera elevata et paulo minus angelis minorata, intellectualem et sensibilem naturam complicans ac universa intra se constringens, ut microcosmos aut parvus mundus a veteribus rationabiliter vocitetur. Hinc ipsa est illa, quae si elevata fuerit in unionem maximitatis, plenitudo omnium perfectionum universi et singulorum existeret, ita ut in ipsa humanitate omnia supremum gradum adipiscerentur.”
a “microcosm” or “parvus mundus”.¹ It is not man as a whole to whom this elevated role pertains, only man as intellect, since intellect abstracts from the sense world and differs from the sensitive part of man.²

Form these lines one might believe that Cusanus holds every human being to be a mediator between God and the universe, at least in potential form. Nevertheless, neither the human race, nor any other species or genus in the universe, can actually receive the Absolute Maximum. If so, then the species or genus in question would potentially become everything which the Absolute Maximum is, which is impossible. Hence the union of Absolute Maximum and universe cannot be found in a created being in the universe. Nor, on the other hand, can it be the Absolute Maximum, God, itself, since it is with limits. The only logical possibility, Cusanus concludes, is a being who owes its subsistence to God and is God in some way, and who at the same time is a contracted being.³

Although the species human being in itself cannot be the hypostatic union, this species, due to its intellect, still shares more with the Absolute Maximum than any other created beings in the universe.⁴ Therefore the hypostatic union must be found within this species, and not, for instance, within those of dogs or plants.⁵ Moreover, it must be one man possessing all perfections.⁶ This being is the Son of God, Jesus

¹ Ibid., iii 3, p. 127.2-3. For this theme in Cusanus’ thought, see DUPRÉ, ‘Der Mensch als Mikrokosmos im Denken des Nikolaus von Kues’, pp. 68-87. For Bruno’s use of the metaphor of man as a microcosm, see SPRUIT, Il problema, pp. 85 n. 164, 105; GRANADA, ‘Bruno e la dignitas hominis’, pp. 66-82.
² CUSANUS, De docta ignorantia iii 4, p. 131.14-27.
³ Ibid., iii 2, p. 125.3-17.
⁴ Ibid., iii 3, pp. 125.24-127.6, especially pp. 126.29-127.6.
⁵ Ibid., iii 3, p. 128.6-10.
Christ. Even though Christ is of human origin, and as such belongs to the species of human beings, this is not what qualifies him as a hypostatic union. It is, instead, that the perfection of all things exists in Christ. Christ is the Son of God and as such identical to the Word of God, by which all things come into being. No other human being can claim such a status.

Through this metaphysical explanation of Christ, Cusanus achieves two things at once. First, he renders Christ a privileged entity who fits into Cusanus' metaphysics of contraction. By doing so, Cusanus also makes his philosophy compatible with Christian doctrine. Second, Cusanus assigns to Christ an intermediary role, which we find in pagan Neoplatonism in relation to the One. Through the Son, every single created thing in the universe returns to the Absolute Maximum. "Through Him who is the contracted maximum, all things would proceed into a contracted being from the Absolute Maximum, and by His mediation would revert to the [Absolute Maximum], having, as it were, emanation as their origin and return as their end."

1 Ibid., iii prologus, iii 3, iii 4, pp. 118.2-9, 127.7-128.10, 129.15-132.27. For Cusanus on Christ as a contraction from absolute maximum, see INGEGNO, Regia pazzia, pp. 126-128, 132-133.
2 CUSANUS, De docta ignorantia iii 3, pp. 127.3-6, 128.1-10.
3 Cf. LAZZARINI, 'Contrazione e incontrazione', where Cusanus' careful requirements to this hypostatic union are ignored. Lazzarini thus claims that, according to Cusanus, the individual human being has the potential to mediate between the sensible universe and God (p. 314). Christ, he adds, is "il grande mediatore" (ibid, p. 315). Although the title of this article by Lazzarini promises some clarification of contraction in Cusanus' Christology, the author only once (p. 313 n. 8) addresses the concept contraction directly as it is used in Cusanus' De docta ignorantia, citing CUSANUS, De docta ignorantia iii 1, probably p. 120.4-6, where it is said that genera and species only exist "contractedly" in individuals. Otherwise Lazzarini does not explain the concept as it appears in this work of Cusanus with regard to human beings or to Christ.
4 CUSANUS, De docta ignorantia iii 3, p. 127.17-21: "per quem cuncta initium contractionis atque finem recipere, ut per ipsum, qui est maximum contractum, a
The 'return' in question may be ambiguous. It is phrased in a way which is similar to Proclus' pagan idea that everything emanated from the One returns to the One. The idea is not, of course, restricted to Proclus. It is fundamental to all Neoplatonism. Cusanus' 'return' is also, however, stated in a less heterodox way, to mean that, through the redemption of Christ, our souls will return to Heaven after death. Whatever the meaning, this return is distinct from noetic ascent, a Neoplatonic return, in Bruno's thought.

These Christological ideas in Cusanus' idea of contraction were not to Bruno's taste.

6. Bruno's criticism of orthodox Christology

To a heterodox philosopher like Bruno the challenge was to put forward his arguments for his philosophical beliefs, but to do so without running the risk of being charged with heresy by the Inquisition. None of the explicit references to Christ in Bruno's Italian and Latin works have heretical implications. He does, however, on several

maximo absoluto omnia in esse contractionis prodirent et in absolutum per medium eiusdem redirent, tamquam per principium emanationis et per finem reductionis.”

2 CUSANUS, *De docta ignorantia* iii 4, pp. 129.23-130.17.
3 Christ is mentioned by name in the following places without attributing to him heretic predicates: BRUNO, *Candelaio* v 17, v 23, pp. 349, 393; *Sigillus* i 35, p. 181.5-7; *Lampas* §322.12-16, p. 1316 (= BOL, vol. 3, p. 183.20-24); *De lampade combinatoria* praeatio, p. 240.1-10; *De magia mathematica* §2.27-30, p. 10 (= BOL, vol. 3, p. 495.16-20); *Summa*, p. 16.13-18; *De principiis* §§90.1-3, 99.7-8, pp. 698-700, 710-712 (= BOL, vol. 3, pp. 560.16-18, 566.7-15); *De monade* vii, xi, pp. 427.23-428.1, 464.21-24.
occasions, allude to Christ and in such a way that it is difficult to avoid drawing the conclusion that he denied Christ’s divinity and hence rejected Christian theology.¹

One example of this is a passage in the Spaccio where Bruno calls Centaur, half man, half horse, “a person who is made of two natures”, and a “hypostatic union”.² The last predicate is normally reserved for Christ in orthodox theology. Is there more than scorn in these words of Bruno? Very probably there is. Bruno adds that Isis and Jove have noted that “for man to be divine it is fitting that he have something of a beast in him”.³ Elsewhere in the Spaccio Bruno associates Isis with the cult of the Egyptians, in which living nature, especially beasts, are regarded as divinely animated and worshipped as divine.⁴ For Bruno, then, the Centaur symbolises his view that a true religion should venerate God in things, that matter was alive and that it produced from within itself animals, including human beings. As he says in the Cabala, what distinguished humans from supposedly lower forms of life was not their souls but

---

¹ E.g. id., Sigillus i 46, p. 190.5, where Bruno mentions the worshipping of “Adonidis mors”, i.e. Christ on the Cross; id., Spaccio iii 3, p. 461, where Bruno depicts Orion, urinating in heaven with fear, an allusion to Christ’s walking on water. An anonymous reader noted in this second passage that Bruno here identified Orion with Christ; see ibid., iii 3, p. 460 n. 4.

² Id., Spaccio iii 3, p. 495: “in cui [i.e., Centaur] una persona è fatta di due nature: e due sustanze concorreno in una ipostatica unione?” A contemporary reader commented in the margin “Rursus in Christum sub persona centauri sicut supra sub Orione” (ibid., iii 3, p. 494 n. 54). For Centaur, see my article, ‘Bruno’s Spaccio and Hyginus’ Poetica astronomica’, pp. 72-73, and GATTI, ‘L’idea di riforma’, p. 70.

³ BRUNO, Spaccio iii 3, p. 495: “In fine (sia stato detto quantosivoglia da Iside, Giove et altri dell’eccellenza de l’esser bestia, e che a l’uomo per esser divino gli conviene aver de la bestia, e quando appetisce mostrarsi altamente divo, faccia conto di farsi vedere in tal misura bestia)”.

their bodies.\textsuperscript{1} The opposition to Cusanus’ Christology — where the notion of contraction and the terms ‘hypostatic union’, or ‘union’ are interpreted in agreement with orthodox Christianity — could not be starker.\textsuperscript{2}

\textsuperscript{1} For Centaur, see ibid., iii 3, pp. 497-499.

\textsuperscript{2} For ‘hypostatic union’ or ‘union’ in this sense, cf. CUSANUS, \textit{De docta ignorantia} iii 3, pp. 126.24-28, 127.3-6, 127.13-16, 128.2-6, 129.3-7.
Bruno applied the concept of contraction in a variety of meanings, among which two interpretations, one ontological and the other noetic, are central to his philosophy. The concept was used by Bruno to explain how multiplicity originates from unity, and how the human soul could ascend from multiplicity to unity.

