Medicine and Religion in Early Dominican Demonology

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The article explores the theories of Roland of Cremona op (†1259), the first Dominican master of theology in Paris and a practising physician, regarding demonic influence on body and soul. Roland uses contemporary neurological theories of voluntary motion and cognition to explain how precisely demons might move the bodily members of possessed subjects, induce seductive images and implant scientific knowledge. The complex interaction of fields of knowledge demonstrated in his unique theories sheds light on the intellectual climate of the early thirteenth century in general, and of the early Parisian Dominican school in particular.

In recent years medieval historians have shown significant and continuous interest in demonology. The early thirteenth century distinguishes itself as a particularly fertile period in this regard, a veritable treasure trove of stories about possession by, and encounters with, demons. These stories appear across literary genres, including *exempla* tales, sermons and hagiographies, which aim to impart moral lessons and demonstrate the power of saints. They have been shown to reflect deep and far-reaching changes in early thirteenth-century religious culture and society, marked by Lateran IV, the establishment of the mendicant orders and an escalation in the violent suppression of heresies.

¹ A partial list includes Barbara Newman, 'Possessed by the spirit: devout women, demoniacs, and the apostolic life in the thirteenth century', *Speculum* lxxiii (1998), 733–70; Dyan Elliot, *Fallen bodies: pollution, sexuality, and demonology in the Middle Ages*, Philadelphia 1999; Nancy Caciola, *Discerning spirits: divine and demonic possession in the Middle Ages*, Ithaca–London 2003; Alain Boureau, *Satan the heretic: the birth of demonology in the medieval West*, Chicago 2006; Florence Chave-Mahir, *L'Exorcisme des possédés dans l'église d'occident (Xe–XIVe siècle)*, Turnhout 2011; Renate Blumenfeld-Kosinski, *The strange case of Ermine de Reims (c. 1347–1396): a medieval woman between demons and saints*, Philadelphia 2015; and Martine Ostorero and Julien Véronèse (eds), *Penser avec les demons: démonologues et démonologies (XIIIe–XVIIe siècle)*, Florence 2015.

Demonic concerns, however, drew the attention not only of exorcists and hagiographers, but also of those educated in Europe's rapidly evolving centres of learning, who engaged with the issue not only with the conceptual tools provided by local traditions or the Scriptures, but with new analytical tools and theoretical models. Learned physicians and theologians added their voices to the choir of those engaging with phenomena with demonic associations, providing original and conflicting points of view.² This article considers one such remarkable voice that reflects in a nutshell the fascinating complexity that demonological discourse posed for theologians who embraced both religious-popular interpretations of these phenomena and the rules of academic scientific discourse: Roland of Cremona (d. 1259).

Roland's account of *cursus*, a popular belief in the nightly orgiastic flight of men and women accomplished with the aid of a mysterious flying ointment that bears strong similarities to the later myth of the witches' Sabbath, has been analysed elsewhere.³ His quaestio on that subject revealed a subtle interaction between a theologically informed demonological framework, knowledge of literature on magical experiments and a fresh approach to popular beliefs. All of these related to Roland's specific position in the field as a master of theology, a physician and a Dominican friar. This present article, however, seeks to deepen understanding of early thirteenth-century demonological discourse by examining Roland's discussion of the extent to which demons challenge human subjectivity by vexing the body and manipulating the mind. His original theories result from experimental theologising using contemporary physiological and neurological theories, as well as information gathered from conversations and personal experience, and they are accompanied by the strong sense of honest doubt and reflection that characterises his writing. This is the story of a theologian and of a generation that defined their own discipline while traversing the entire intellectual field as it was constituted in the period, challenging disciplinary borders while being aware of the objective difficulties involved, including that of one's personal limits. Finally, although Roland's work was largely forgotten, his approach to theology sheds light on the little studied intellectual environment that characterised the first days of the

² For a study that examines the intellectual and popular field regarding incubi see Maaike Van der Lugt, 'The incubus in scholastic debate: medicine, theology and popular belief', in Peter Biller and Joseph Ziegler (eds), Religion and medicine in the Middle Ages, Woodbridge 2001, 69–75, and Le Ver, le démon et la vierge: les théories médiévales de la génération extraordinaire: une étude sur les rapports entre théologie, philosophie naturelle et médecine, Paris 2004, esp. pp. 248–63.