Scholastic philosophers had used the concept contraction to explain how the sensible universe was derived from a first cause and principle, identified as God, through a series of causes. Bruno used these sources and their interpretation for the same purpose. Among all of these authors, including Bruno, the notion of contraction remained more or less the same, accounting for the dependencies of inferior on superior being. What did change dramatically between scholastic authors, on the one hand, and Bruno, on the other, was the metaphysical structure and the "theology" in which the concept was employed.

Bruno's idiosyncratic concept of matter is the key to his metaphysics. It was primarily due to this interpretation of matter that he was able to transplant the scholastic use of contraction from a transcendent metaphysics into an immanent metaphysics. By assigning to matter active as well as passive potentiality, the causal dependencies in his metaphysical architecture differed completely compared with his scholastic predecessors. For Bruno, matter was no longer a passive recipient of causes. It was, instead, a co-determining principle together with the formal principle. Accordingly, Bruno redefined contraction, so that he could explain his theory of matter and form. In this way contraction became a key concept in his metaphysics.

Bruno probably based his concept contraction chiefly on Giles. Through the Neoplatonic doctrine of reception according to the capacity of the recipient, transmitted to him through the *Liber de causis*, this scholastic philosopher had opened up the
theoretical possibility of a dialectical relationship between matter and form. Giles had thus spoken of a "double determination" (*duplex limitatio*). This may have been the source of Bruno's expression "double contraction" (*duplex contractio*). Giles did not, however, pursue the hylozoistic possibilities of this interpretation of matter and form, as Bruno would later do. He retained the Aristotelian conception of matter as passive potentiality. It was, instead, Bruno who formulated a theory of matter as both passive and active potentiality, inspired by philosophers like David of Dinant and Avicebron. Although Bruno may have borrowed Giles' idea of contraction through matter as well as form, Bruno's notion of matter did not derive from Giles, but from his interpretation of Plotinus' theory of intelligible and corporeal matter. Having arrived at this notion of matter through Plotinus, he employed the term 'contraction' within a metaphysical structure that suited his pantheistic inclinations.

Through the *Liber de causis* and its scholastic commentaries, notably, for present purposes, the one by Giles, Neoplatonic doctrines had been part of scholastic philosophy from the twelfth century. Several references to the *Liber de causis* in Renaissance philosophy suggest that it continued to exert influence well into the sixteenth century. Ficino's Latin translation of Plotinus' *Enneads* may not have been as revolutionary to Bruno's metaphysics as has been assumed, since Bruno could have been introduced to, or at least been prepared for, Plotinus' and Proclus' systems of hypostases through the *Liber de causis*, where they are presented in a way that makes them sound more creationistic than in Plotinus' and Proclus' authentic philosophies. In the *Eroici furori*, for example, Bruno uses the expression 'horizon' to denote the hypostasis Soul. Sarauw refers the passage in the *Eroici furori* to Plotinus' *Enneads*. However, in Ficino's translation of the lines in question, 'horizon' is not used. But in the *Liber de causis* 'horizon' symbolises the hypostasis Soul.1

This coincidence means, on one hand, that what has been perceived as genuinely Plotinian contributions to Bruno's theory of hypostases may in fact originate from the

---

1 See p. 21 n. 3 above.
Liber de causis, and, on the other hand, that in some cases it is probably impossible to determine which source is used. However, Ficino’s translation of, and commentary on, Plotinus undoubtedly supplied Bruno with a notion of matter absent from scholastic derivatives of Neoplatonism derived from the Liber de causis. Bruno blended this scholastic theory of individuation through contraction with a Plotinian or Ficinian account of spiritual and corporeal matter and thereby produced his own idiosyncratic theory of matter.

Besides Giles another predecessor was significant to Bruno’s use of the notion contraction, namely Cusanus. Cusanus probably picked up the notion from the scholastic tradition of which Giles had been part, but subjected the concept to his Neoplatonic idea of procession from unity to plurality. Moreover, Cusanus’ metaphysics and theology are not heterodox and therefore contraction does not, as it does in Bruno, appear in a heterodox metaphysics.

As we have seen in Chapter 7, Bruno did not believe in Christ. Bruno’s critical considerations about Christ are reflected in his use of the term ‘contraction’ in the Spaccio. There we encounter this notion in the ontological sense, describing the relation between the divine and human. The divine, Bruno states immediately before Asclepius’ lament, cannot be experienced directly by human beings. It is accessible to him only inasmuch as it is contracted in living nature.¹ Asclepius’ lament may be read as a literary device, exhorting the reader to venerate the divine in this way.² In the Spaccio, Bruno foretells that the ancient Egyptian wisdom, of which Asclepius was part, will flourish in the future, when the wheel of vicissitude has turned again,

1 BRUNO, Spaccio iii 2, p. 427. For the passage, see INGEGNO, Regia pazzia, pp. 136-137. However, Ingegno’s reading of this page in the Spaccio is coloured by his basic interpretation of contraction in the noetic sense as inspired by Ficino and his theory of a cosmologically structured descent and ascent; see ibid., pp. 133-134.

implying that nature is experienced, and venerated, as God in things.¹ The concept contraction — both as a theory of individuation and as a means of the contemplative philosopher's noetic ascent — helps us understand the philosophy underlying these views.

¹ BRUNO, *Spaccio* iii 2, p. 417.
BIBLIOGRAPHY
MANUSCRIPTS

Bernkastel a./Mosel, Hospital zu Cues, MS 83, 325 fols.
Bernkastel a./Mosel, Hospital zu Cues, MS 195, 110 fols.
PRIMARY SOURCES


Albert the Great. Opera omnia, eds B. Geyer et al., vol. 1-. Aschendorff:

Münster i. W., 1951-.

— De causis et processu universitatis a prima causa, ed. W. Fauser, in Albert the Great, Opera omnia, vol. 17, pt 2.


230
— Cabala del cavallo pegaseo con l’aggiunta dell’asino cillenico, in BOeuC, vol. 6.


— Cantus circaeus ad eam memoriae proxim ordinatus quam ipse ludiciariam appellat, in BOL, vol. 1, pt 1, pp. 179-257.

— De la causa, principio et uno, in BOeuC, vol. 3.

— La cena de le ceneri, in BOeuC, vol. 2.

— De gli eroici furori, in BOeuC, vol. 7.


— De l’infinito, universo e mondi, in BOeuC, vol. 4.


— Lampastrigintastatarum, in BOM, pp. 927-1590.


— [Demagiamathematica], in BOM, pp. 3-158.

— [De magia naturali], in BOM, pp. 159-320 [= Demagia in BOL, vol. 3, pp. 492-506].

— De monade numero et figura, secretioris nempe physicae, mathematicae et metaphysicae elementa, in BOL, vol. 1, pt 2, pp. 319-484.


— De rerum principiis et elementis et causis, in BOM, pp. 585-759.

— *Spaccio de la bestia trionfante*, in *BOeuC*, vol. 5.
— *Summa terminorum metaphysicorum*, in *BOL*, vol. 1, pt 4, pp. 1-128.
— *Trigintasigilli*, in *BOL*, vol. 2, pt 2, pp. 79-120.
— *De triplici minimo et mensura ad trium speculativarum scientiarum et multarum activarumartium principia*, in *BOL*, vol. 1, pt 3, pp. 119-361. Cited as Bruno, *De minimo*.
— *De vinculis in genere*, in *BOM*, pp. 413-584.


— In Dionysium Areopagitam De divinis nominibus, in Ficino, Opera, pp. 1024-1128. Cited as Ficino, In De divinis nominibus.
— De divino furore, in Ficino, Opera, pp. 612-615.
— In Epistolas D. Pauli, ascensus ad tertium coelum, ad Paulum intelligendum, in Ficino, Opera, pp. 425-472.
— In epistolae duodecim Platonis, in Ficino, Opera, pp. 1530-1536.
— Liber de lumine, in Ficino, Opera, pp. 976-986.
— In Platonis Ionom, vel de furore poetico, in Ficino, Opera, pp. 1281-1284.
— In Plotinum. See Plotinus, Operum philosophicorum omnium libri LIV.
— In Timaeum commentarium, in Ficino, Opera, pp. 1438-1484.


— *Tractatus de esse et essentia*: MS Cues 195, fols 67r-105v.


**Iamblichus.** *De mysteriis Aegyptorum, Chaldaeorum, Assyriorum*, together with works by other authors, all in Latin by M. Ficino. A. Manuzio: Venice, 1497, fols a2r-f1v.


— *Ex libro de forma Dei*: MS Cues 83, fols 96r-97r.


NICHOLAS OF CUSA [NICOLAUS KHRYPFFS]. [Opera]. M. Flach?: Strasbourg, 1490?
- [Collections]. B. M. Dulci bellus: Cortemaggiore, 1520?
- Apologia doctae ignorantiae discipuli ad discipulum, ed. R. Klibansy, in COO, vol. 2.
- De coniecturis, eds J. Koch and C. Bormann, in COO, vol. 3.
- La dotta ignoranza, Italian tr. with intro. and notes by G. F. Vescovini, 2nd ed. Città nuova: Rome, 1998. (Fonti cristiane per il terzo millennio, vol. 7.)


— *Elementatio theologiae*. MS Cues 195, fols 34v-66v.


THOMAS AQUINAS. *Opera omnia*, vol. 1-. Rome, 1882-.
— *Liber de causis*: MS Cues 195, fols 1r-34v.


— *Responsio ad lectorem venetum de 36 articulis*, in Aquinas, *Opera omnia*, vol. 42, pp. 337-346.

— *Summa theologiae*, in Aquinas, *Opera omnia*, vols 4-12.


WENCK, J. *Deignotalitteratura*, in J. Hopkins, *Nicholas of Cusa's debate with John Wenck*, pp. 95-118. Hopkins has provided the page and line numbers of the 1910-edition by Vansteenberghe, to which I also refer.
SECONDARY SOURCES


— ‘Introduction’. See Bruno, De la causa, principio et uno, pp. IX-LI.


241


— ‘Iamblichus, Synesius and the Chaldean oracles in Marsilio Ficino’s De vita libri tres: Hermetic magic or Neoplatonic magic?’, in Supplementum festivum: Studies in the honor of Paul Oskar Kristeller, pp. 441-455.


— “‘Cause prime non est yliathim’. Liber de causis, prop. 8[9]: le fonti e la dottrina’: Documenti e studi sulla tradizione filosofica medievale, vol. 1 (1990), pp. 327-351.


FARMER, S. A. ‘Introductory monograph’. See Pico, Conclusiones sive theses DCCCC.

FAUSER, W. ‘Prolegomena’. See Albert the Great, De causis et processu universitatis a prima causa, pp. V-XXXII.


KLIBANSKY, R. ‘The continuity of the Platonic tradition during the Middle Ages’ with a new preface and four supplementary chapters together with ‘Plato’s Parmenides in the Middle Ages and the Renaissance’ with a new introductory preface. Kraus International Publications: Munich, 1981.


248


Moran, D. ‘Pantheism from John Scottus Eriugena to Nicholas of Cusa’, in *American Catholic philosophical quarterly*, vol. 64 (1990), pp. 131-152.


— See Plotinus, Les deux matières.


NASH, P. W. 'Giles of Rome on Boethius' "Diversum est esse et id quod est"': Mediaeval studies, vol. 12 (1950), pp. 57-91.


— ‘Introduction’. See Bruno, Lo spaccio de la bestia trionfante, pp. IX-CCVI.


SPAMPANATO, V. *Vita di G. Bruno con documenti editi e inediti*. 2 vols with continuous pagination. G. Principato: Messina, 1921. (*Studi filosofici*, vol. 10.)


— ‘Introduzione’. See Bruno, De umbris idearum, pp. IX-LXXVII.


Tocco, F. Le opere latine di Giordano Bruno esposte e confrontate con le italiane. Le Monnier: Florence, 1889.


— Autour de la Docte ignorance. Une controverse sur la théologie mystique au XV^e siècle: Aschendorff: Münster i. W., 1915. (Beiträge zur Geschichte der Philosophie des Mittelalters, Band 14, Heft 2-4.)


VESCOVINI, G. F. 'Introduzione', in Nicholas of Cusa, *La dotta ignoranza*, pp. 5-35.


WAGNER, M. F. 'Plotinus' idealism and the problem of matter in *Enneads* vi.4 & 5': *Dionysius*, vol. 10 (1986), pp. 57-83.

WALKER, D. P. 'The astral body in Renaissance medicine': *JWCI*, vol. 21 (1958), pp. 119-133.

— *Spiritual and demonic magic from Ficino to Campanella*. Warburg Institute: London, 1958. (Studies of the Warburg Institute, vol. 22.)


— 'Siger of Brabant', in REP, vol. 8, pp. 764-768.
APPENDIX I

TEOFILO DA VAIRANO AND GILES OF ROME
It is possible that Bruno had gained some knowledge of Giles’ thought during his early education. The Augustinian Teofilo da Vairano, or Variano (d. 1578), had taught him logic the year before Bruno entered the Dominican order, when he was fourteen or fifteen years old, i.e. around 1563; and he may well have introduced Bruno to the works of Giles.1 Vairano had not only studied logic during his education as an Augustinian, which he finished in 1562, but also natural philosophy and theology. For according to the Agustinian ratio studiorum, which Teofilo had followed, the commentaries of Giles or of Thomas Aquinas on the Sentences, a collection of doctrinally central texts from the Scriptures and Church Fathers compiled by Peter Lombard (ca. 1100-1160), were to be read as part of the curriculum of theology.2 Giles’ commentaries on the Sentences had been published in Venice in 1482 and 1492; and they were published there once again in 1581.

Therefore, we can assume that the logic teacher whose private lessons Bruno attended in Naples would at least have been familiar with Giles’ commentary on the Sentences. Unfortunately, we do not know to what extent Teofilo drew attention to Giles’ ideas in his lectures on logic. But it is possible that these lectures were backed


up with ontological reflections, since Aristotelian logic asserts that the subject-predicate structure of propositions in logic is isomorphic with the substance-accidents structure of things. If the young Bruno had indeed acquired some introduction to Giles' work from Vairano, this would help to explain why he might have turned to Giles' commentary on the Liber de causis later in his career.
APPENDIX II

INDEX OF PRIMARY SOURCES
AGRIFFA OF NETTESHEIM

*De occulta philosophia*, ed. V. P. Compagni*

*For full bibliographical information about this edition, see the Bibliography. Similarly for the remaining works listed, apart from classical Greek and Latin works.

iii 4; p. 151
iii 55, p. 567.24-28: p. 139 n. 3
iii 55: p. 151

ALBERT THE GREAT

*De causis et processu universitatis a prima causa*, ed. W. Fauser

i 1, p. 8.21-22: p. 44 n. 1
i 1, p. 8.34: p. 44 n. 1
I iv 1, p. 43.4: p. 44 n. 1
I iv 1, p. 43.63: p. 44 n. 1
II ii 15, p. 108.73-80: p. 182 n. 1
II ii 16, p. 109.11-15: p. 182 n. 1
II ii 22, p. 116.4-34: p. 185 n. 2
II ii 22, p. 116.24-33: p. 182 n. 1

ARISTOTLE*

*All references are to Aristotle, Opera, ed. I. Bekker, Berlin 1837*

*De anima*

i 1 402a22-26: p. 87 n. 2
ii 1 412b27-28: p. 51 n. 1
iii 8 432b7-10: pp. 109 n. 1, 113 n. 2

*Categories*

iv 1b25-2a4: p. 205 n. 2
iv 1b25-2a10: pp. 87 n. 1, 206 n. 1
iv-v 2a4-2b6: p. 87 n. 3
v 2a11-14: p. 50 n. 1
v 2b14-19: p. 50 n. 2
v 2b27-2b6: p. 52 n. 3

*Physics*

I vii 191a4-14: p. 190 n. 1
I ix 192b13-25: p. 50 n. 7

De memoria et reminiscencia

i 450b22-25: pp. 109 n. 2, 113 n. 2
i 450b28-32: p. 110 n. 1

*Metaphysics*

I ix 991a8-991b9: p. 171 n. 2
IV iii 1003b19-20: p. 75 n. 1
V i 1012b34-1013a4: p. 55 n. 2
V i-ii 1012b34-1014a25: p. 55 n. 1
V vii 1017b22-27: p. 88 n. 1
V viii 1017b13-14: p. 50 n. 1
VII i-iv 1028a10-1030b13: pp. 50 n. 3, 55 n. 6
VII iv 1030a3-6: p. 50 n. 5
VII vii-x: p. 171
VII viii 1033b5-19: p. 190 n. 1
VII xi 1037a5-7: p. 51 n. 2
VII xi 1037b29-30: p. 50 n. 4
VII xiii 1038b15-16: p. 50 n. 1
XII: p. 160 n. 2

*Nicomachean ethics*

X vii 1177a12-18: p. 201 n. 1

*Topica*

I ix 103b20-24: p. 87 n. 1

PSEUDO-ARISTOTLE

*Liber de causis*, ed. A. Pattin

i 1-8, pp. 134-135: pp. 163 n. 1, 214 n. 1
ii 20, p. 138: p. 163 n. 2
ii 22, p. 138: pp. 20 n. 3, 21 n. 2, 21 n. 3, 163 n. 4
ii 23, p. 138: p. 163 n. 2
ii 25-26, p. 139: p. 163 n. 3
iv 37, p. 142: pp. 173 n. 2, 174 n. 4, 214 n. 1
iv 37-38, p. 142: pp. 163 n. 1, 180 n. 1
viii(ix) 79, p. 154: p. 165 n. 4
viii(ix) 82-87, pp. 155-157: p. 211 n. 1
viii(ix) 84, p. 156: pp. 20 n. 3, 21 n. 2
viii(ix) 85, p. 156: p. 166 n. 1
viii(ix) 86, p. 156: p. 165 n. 8
viii(ix) 87, pp. 156-157: pp. 178 n. 4, 211 n. 4
Problemata, ed. P. Louis

xxx 1 953a10-19: p. 140 n. 2

AUGUSTINE, ST

De catechizandis rudibus liber unus, ed. J. P. Migne

x 14, cols 321-322: p. 136 n. 2

De diversis quaestionibus 83, ed. J. P. Migne

xlvi 2, col. 30: p. 92 n. 4

BIBLIA SACRA

Vulgata, eds B. Fischer et al.