³ Ayelet Even-Ezra, 'Cursus: an early thirteenth-century source for nocturnal flights and ointments in the work of Roland of Cremona', Magic, Ritual and Witchcraft xii (2017), 314–30.

730 AYELET EVEN-EZRA

Dominican Parisian school, the one which would go on to nourish Albert the Great and Thomas Aquinas in the next decades.

Roland and the early Dominican Parisian school

From the first years of his order, Dominic Guzman set his mind to providing his friars-preachers with the best theological education that Europe had to offer at the time. Paris, the fountain of knowledge, was a natural choice. The first Dominicans were warmly welcomed by the community of masters, and supported by the papacy. Pope Honorius III asked John of St Albans to teach in St Jacques around 1221 and the incorporation of the studium into the university is usually traced to that year.⁴ Around this time, Roland entered the newly settled Bolognese Dominican community which, according to Gerard of Frachet's Lives of the friars (1255–60), was under threat of closure. All that Friar Reginald, the community's head and a former master of arts and of civil and canon law, could do was pray and encourage his fellow friars. He had just finished a sermon when in rushed master Roland and asked to be accepted without further delay into the order. Reginald and the friars could not hide their joy, and the event attracted a crowd of men, women and students.⁵ Some propose that the word philosophicis, by which Gerard characterises Roland's education prior to taking the habit, should be read *physicis*, for his writings abound with examples, arguments and citations of various medical sources, as well as personal accounts of practising medicine.6

⁴ Chartularium universitatis Parisiensis, ed. Heinrich Denifle, Emile Chatelain, Charles Samaran and Émile A. van Moé, Bruxelles-Paris 1889-91, repr. 1964, i, nos 34-6 at pp. 93-5; cf. nos 39-40 at pp. 97-8. See also Simon Tugwell, Early Dominicans: selected writings, London, 1982, 111 n. 70, and Marian Michèle Mulchahey, "First the bow is bent in study": Dominican education before 1350, Toronto 1998, 362.

⁵ Gerard de Frachet, *Vitae fratrum Ordinis Praedicatorum*, ed. Benedict M. Reichert, Monumenta Ordinis Pradicatorum Historica (hereinafter cited as MOPH) i, Louvain 1806, 25–7.

⁶ On the question of whether Roland actually taught and practised medicine in Bologna or was only well read see Ephrem Filthaut, *Roland von Cremona, O.P., und die Anfänge der Scholastik im Predigerorden: ein Beitrag zur Geistesgeschichte der älteren Dominikaner*, Vechta 1936, 10–19. For valuable lists of multiple occurrences of citations from Galen, Hippocrates, Constantine the African and Johaninus Johannitius, as well as general references to medical sources see p. 16 nn. 35–6. Roland describes himself as practising medicine. See also de Frachet, *Vitae fratrum Ordinis Praedicatorum*, 25–7, and Nathalie Gorochov, *Naissance de l'université: les écoles de Paris d'Innocent III à Thomas d'Aquin (v. 1200 – v. 1245)*, Paris 2012, 372–3, 381, 436–7. On later medical doctors pursuing a second higher degree in theology see Danielle Jacquart, *Le Milieu médical en France du XIIe au XVe siècle* (2e supplément au Dictionnaire d'Ernest Wickersheimer), Geneva 1981, 393, and William J. Courtenay, 'Curers of body and soul: medical

Roland was sent to study theology in Paris, where he found another physician turned theologian in the English master John of St Giles,7 under whom he was incepted. During the tense years of 1229 and 1230, Roland was made the first Dominican regent master of theology.8 In 1231 John followed his student and took the Dominican habit and the two physicians thus made up the first generation of Dominican masters of theology in Paris.9 Roland departed soon after for Toulouse, before ultimately returning to Italy.10 Hugh of St Cher and Guerric of St Ouentin succeeded to their chairs in the Parisian school. In a sermon that John delivered in Paris, he harshly rebuked 'those who could hardly separate from their knowledge, as happens in some people who cannot separate from Aristotle while in theology'. 11 Some of the most prominent masters of the time fit this description well: Philip the Chancellor (d. 1236), Alexander of Hales (OFM, d. 1245) and William of Auvergne (d. 1249) all applied bits of philosophy to their theology. But it also fits John and Roland. John's theological works do not survive. There is only a short medical-experimental text. But Roland's commentary on Job and his Summa are extant, although both are unedited and little studied. 12

Roland's *Summa*, probably completed between 1232 and 1234, after his Paris regency, is rich with references to both philosophical and medical authorities in relation to almost every subject. Demonic influence on

doctors as theologians', in Peter Biller and Joseph Ziegler (eds), *Religion and medicine in the Middle Ages* Woodbridge 2001, 69–75.

the Middle Ages Woodbridge 2001, 69–75.

Nicolas Trivet, Annales sex regum Anglie, ed. Thomas Hog, London 1845, 211–12.

8 Mulchahey, 'First the bow is bent in study', 364.

⁹ Trivet, Annales, 210–1; Marie-Madeleine Davy, Les Sermons universitaires parisiens de 1230–1231: contribution à l'histoire de la prédication médiévale, Paris 1931, 272.

¹⁰ Filthaut, Roland von Cremona, 22–7; Walter L. Wakefield, Heresy, crusade and inquisition in southern France, 1100–1250, Berkeley 1974, 209–10; Riccardo Parmeggiani, 'Rolando de Cremona (†1259) e gli eretici: il ruolo dei Frati Predicatori tra escatologismo e profezia', Archivum Fratrum Praedicatorum lxxix (2009), 23–84.

'ivx possunt separari a scientia sua, sicut patet in quibusdam, qui ab Aristotele non possunt in theologia separari': Davy, Les Sermons universitaires parisiens de 1230–1231,

On Roland's commentary on Job see Antoine Dondaine, 'Un Commentaire scripturaire de Roland de Crémone: le livre de Job', *Archivum fratrum praedicatorum* xi (1941), 109–37. It is currently being edited by Luc Ferrier from Biblothèque nationale de France, Paris, мs Lat. 405. As for the *Summa*, Biblothèque Mazarine, Paris, мs 795 (13th century) contains books 1, 2, and 3; Biblioteca Apostolica Vaticana, Rome, мs Barb. Lat. 729 (13th–14th century) books 1, 2 and parts of 3; and Biblioteca nationale, Conventi Sopressi de ordinare, Florence, мs 282 contains books 2 and 3. Biblioteca civica, Bergamo, мs Civ. 6.129 (Δ 9.13) contains only book 3, which was transcribed in Aloyso Cortesi, *Summa Magistri Rolandi Cremonensis O.P. Liber Tercius*, Bergamo 1962. On the dating of the *Summa* see Filthaut, *Roland von Cremona*, 50; Giuseppe Cremascoli, 'La "Summa" di Rolando di Cremona, Il testo del prologo', *Studi Medievali* xvi (1975), 825–76; and Odon Lottin, 'Roland de Crémone et Hugues de Saint-Cher', *Revue de théologie ancienne et médiévale* xii (1940), 136–43.

human beings is exemplary and representative in this regard. Peter Lombard devoted a cluster of *quaestiones* in the second book of the *Sentences* to angels and demons (dist. 2–8). His discussion, however, addresses the issue of demonic influence on human beings only briefly, and so it was with his early followers too. Interest in other aspects of demonology increased only in the generation of Roland, William of Auvergne and Alexander of Hales, who engaged it equipped with new bodies of knowledge, mainly in natural philosophy.¹³

In the second book of his *Summa* Roland agreed with Peter Lombard and William of Auxerre that demons cannot penetrate the soul and elaborated on the impossibility of such a penetration from a philosophical point of view. ¹⁴ Furthermore, he took this as a point of departure for a series of original *quaestiones* examining the precise mechanisms by which demons vex bodies, and implant images and scientific knowledge in human minds.