Actus apostolorum

9.1-12: p. 36 n. 4
22.5-16: p. 36 n. 4
26.12-18: p. 36 n. 4

2 Ad Corinthios

12.1-4: p. 36 n. 4

Ad Hebraeos

11.3: p. 186 n. 2

Secundum Ioannahem

1.1-4: p. 186 n. 2

Secundum Mattheum

21.21-22: p. 26 n. 2

Ad Romanos

9.20-21: p. 103 n. 1

1 Liber Samulelis

14.19: p. 135 n. 3

Ad Timotheum

ii 2.20-21: p. 103 n. 1

BOETHIUS, ANICIUS MANLIUS SEVERINUS

In praedicamenta Aristotelis, in Boethius, Opera omnia, Basel 1570

i, p. 114.5-6: p. 86 n. 3
i, p. 114.5-12: p. 86 n. 4

BRUNO, GIORDANO


i 4, p. 7.13-16: p. 143 n. 4
iii 7, p. 60.19-21: p. 86 n. 2

Articuli centum et sexaginta adversus huius tempestatis mathematicos aique philosophos, eds F. Tocco and H. Vitelli, in BOL, vol. 1, pt 3

p. 59.23-25: p. 199 n. 2
p. 60.12: p. 197 n. 1

La cabala del cavallo pegaseo con l’aggiunta dell’asino cilenico, ed. G. Aquileccia, in BÓeuC, vol. 6

declamazione, p. 23: p. 103 n. 3
declamazione, pp. 23-25: p. 103 n. 2
i, p. 69: p. 89 n. 1
ii, pp. 95-97: p. 47 n. 2

Camoeracensis Acrotimes seu rationes articulorum physicorum adversus
Candelio, ed. G. Aquileccia, in BOL, vol. 1, pt 1
v 17, p. 349: p. 221 n. 3
v 23, p. 393: p. 221 n. 3

De la causa, principio et uno, ed. G. Aquileccia, in BOL, vol. 3
epist., p. 13: pp. 53 n. 1, 59 n. 1
epis., p. 15: p. 58 n. 2
epis., p. 17: pp. 55 n. 5, 62 n. 3, 66 n. 3
epis., pp. 17-19: p. 52 n. 1
epis., p. 21: p. 47 n. 1
epis., p. 23: pp. 54 n. 4, 89 n. 1
ii, pp. 101-111: p. 54 n. 6
ii, pp. 103-107: p. 84 n. 1
ii, p. 111: pp. 54 n. 7, 55 n. 2
ii, pp. 111-113: p. 55 n. 3
ii, p. 113: pp. 56 n. 2, 215 n. 4
ii, p. 115: p. 53 n. 1
ii, pp. 115-117: p. 56 n. 5
ii, p. 117: p. 216 n. 1
ii, p. 121: p. 56 n. 2
ii, pp. 121-125: pp. 20 n. 1, 83 n. 5
ii, p. 123: p. 115 n. 5
ii, p. 125: p. 115 n. 5
ii, p. 127: p. 61 n. 1
ii, p. 135: p. 216 n. 4
ii, p. 137: pp. 53 n. 1, 59 n. 1
ii, pp. 139-141: pp. 32 n. 1, 51 n. 3, 51 n. 4
ii, p. 141: p. 50 n. 7
ii, p. 147: pp. 45 n. 2, 47 n. 1, 58 n. 2, 190 n. 3
ii, pp. 149-151: p. 54 n. 1
iii, p. 169: pp. 52 n. 4, 52 n. 5, 54 n. 5, 57 n. 5, 66 n. 3
iii, pp. 169-171: p. 53 n. 1

iii, p. 173: p. 49 n. 1
iii, pp. 173-179: p. 50 n. 7
iii, pp. 185-187: p. 51 n. 1
iii, pp. 185-189: p. 52 n. 2
iii, p. 187: p. 47 n. 1
iii, p. 189: pp. 43 n. 5, 52 n. 1, 54 n. 2, 59 n. 1
iii, pp. 189-191: pp. 54 n. 3, 55 n. 4, 181 n. 1
iii, p. 191: pp. 50 n. 7, 55 n. 5, 66 n. 3
iii, p. 193: pp. 55 n. 5, 62 n. 3
iii, p. 203: p. 57 n. 5
iii, p. 205: pp. 75 n. 3, 200 n. 3
iii, pp. 213-215: p. 66 n. 4
iv, p. 219: pp. 50 n. 7, 58 n. 3
iv, pp. 219-231: p. 50 n. 7
iv, p. 233: pp. 47 n. 1, 66 n. 3, 70 n. 1
iv, pp. 233-237: p. 76 n. 3
iv, p. 237: pp. 64 n. 1, 67 n. 2, 68 n. 1, 69 n. 2, 69 n. 3, 71 n. 5, 76 n. 3
iv, pp. 237-239: p. 54 n. 4
iv, p. 239: pp. 62 n. 3, 69 n. 2, 69 n. 4, 190 n. 2
iv, p. 241: p. 70 n. 2
iv, p. 243: pp. 47 n. 1, 70 n. 1
iv, pp. 243-245: pp. 75 n. 3, 77 n. 1, 200 n. 3
iv, p. 247: p. 47 n. 1
iv, p. 249: p. 73 n. 2
iv, pp. 249-251: pp. 62 n. 3, 64 n. 1, 71 n. 5, 72 n. 2
iv, p. 251: pp. 67 n. 1, 71 n. 4, 76 n. 1
iv, pp. 251-265: p. 54 n. 4
iv, p. 253: p. 28 n. 2
iv, p. 257: p. 71 n. 5
iv, p. 259: p. 71 n. 5
iv, p. 263: p. 71 n. 5
iv, p. 265: p. 50 n. 7
iv, p. 267: p. 66 n. 3
v, pp. 273-277: p. 73 n. 3
v, p. 277-273: p. 181 n. 1
v, p. 283: p. 61 n. 2
v, p. 285: p. 54 n. 1
v, p. 291: p. 11 n. 1
v, pp. 295-297: p. 167 n. 5
v, p. 297: pp. 11 n. 1, 86 n. 2, 88 n. 2
v, pp. 299-301: p. 199 n. 1
v, pp. 299-307: p. 74 n. 2
v, pp. 299-311: p. 75 n. 3
v, p. 301: p. 74 n. 2
v, pp. 302-303: p. 74 n. 2
v, p. 315: p. 75 n. 3
v, p. 317: p. 69 n. 2
La cena de le ceneri, ed. G. Aquilecchia, in B0euC, vol. 2

i, p. 51: p. 84 n. 1
iii, p. 133: p. 197 n. 3
iii, pp. 155-157: p. 197 n. 3
iii, pp. 159-161: p. 61 n. 2
iii, p. 161: p. 73 n. 5
iii, pp. 171-173: p. 51 n. 4
v, p. 239: p. 73 n. 5
v, p. 257: p. 32 n. 1

De gli eroici furori, ed. G. Aquilecchia, in B0euC, vol. 7

arg., p. 5: p. 99 n. 4
arg., p. 15: p. 216 n. 4
arg., pp. 17-19: p. 99 n. 4
arg., p. 41: p. 167 n. 5
i 3, p. 119: p. 100 n. 1
i 3, pp. 119-121: pp. 100 n. 3, 102 n. 5, 104 n. 1
i 3, p. 121: pp. 101 n. 1, 102 n. 3, 104 n. 1
i 3, p. 123: pp. 99 n. 3, 99 n. 4, 99 n. 5, 101 n. 3, 102 n. 1
i 3, p. 137: pp. 78 n. 1, 93 n. 2, 144 n. 5
i 4, p. 155: p. 144 n. 5
i 4, p. 157: p. 61 n. 2
i 4, p. 159: pp. 78 n. 1, 94 n. 2
i 4, p. 167: p. 47 n. 1
i 4, p. 189: p. 21 n. 3
i 4, p. 189.11-19: p. 119 n. 3
i 5, p. 225: pp. 95 n. 2, 129 n. 3
ii 1, p. 297.12-18: p. 119 n. 3
ii 1, p. 315: p. 94 n. 1
ii 1, pp. 325-327: p. 16 n. 1
ii 1, p. 327: pp. 16 n. 2, 25 n. 4, 31 n. 4, 39 n. 1, 78 n. 1, 94 n. 2, 145 n. 2
ii 2, p. 389: p. 216 n. 4s
ii 3, p. 421: pp. 78 n. 1, 94 n. 2
ii 3, p. 423: p. 98 n. 1
ii 4, p. 457: p. 84 n. 1
ii 5, p. 465: p. 84 n. 1

Idiota triumphant seu de Mordentio inter geometras deo, dialogus, ed. G. Aquilecchia

i, pp. 6.1-7.7: p. 100 n. 3
i, p. 6.19-24: p. 100 n. 1

De imaginum, signorum et idearum compositione ad omnia inventionum, dispositionum et memoriae genera, eds F. Tocco and H. Vitelli, in BOL, vol. 2, pt 3

dedication, pp. 89.20-90.30: p. 89 n. 1
dedication, p. 91.11-16: p. 119 n. 2
i i i, p. 94.12-18: pp. 84 n. 1, 90 n. 2
i i i, p. 94.14-18: pp. 92 n. 3, 129 n. 5
i i i, p. 98.1-7: p. 84 n. 1
i i i, p. 100.12-17: p. 47 n. 1
i i i, p. 101.4-24: p. 89 n. 1
i i i, p. 119.3-15: p. 78 n. 1
i i i, p. 198.6-13: p. 89 n. 1
i i i, pp. 295.8-296.4: p. 126 n. 1

De immenso et innumerabilibus seu de universo et mundis, ed. F. Fiorentino, in BOL, vol. 1, pts 2 and 3

i 1, p. 201.3-6: p. 51 n. 4
i 1, p. 202.16-19: p. 20 n. 3
i 1, p. 205.1-4: pp. 47 n. 1, 58 n. 3, 190 n. 4
i i i, pp. 381.25-382.3: p. 199 n. 5
i v, pp. 45.17-46.19: p. 199 n. 5
v 9, pp. 146.1-149.12: p. 216 n. 4
v 12, p. 156.10-17: pp. 47 n. 1, 58 n. 3
v i i i, p. 303.6-8: p. 47 n. 1
v i i i, p. 310.9: p. 180 n. 3
v i i i, p. 310.10-18: p. 180 n. 3

De l'infinito, universo e mondi, ed. Aquilecchia, in B0euC, vol. 4

epist., p. 25: p. 197 n. 3
epist., p. 45: p. 84 n. 1
epist., p. 55: p. 51 n. 4
i, p. 61: pp. 121 n. 2, 144 n. 5
i, p. 85: pp. 22 n. 4, 61 n. 2, 73 n. 5, 216 n. 4
i, p. 87: p. 56 n. 3
i, p. 101: p. 216 n. 4
i i i, pp. 195-197: p. 197 n.
i i i, p. 197: pp. 197 n. 3, 200 n. 1
v, p. 361: p. 73 n. 4


praefatio, p. 234.6-9: pp. 197 n. 1, 199 n. 5
praefatio, p. 240.1-10: p. 221 n. 3
i i x, p. 280.20-25: p. 79 n. 1
Lampas triginta statuarum, ed. N. Tirinnanzi, in BOM; = BOL, vol. 3, indicated in brackets

§64.1-4, p. 1020 (p. 42.22-24): p. 216 n. 4
§64.14-23, p. 1022 (p. 43.7-15): p. 84 n. 1
§74.1-16, pp. 1036-1038 (p. 50.4-19): p. 24 n. 1
§§241.1-244.11, pp. 1226-1230 (pp. 140.4-141.27): p. 145 n. 1
§242.1-3, p. 1226 (p. 140.14-16): p. 143 n. 4
§243.1-19, pp. 1228-1230 (pp. 140.24-141.17): p. 144 n. 1
§243.11-13, p. 1228 (p. 141.9-11): p. 144 n. 3
§243.14-17, p. 1230 (p. 141.12-15): pp. 78 n. 1, 144 n. 4
$243.18-19, p. 1230 (p. 141.16-17): p. 144 n. 6
§244.1-6, p. 1230 (p. 141.18-22): p. 119 n. 2, 121 n. 2, 122 n. 2
§245.1-4, p. 1232 (p. 142.3-6): p. 145 n. 1
§246.12-27, pp. 1232-1234 (p. 143.1-16): pp. 28 n. 1, 145 n. 4
§322.12-16, p. 1316 (p. 183.20-24): p. 221 n. 3
§408.10-18, pp. 1434-1436 (pp. 238.19-239.1): pp. 82 n. 2
§408.13-23, pp. 1434-1436 (pp. 238.22-239.6): pp. 47 n. 2
§419.15-22, p. 1452 (p. 245.16-24): p. 47 n. 1
Libri physicorum aristotelis explanati, in BOL, vol. 3
p. 381.22: p. 36 n. 2

De magia mathematica, ed. N. Tirinnanzi, in BOM; = BOL, vol. 3, indicated in brackets

§2.27-30, p. 10 (p. 495.16-20): p. 221 n. 3

De magia naturali, ed. S. Bassi, in BOM; = De magia, in BOL, vol. 3, indicated in brackets

§2.17-24, p. 162 (p. 398.8-16): pp. 104 n. 4, 130 n. 2
§2.17-30, p. 162 (p. 398.8-22): p. 141 n. 4
§6.1-23, pp. 168-170 (pp. 401.25-402.21): p. 11 n. 1
§7.1-2, p. 172 (p. 403.4-5): p. 89 n. 1
§16.6-7, p. 188 (p. 409.16-17): p. 20 n. 1
§16.6-10, p. 188 (p. 409.16-20): pp. 20 n. 3, 78 n. 1

De monade numero et figura, secretioris nempe physicae, mathematicae et metaphysicae elementa, ed. F. Fiorentino, in BOL, vol. 1, pt 2

iii, p. 356.11-27: p. 119 n. 3
iii, p. 356.20-27: p. 78 n. 1
v, p. 387.20: p. 35 n. 3
vii, pp. 427.23-428.1: p. 221 n. 3
xi, p. 464.21-24: p. 221 n. 3

Oratio valedictoria, ed. F. Fiorentino, in BOL, vol. 1, pt 1

pp. 14.22-15.5: p. 89 n. 1
p. 17.2-7: pp. 197 n. 1, 200 n. 2


p. 58.8-18: p. 79 n. 1
p. 75.12-15: p. 79 n. 1

De rerum principiis et causis, ed. E. Scapparone, in BOM; = BOL, vol. 3, indicated in brackets

§41.1-6, p. 634 (p. 530.5-11): p. 141 n. 4
§77, p. 684.3-7 (p. 553.1-8): p. 47 n. 1
§90.1-3, pp. 698-700 (p. 560.16-18): p. 221 n. 3
§99.7-8, pp. 710-712 (p. 566.7-15): p. 221 n. 3


i 5, pp. 197.25-199.17: p. 27 n. 2
i 14-16, pp. 164.9-165.7: p. 48 n. 1
i 16, pp. 164.27-165.7: p. 89 n. 1
i 17, p. 165.11-13: p. 102 n. 4
i 18, p. 165.17-21: p. 22 n. 2
i 24, p. 167.24-28: p. 120 n. 2

267
Theses de magia, ed. S. Bassi, in BOM, = BOL, vol. 3, indicated in brackets

§10.6-10, p. 330 (p. 438.19-22): p. 90 n. 2
§21.2-4, p. 340 (p. 462.28-30): p. 84 n. 1


p. 90.5-7: p. 79 n. 1
pp. 105.30-106.10: p. 79 n. 1


p. 73: p. 16 n. 2
p. 123-18: p. 128 n. 1
p. 123-23-27: p. 129 n. 1
p. 133.14-19: p. 45 n. 3
p. 139.8-11: p. 79 n. 1

De triplici minimo et mensura ad trium speculativarum scientiarum et multarum activarum artium principia, eds F. Tocco and H. Vitelli, in BOL, vol. 1, pt 3

I 1, p. 136.21-28: p. 89 n. 1
I 4, p. 145.28-29: p. 47 n. 1
I 4, p. 146.20-24: pp. 78 n. 1, 85 n. 1
I 4, p. 147: p. 74 n. 2
I 4, p. 148: p. 74 n. 2
I 4, p. 149.3-5: p. 84 n. 1
I 9, p. 169.21-22: p. 47 n. 1
V ii 3, p. 193.3-7: p. 47 n. 2
De umbris idearum, ed. R. Sturlese