Controlling the body: physicians mocking the Gospel and the psycho-motor system

Of all the beliefs about demons, their ability to possess humans was the most commonly held in Roland's environment. Dominican friars were well versed in these phenomena. In his *Lives of the brethren*, Gerard of Frachet relates several occasions on which Dominic and his friars encountered people possessed by demons. On one such, a friar was seized by a demon and began shouting horribly. Dominic spoke with the demon, who claimed that the possession was a punishment incurred by the friar who had stolen food meant for the sick. Dominic absolved the friar of his sin and ordered the demon to stop vexing him and leave his body. 15

Yet saints and their hagiographers were not the only possible interpreters of such phenomena in medieval Europe, nor indeed in Dominican communities. Learned medieval physicians could diagnose some of these occurrences as epileptic seizures or manic-melancholic behaviour. Epilepsy in particular, since antiquity, had become a classical locus for opposing divine and demonic interpretations to naturalist-somatic ones, or rather suggesting their coexistence and addressing misleading similarity. These two approaches were voiced in antiquity, in the medieval Muslim world, and in the intellectual culture of Roland's times. At times, these theories were strongly opposed to the alternative, demonic ones. Furthermore, already in the opening lines of *The sacred disease* the

¹³ On William of Auvergne's demonology see Thomas B. de Mayo, *The demonology of William of Auvergne: by fire and word*, Lewiston–Queenston–Lampeter 2007.

¹⁴ William of Auxerre, *Summa aurea* 2.5.5, ed. Jean Ribaillier, Paris–Grottaferrata 1980–7, ii. 112.

Gerard de Frachet, *Vitae fratrum*, 80. For other instances see pp. 85, 124–5, 159.

somatic approach was equated with learning and the divine/demonic approach with ignorance. This dichotomy has repeatedly been used to construct the superiority of elite groups, whether the subculture of the educated or entire cultures, throughout Western history. 16 But at the same time the array of sources available to early thirteenth-century physicians in the Latin West also expressed an approach that did not entirely dismiss the alternative, demonic explanation. Catherine Rider points out that Al-Zahrawi's (Albucasim) discussion of epilepsy distinguished five types of epilepsy. While four of these are caused by internal humoral imbalance, the fifth is caused by an external cause, called by some demons. While he attributes here the name 'demons' to others, he does relate later cases of epilepsy with remarkable knowledge and suggests an address to God if remedies do not improve the patients' condition. Constantine the African was more explicit. His chapter on epilepsy is found in the part of the *Pantegni* that was not adapted from Al-Majoussi, and there he argues for the difficulties involved in distinguishing an epileptic from a lunatic or a demoniac, as well as suggesting several tests to do so. He offered for all phenomena the remedy of religious practice; these passages were widely quoted in later Latin compendia.¹⁷

Gilbert the Englishman, Roland's contemporary and the author of an influential *compendium medicinae*, provides a good example of the strand of thought that politely ignored this aspect of the subject during Roland's times and surroundings altogether. He presents the etymology for 'mania' by explaining that it may seem as if demons speak in manic people and reveal secrets. ¹⁸ Following Galen, he later associates the possessed with hallucinating subjects who believe that they have no head, or

¹⁷ Catherine Rider, 'Demons and mental disorder in late medieval medicine', in Sari Katajala-Peltomaa and Susanna Niiranen (eds), *Mental (dis)order in later medieval Europe*, Leiden 2014, 47–69 at pp. 52–5.

¹⁶ Owsei Temkin, *The falling sickness: a history of epilepsy from the Greeks to the beginnings of modern neurology*, Baltimore 1994, 89 at n. 185 and passim regarding antiquity, and n. 51, where the resistance of ancient Greek medicine to magic beliefs is noted as now-adays praised as one of its greatest achievements. For a story that employs this dichotomy to oppose Arab and Frankish medicine during the Third Crusade to demonstrate cultural superiority see Ann F. Woodings, 'Medical resources and practices of the crusaders states in Syria and Palestine, 1096–1193', *Medical History* xv (1971), 268–77 at pp. 270–1. Van der Lugt cites Bernard de Godron as dividing physicians, theologians and the common people according to their explanation of the incubus: physicians argue that it is a phantasm; theologians, a demon; and the people, a mysterious old lady: 'The incubus', 176.