§22.4-11, p. 26: p. 84 n. 1
§23.2-8, p. 27: p. 84 n. 1
§25.7-11, pp. 28-29: p. 84 n. 1
§28.9-11, p. 31: pp. 85 n. 2, 124 n. 1
§28.9-15, p. 31: p. 167 n. 5
§28.11-15, p. 31: pp. 124 n. 2, 167 n. 5
§28.15-17, p. 31: p. 124 n. 3
§29.2-4, p. 32: pp. 47 n. 1, 129 n. 3, 215 n. 2
§29.7-8, p. 32: p. 84 n. 1
§30.2-5, p. 32: p. 129 n. 4
§33.2-4, pp. 33-34: p. 125 n. 1
§34.2-7, p. 34: pp. 11 n. 1, 125 n. 1, 126 n. 4, 129 n. 2, 131 n. 1, 131 n. 3
§34.4, p. 34: p. 126 n. 2
§34.8-10, p. 34: pp. 126 n. 1, 127 n. 1
§36.2-5, p. 35: p. 129 n. 6
§36.4, p. 35: p. 129 n. 1
§36.6, p. 36: p. 129 n. 1
§52-53, pp. 43-45: p. 74 n. 2
§52, p. 44: p. 74 n. 2
§52.10-12, pp. 43-44: p. 89 n. 1
§52.12-15, p. 44: p. 92 n. 3
§52.13, p. 44: p. 167 n. 5
§52.14-15, p. 44: p. 84 n. 1
§52.16-53.14, pp. 44-45: p. 199 n. 3
§54.6, p. 47: p. 107 n. 1
§54.6-8, p. 47: p. 78 n. 1
§55.9-12, p. 48: pp. 78 n. 1, 129 n. 4
§61.2-8, p. 51: p. 81 n. 2
§61.3, p. 51: p. 107 n. 1
§61.5-8, p. 51: p. 47 n. 2
§63.2-6, p. 52: pp. 47 n. 1, 61 n. 2, 215 n. 2
§70.3-4, p. 55: p. 84 n. 1
§71.2, p. 55: pp. 107 n. 1, 107 n. 2
§72.2-7, p. 56: pp. 93 n. 1, 130 n. 1, 146 n. 3
§72.3, p. 56: p. 107 n. 1
§84.11-12, p. 63: pp. 78 n. 1, 93 n. 1
§87.8-13, p. 66: p. 112 n. 4
§92.12-17, p. 69: pp. 47 n. 1, 215 n. 2
§94.2-9, pp. 69-70: pp. 47 n. 1, 215 n. 2, 215 n. 3
§94.6, p. 70: p. 215 n. 3
§97.2-4, p. 71: p. 84 n. 1
§100.2-6, p. 73: p. 79 n. 1
§140.2-9, p. 102: p. 93 n. 1
§159.4-6, p. 117: p. 131 n. 4
§164.2-9, p. 122: p. 131 n. 4
§180.1-5, p. 131: p. 79 n. 1
§210.3, p. 159: p. 131 n. 4
§222.15-19, p. 175: p. 131 n. 4
§234.14-17, p. 193: pp. 47 n. 1, 215 n. 2

De vinculis in genere, ed. E. Scapparone, in BOM = BOL, vol. 3, indicated in brackets

§63.2-8, pp. 492-494 (p. 684.17-23): p. 84 n. 1
§77.35-47, pp. 518-520 (p. 696.1-13): p. 66 n. 3

CALVIN, JOHN

Institutio religionis christianae, eds G. Baum, E. Cunitz and E. Reuss

III xxiii 4, col. 701: p. 103 n. 1
IV xiii 10, col. 932: p. 18 n. 3

CAMPANELLA, TOMMASO

Apologia pro Galileo, Frankfurt 1622

ii, pp. 9-10: p. 193 n. 1
iv, p. 52: p. 193 n. 1

CICERO, MARCUS TULLIUS

De naturae deorum, ed. H. Rackham

II 1x 150: p. 135 n. 2
De officiis, ed. W. Miller

I xli 146: p. 135 n. 2

Pro Sestio, ed. R. Gardner

viii 19: p. 135 n. 2

Tusculanae disputationes, ed. J. E. King

I xxxvii 90: p. 135 n. 4
II xxxiv 83: p. 136 n. 1
IV vi 14: p. 135 n. 4

270
DIACETTO, F. CATTANI DA

I tre libri d'amore, Venice 1561

iii 2, pp. 108-110: p. 29 n. 4

DREITRICH OF FREIBERG

De animatione caeli, ed. L. Sturlesen

iv, §3, pp. 15-16: pp. 185 n. 3, 204 n. 1
vii, §1, p. 17: pp. 185 n. 4, 186 n. 2
vii, §2, p. 18: p. 186 n. 2
viii, §§1-4, pp. 19-20: p. 186 n. 1

De visione beatifica, ed. B. Mojsisch

IV iii 1, §4, p. 112: p. 185 n. 1

PSEUDO-DIONYSIUS THE AREOPIGE

De divinis nominibus, tr. A. Traversari, ed. P. Chevallier

iii 1, pp. 124-125: p. 126 n. 3

DUNS SCOTUS, JOHN

De primo principio, ed. E. Roche

iv, conclusio 8: p. 207 n. 5
iv, conclusio 9, p. 118: p. 207 n. 5

FICINO, MARSHILIO

Commentarium in Convivium Platonis, de amore, ed. R. Marcel

II iii, p. 147.17-19: p. 24 n. 2
II iii, p. 149.30-39: p. 92 n. 5
II vii, pp. 153-155: p. 29 n. 3
V vi, p. 185.5-7: p. 92 n. 5
VI v, p. 205.7-12: p. 29 n. 3
VI v, p. 205.20-30: p. 98 n. 2
VI vii-viii, pp. 208-212: p. 29 n. 3
VI ix, p. 215.3-12: p. 98 n. 2
VII iii, p. 245.10-12: p. 100 n. 2
VII xii-xiii, pp. 256.19-258.10: p. 100 n. 2
VII xiv, p. 257.2: p. 98 n. 3

In Dionysium Areopagitam De divinis nominibus, in Ficino, Opera, Basel 1576

iii 1, p. 1049.10-37: p. 126 n. 4
iii 1, p. 1049.13-16: p. 126 n. 4

De divino furore, in Ficino, Opera, Basel 1576

p. 614.1: p. 100 n. 2

In Epistolae D. Pauli, ascensus ad tertium coelum, ad Paulum intelligendum, in Ficino, Opera, Basel 1576

prooemium, p. 425.29-31: pp. 37 n. 5, 146 n. 2

In epistolas duodecim Platonis, in Ficino, Opera, Basel 1576

p. 1531.23-29: p. 92 n. 5

Le lettere, ed. S. Gentile

1.115.181-185: pp. 97 n. 2, 139 n. 1

Liber de lumine, in Ficino, Opera, Basel 1576

ii, p. 977.1-3: p. 43 n. 4

In Platonis Ionen, vel de furore poetico, in Ficino, Opera, Basel 1576

p. 1281.40-43: p. 100 n. 2

In Plotinum, in Plotinus, Operum philosophicorum omnium libri LIV in sex enneades distributi, Basel 1580

II i [40] 1, p. 86.32-33: pp. 64 n. 1, 72 n. 5
II i [40] 1, p. 86.33-35: p. 65 n. 5
II i [40] 7, p. 93.27-31: p. 43 n. 4
II iv [12], p. 148.32: p. 67 n. 2
II iv [12] 4, p. 150.10: p. 68 n. 3
II iv [12] 4, p. 150.28-29: pp. 68 n. 1, 69 n. 1
II iv [12] 11, p. 154.43-44: p. 73 n. 1
II v [25] 3, p. 171.29-31: p. 71 n. 3
III vi [26], pp. 300.54-301.1: p. 119 n. 4
IV iii [27] 27, p. 392.51-65: p. 116 n. 3
IV iii [27] 31, p. 395.10-16: p. 117 n. 3
IV iii [27] 31, p. 395.10-18: p. 117 n. 1
IV iii [27] 31, p. 395.16-18: p. 117 n. 4
IV vi [41], p. 433.15: p. 111 n. 3
V vii [31] 11, p. 552.34-37: pp. 95 n. 3, 96 n. 2
VI vii [38] 11, p. 552.34-37: pp. 95 n. 3, 96 n. 2

In Plotinum, in Ficino, Opera, Basel 1576

In Phaedrum, ed. M. J. B. Allen; = In Phaedrum, in Ficino, Opera 176, indicated in brackets

i, pp. 75.27-79.28 (p. 1364.5-47): p. 100 n. 2
ii, p. 75.29 (p. 1364.8): p. 98 n. 3

Responsio petenti Platonice instructionem et librorum numerum, ed. R. Klibansky

p. 46, line 39: p. 157 n. 2

Theologia platonica, ed. R. Marcel

vi i 2, vol. 1, p. 263: p. 22 n. 2
vi i 2, vol. 1, pp. 265-266: p. 22 n. 2
viii 16, vol. 1, pp. 329.30-330.11: p. 42 n. 1
xi 4, vol. 2, p. 112.21-34: p. 92 n. 4
xii i 2, vol. 2, p. 219.22-25: pp. 139 n. 3, 152 n. 2
xiii i 2, vol. 2, p. 237.18-20: p. 96 n. 4
xiii i 4, vol. 2, p. 237.20-26: p. 97 n. 1
xv 16, vol. 3, p. 81.19-34: p. 92 n. 4
xv 16, vol. 3, p. 83.10-28: p. 117 n. 4
xviii 5, vol. 3, pp. 196-197: p. 141 n. 3

Theologia platonica, de immortalitate animorum, in Ficino, Opera, Basel 1576

xiii i 2, p. 294.27: p. 139 n. 3

In Timaeum, in Ficino, Opera, Basel 1576

x, p. 1442.5-10: p. 43 n. 4
lxxx, p. 1479.43-60: p. 36 n. 3

De vita, eds C. V. Kaske and J. R. Clark

proemium, lines 25-32, pp. 102-104: p. 136 n. 4
i 2.11-13, p. 110: pp. 136 n. 5, 137 n. 4
i 2.13-15, p. 110: p. 137 n. 1
i 3-6, pp. 112-122: p. 98 n. 2
i 4.22-48, p. 114: p. 141 n. 1
i 5.3-5, p. 116: p. 140 n. 2
i 5.5-7, p. 116: pp. 140 n. 3, 140 n. 4
i 5.8-12, p. 116: p. 140 n. 5
i 7, pp. 122-128: p. 141 n. 2
iii 2.67-72, p. 252: p. 138 n. 3
iii 2.89-94, p. 254: p. 137 n. 7
iii 3.1-42, pp. 255-257: p. 138 n. 1
iii 4.1-69, pp. 259-263: p. 138 n. 1
iii 12.28-31, pp. 298-300: p. 138 n. 2
iii 22.4-11, p. 362: p. 137 n. 4
iii 22.7, p. 362: p. 137 n. 4
iii 22.18-31, p. 364: p. 137 n. 4
iii 22.39-41, p. 364: p. 143 n. 3
iii 22.108-115, pp. 368: p. 137 n. 7
iii 26.49-63, pp. 386: p. 138 n. 2
iii 26.77-84, pp. 388: p. 138 n. 2

Il processo di Giordano Bruno

pp. 16-17: p. 160 n. 1
p. 28: p. 18 n. 2
p. 55: p. 160 n. 1
p. 57: p. 160 n. 1
p. 60: p. 160 n. 1
p. 65: p. 18 n. 2
p. 156: p. 157 n. 2
p. 160: p. 18 n. 2
p. 168: p. 160 n. 1
p. 177: pp. 18 n. 2, 160 n. 1
p. 178: p. 160 n. 1
p. 193: p. 160 n. 1
p. 217: p. 160 n. 1
p. 249: p. 18 n. 2
p. 251: p. 18 n. 2
p. 259: p. 160 n. 1
p. 270: p. 160 n. 1
p. 272: p. 160 n. 1
p. 277: p. 160 n. 1
p. 286: p. 160 n. 1
p. 287: p. 160 n. 1
p. 292: p. 18 n. 2

Firpo, Luigi

Il processo di Giordano Bruno

pp. 16-17: p. 160 n. 1
p. 28: p. 18 n. 2
p. 55: p. 160 n. 1
p. 57: p. 160 n. 1
p. 60: p. 160 n. 1
p. 65: p. 18 n. 2
p. 156: p. 157 n. 2
p. 160: p. 18 n. 2
p. 168: p. 160 n. 1
p. 177: pp. 18 n. 2, 160 n. 1
p. 178: p. 160 n. 1
p. 193: p. 160 n. 1
p. 217: p. 160 n. 1
p. 249: p. 18 n. 2
p. 251: p. 18 n. 2
p. 259: p. 160 n. 1
p. 270: p. 160 n. 1
p. 272: p. 160 n. 1
p. 277: p. 160 n. 1
p. 286: p. 160 n. 1
p. 287: p. 160 n. 1
p. 292: p. 18 n. 2
GlI.ES OF ROvE

Opus super authorem de causis, Alpharabium,
Venice 1550

proemio, Y: p. 177 n. 1
i, fol. 4r, lines 25-31: p. 177 n. 2
i, fol. 5r, lines 28-31: p. 177 n. 2
ii, fol. 7r, lines 16-37: p. 22 n. 1
ii, fol. 8r, lines 38-44: p. 177 n. 2
ii, fol. 8v, lines 40-42: pp. 179 n. 2, 207 n. 4, 214 n. 1
ii, fol. 8v, lines 1-18: p. 179 n. 3
ii, fol. 8v, lines 9-18: p. 177 n. 2
ii, fol. 8v, lines 11-13: p. 179 n. 3
iv, fol. 15r, lines 16-20: p. 177 n. 2
iv, fol. 16r, lines 14-18: pp. 177 n. 2, 188 n. 2, 189 n. 7
iv, fol. 16r, lines 29-31: p. 188 n. 1
iv, fol. 16r, lines 29-35: p. 189 n. 7
iv, fol. 16r, lines 32-35: p. 188 n. 1
iv, fol. 16r, lines 35-36: p. 179 n. 1
iv, fol. 16r, lines 40-42: p. 179 n. 1
iv, fol. 16r, lines 42-43: p. 179 n. 2
iv, fol. 20r, lines 19-24: pp. 177 n. 2, 189 n. 7
v, fol. 20v, lines 22-24: p. 189 n. 5
v, fol. 20v, lines 35-39: p. 184 n. 1
v, fol. 20v, lines 35-42: p. 177 n. 1
v, fols 20r, line 30-21r, line 3: p. 189 n. 5
vi, fol. 23r, lines 10-11: p. 177 n. 2
vi, fol. 23r, lines 14-18: p. 177 n. 2
vi, fol. 23r, lines 15-18: p. 179 n. 2
vi, fol. 23r, lines 23-25: p. 177 n. 2
vii, fol. 25r, lines 18-21: p. 177 n. 2
vii, fol. 25r, lines 33-42: pp. 88 n. 2, 206 n. 2
vii, fol. 25r, lines 34-44: p. 177 n. 2
vii, fol. 25r, lines 40-42: pp. 183 n. 5, 207 n. 1
ix, fol. 35r, lines 25-26: p. 179 n. 1
ix, fol. 35r, lines 30-41: pp. 177 n. 2, 188 n. 1
ix, fol. 35r, lines 35-37: p. 183 n. 3
x, fol. 36r, lines 30-36: p. 177 n. 2
x, fol. 36r, lines 33-35: p. 179 n. 2
x, fol. 37r, lines 32-37: pp. 177 n. 2, 178 n. 3
x, fol. 37r, lines 42-46: p. 177 n. 2
x, fol. 38r, lines 38-44: p. 177 n. 2
xiv, fol. 47r, lines 44-46: p. 177 n. 2
xvii, fol. 62r, lines 41-44: p. 177 n. 2
xxii, fol. 74v, lines 14-20: pp. 177 n. 2, 188 n. 1, 189 n. 7
xxii, fol. 74v, lines 28-36: p. 177 n. 2
xxii, fol. 74v, lines 41-44: pp. 177 n. 2, 189 n. 7
xxii, fol. 76v, line 40 - fol. 77v, line 3: p. 189 n. 5
xxvi, fol. 89r, lines 2-3: p. 179 n. 1

Theoremata de esse et essentia, ed. E. Hoedez

theorema 1, p. 1.2-5: p. 203 n. 1
theorema 1, p. 2.13-17: p. 178 n. 1
theorema 1, p. 4.1-3: p. 178 n. 1
theorema 1, p. 4.11-17: p. 178 n. 1
theorema 3, pp. 13.16-14.3: p. 178 n. 1
theorema 4, p. 16.1-10: p. 212 n. 1
theorema 4, p. 16.5-10: p. 212 n. 1
theorema 22, p. 159.2-7: p. 203 n. 1

Tractatus de esse et essentia, in MS Cues 195

fol. 67v: p. 203 n. 1
fol. 105v: p. 203 n. 1

PSEUDO-HENRY OF GHENT

Quaestiones in Librum de causis, ed. J. P. Zwaenepoel

theorema 3, resp. ad qu. 23.48-54, p. 59: p. 171 n. 1
theorema 4.5, qu. 24, p. 60: p. 171 n. 3
theorema 4.12-13, qu. 24, p. 60: pp. 171 n. 4, 175 n. 1
theorema 4.28-31, qu. 25, p. 61: pp. 169 n. 3, 171 n. 5
theorema 4.79-81, resp. ad qu. 25, p. 63: pp. 169 n. 3, 172 n. 1, 175 n. 2

HOMER


vii.421-422: p. 21 n. 1

273
IAMBlichus

De mysteriis Aegyptorum, Chaldaeorum, Assyriorum, ed. and tr. M. Ficino, Venice 1497

fols b5r, line 37 - b6r, line 8: p. 25 n. 3

De mysteriis Aegyptorum, ed. des Places

iii 3, p. 101: p. 24 n. 3

LANDiNO, CRISTOForo

Disputationes camaldulenses, ed. P. Lohé

iii, pp. 125-126: p. 29 n. 4

LOYOLA, STo IgnAUIuS

Exercicios espirituales, ed. J. Rickaby

p. 4: p. 35 n. 3
p. 48: p. 35 n. 2

LULL, RAYMOND

Lectura artis, ed. J. G. Estelrich

xi, pp. 426-428: p. 79 n. 1

Ex libro de forma Dei, in MS Cues 83

96r, lines 57-58: p. 207 n. 5
97r, lines 1-3: p. 207 n. 5

LUThER, MARTIN

De servo arbitrio, ed. U. Freitag, in Martin Luthers Werke. Kritische Gesamtausgabe, vol. 18

p. 787.13-14: p. 103 n. 1

MERSennE, MArIN

L’impiété des déistes, Paris 1624

i 10, pp. 232-234: pp. 26n. 3, 149 n. 1
i 10, p. 234: p. 36 n. 4
i 10, pp. 234-235: p. 149 n. 1
ii 17, pp. 326-342: p. 193 n. 2
ii 19, pp. 358-361: p. 193 n. 2

NICHOLAS OF CUSA

Apologia docta ignorantiae discipuli ad discipulum, ed. R. Klibansky

p. 8.16-19: p. 213 n. 5
pp. 22.10-23.14: p. 213 n. 3

Apologia docta ignorantiae discipuli ad discipulum, Strasbourg 1490?

fols 206r-212r: p. 213 n. 1

Apologia docta ignorantiae discipuli ad discipulum, ed. Fèvre, Paris 1514

vol. 1, fols 34r-41r: p. 213 n. 1

Apologia docta ignorantiae discipuli ad discipulum, Basel 1565

pp. 63-75: p. 213 n. 1

De beryllo, eds J. G. Senger and C. Bormann, in COO, vol. 11, pt 1

§§8.13-10.22, pp. 11-13: p. 199 n. 3
§§9, 10 and 19, pp. 11-13, 22-24: p. 74 n. 2

De coniecturis, eds J. Koch and C. Bormann, in COO, vol. 3

i 7, §§27.17-28.16, pp. 34-35: p. 205 n. 1

De docta ignorantia, eds E. Hoffmann and R. Klibansky, in COO, vol. 1

i 2, p. 7.3-12: p. 75 n. 2
i 13, p. 26: p. 74 n. 2
i 23, p. 46.22-23: p. 214 n. 1
ii 2, p. 68.23-30: p. 209 n. 1
ii 4, p. 74.25-28: p. 210 n. 7
ii 4, p. 74.26-27: p. 211 n. 2
ii 4, pp. 74.28-75.4: p. 211 n. 3
ii 5, pp. 76.1-78.29: p. 216 n. 3
Senno vi, ed s. M. Bodewig et al., in COO, vol. 16
§31.33-36, p. 115: p. 126 n. 4
De visione Dei, ed. A. D. Riemann, in COO, vol. 6
ix, §35, p. 154: p. 215 n. 3

Pico della Mirandola, Giovanni

Commento dello illustissimo signor conte Joanni Pico Mirandolano sopra una canzona de amore composta da Girolamo Benivieni cittadini fiorentino secondo la mente et opinione de' platonici, ed. E. Garin

io 10-13, pp. 498-504: p. 29 n. 4
iii 4, p. 530: p. 37 n. 5

Conclusiones sive theses DCCC, ed. S. A. Farmer

6-1-10, pp. 460-464: p. 157 n. 2
6-4, p. 462: p. 180 n. 1

Plato*

*Unless otherwise indicated, I cite the edition by J. Burnet, in the series Scriptorum classicorum bibliotheca Oxoniensis

Phaedo

72e3-77a5: p. 115 n. 1

Phaedrus

245a1-8: p. 140 n. 5
246a3-d2: p. 64 n. 4
265a9-11: p. 100 n. 2
265b2-5: p. 98 n. 3

Symposium

180d3-e5: p. 29 n. 1

Theaetetus

144a5-b2: p. 140 n. 3

Timaeus

28a6-b1: p. 44 n. 1

Timaeus, tr. Calcidius, ed. J. H. Waszink

28a, p. 20.22: p. 44 n. 1
PROCLUS

*Elementatio theologica*, ed. H. Boese

prop. 1-13, p. 3: p. 202 n. 3  
prop. 21.5, p. 14: p. 204 n. 1  
prop. 125.1, p. 63: p. 201 n. 1  
prop. 129, p. 65: p. 211 n. 4  
prop. 132.1, p. 66: p. 201 n. 1  
prop. 138.1-2, p. 69: pp. 174 n. 1, 174 n. 4  
prop. 177.6-9, p. 87: p. 169 n. 2  
prop. 211.7-11, p. 103: p. 202 n. 2

*Elementatio theologica*, in MS Cues 195

fol. 34a: p. 202 n. 3  
fol. 66b: p. 202 n. 3

*Elements of theology*, ed. E. R. Dodds

prop. 21, p. 24: p. 221 n. 1  
prop. 21, p. 24.5: p. 204 n. 1  
prop. 101, p. 90: p. 180 n. 2  
prop. 125, p. 110.29: p. 204 n. 1  
prop. 132, p. 116.28: p. 204 n. 1  
prop. 138, p. 122.7: p. 174 n. 2  
prop. 173, pp. 150-221.27: p. 167 n. 4  
prop. 177, p. 156.1-9: p. 167 n. 4  
prop. 177, p. 156.7-9: p. 169 n. 1  
prop. 177, p. 156.16-20: p. 167 n. 4

QUINTILIAN, MARCUS FABIUS

*Institutio oratoria*, ed. H. E. Butler

XI ii 20: p. 127 n. 2

ROMBERCH, JOHN

*Congestorium artificiose memorie*, Venice 1533

iii 15, fol. 66v: p. 127 n. 2

SPAMPANATO, VINCENZO

*Vita di G. Bruno con documenti editi e inediti.*  
pp. 651-652: p. 160 n. 1

p. 700: p. 119 n. 1

THOMAS AQUINAS

*De ente et essentia*, ed. M.-D. Roland-Gosselin

iv, pp. 29.32-30.7: p. 176 n. 2  
iv, pp. 31.18-32.6: p. 175 n. 5  
iv, p. 32.3-4: p. 172 n. 4

*In librum beati Dionyssii De divinis nominibus expositio*, ed. C. Pera

iii 1, §§238-244, p. 76: p. 126 n. 4

*Super Librum de causis expositio*, ed. H. D. Saffrey

proemium, p. 1.4-6: p. 201 n. 1  
proemium, p. 3.1-5: p. 156 n. 2  
proemium, p. 3.5-10: p. 172 n. 3  
iv, p. 27.11-14: pp. 174 n. 1, 174 n. 5  
iv, p. 29.3-5: p. 174 n. 6  
iv, p. 29.7-8: p. 175 n. 3  
ix, p. 64.6-15: p. 175 n. 5  
ix, p. 64.9-13: p. 176 n. 1  
xxxii, p. 145.17-21: p. 201 n. 1

*Liber de causis*, in MS Cues 195

fols 1r-34v: p. 157 n. 2  
fol. 1m: p. 201 n. 1  
fol. 34vb: p. 201 n. 1

*Quaestiones quodlibetales*, ed. R. P. Mandonnet

quodlibetum 3, qu. 1, art. 1, pp. 71-72: pp. 179 n. 2, 187 n. 2, 214 n. 1

*Responsio ad lectorem venetum de 36 articulis*, in Aquinas, *Opera omnia*, vol. 42

art. 7, p. 340: p. 187 n. 1

*Summa theologiae*, in Aquinas, *Opera omnia*, vols 4-12

1a, qu. 7, art. 2, resp., vol. 4, p. 74: p. 207 n. 5

277
1a, qu. 33, art. 1, resp., vol. 4, p. 358: p. 55 n. 2
1a, qu. 44, art. 1, vol. 4, pp. 455-457: p. 54 n. 7
1a, qu. 44, art. 2, arg. 1m, vol. 4, p. 457: p. 62 n. 1
1a, qu. 44, art. 2, arg., vol. 4, p. 457: p. 190 n. 1
1a, qu. 44, art. 2, resp., vol. 4, p. 458: pp. 50 n. 6, 22 n. 2, 173 n. 1, 187 n. 3, 188 n. 1
1a, qu. 45, art. 1-8, vol. 4, pp. 464-477: p. 182 n. 2
1a, qu. 45, art. 1, resp., vol. 4, p. 464: p. 182 n. 4
1a, qu. 45, art. 1, 2 and 4, vol. 4, pp. 464, 466, 468: p. 182 n. 3

Summa contra gentiles, in Aquinas, Opera omnia, vols 13-15
i 55, vol. 13, p. 157: p. 91 n. 2

Virgil

Aeneid, ed. H. R. Fairclough

vi.726-727: p. 53 n. 1s

WENCK, JOHN

De ignota litteratura, ed. J. Hopkins

p. 24.19: p. 213 n. 2
p. 26.27-30: p. 213 n. 4
p. 34.12-15: p. 214 n. 1
p. 36.20-29: p. 213 n. 4
p. 37.14-34: p. 213 n. 4

278