¹⁸ Gilbertus Anglicus, Compendium medicinae Gilberti anglici tam morborum universalium quam particularium nondum medicis sed et cyrurgicis utilissimum, Lyon 1501, fo. 102v. See also Henry E. Handerson, Gilbertus Anglicus: medicine of the thirteenth century, Cleveland 1918, and Michael R. McVaugh, 'Who was Gilbert the Englishman?', in George Hardin Brown and Linda Ehrsam Voigts (eds), The study of medieval manuscripts of England: Festschrift in honor of Richard W. Pfaff, Tempe 2011, 295–324.

that they have snakes in their stomach, or, 'that they have seen demons, get mad and hit themselves and others'. Along with many others, he was quite familiar with different somatic theories of epilepsy, as well as with conspicuous desires for solitude, eating disorders and melancholia. Gilbert restricted himself strategically to that which was consonant with his professional identity as a naturalist physician, remaining silent about demonic interpretations of melancholy without dismissing them, and thus remaining within the boundaries of the discipline. But his readers could accordingly conclude that the naturalist approach might explain all supposedly demonic possessions.

Roland's contemporary, William of Auvergne, the Paris bishop and master of theology, was concerned precisely with the potential conflict between medical theories of mental maladies and scripturally informed demonology. In the discussion of demons in his De universo, he therefore provides extensive medical information about diseases of the brain, ecstasy and many other phenomena, and advises his readers to acquaint themselves with the art of medicine.²¹ Nevertheless, he insists, physicians should not conclude that demons do not exist at all. The theologian's role and the one that he takes here as an author is to explain beliefs regarding demons in relation to the body, how they enter through the digestive system and speak with a voice considerably different from that of their subject. This theological mission is aided by William's natural knowledge, specifically of the occult. He alludes, for instance, to the manner by which magnets operate, in order to explain demonic operation. Physiological theories or explicit references to medical authorities are absent from his text.

Roland also addresses the conflicted nature of a professional field that comprises medical and theological authorities and the challenge that medical somatic theory poses to the dignity of both popular and theological positions. His main goal is to refute 'certain damned and false men who mock the holiest words of the Evangelist, saying that he speaks falsely when describing falling and spinning men as demon possessed'.²² In all likelihood, the scriptural reference to which he alludes is the account found in all three synoptic Gospels of Jesus healing an afflicted subject

¹⁹ Gilbertus Anglicus, Compendium medicinae, 103r.

Temkin, *The falling sickness*, 118–33. On the late English reception of Gilbert's account of epilepsy see George R. Keiser, 'Epilepsy: the falling evil', in Lister M. Matheson (ed.), *Popular and practical science of medieval England*, East Lansing 1994, 219–44, esp. pp. 227ff.

²¹ Guillelmi Alverni Opera omnia, Paris 1674, i.1040–1; Caciola, Discerning spirits, 149–50 and passim

²²'Hoc autem dixi propter quosdam homines dampnatos et reprobos, qui derident sanctissima verba evangelii, quod evangelium loquitur falsum, quando dicit quod homines spinnantes cadebant et erant demoniaci': MS Barb. Lat. 729, fo. 84b.

(Mark ix.14–29; Matthew xvii.14–20; Luke ix.37–43). The story lends itself easily to an interpretation of epilepsy, and had already been a target for such criticism in late antiquity. Against the naturalist-somatic interpretation of the pagan elite, Origen and later Greek and Latin Church Fathers followed the Gospel, taking the side of fishermen and exorcists. They demanded that believers of the Gospels affirm that the boy in this story was possessed by an unclean spirit, as the Gospel claims.²³

Centuries later, Roland determined to fight the battle with a completely different strategy, delineating anew the boundaries of demonological and somatic discourses. His interest in this boundary is evident from his decision not to centre on cases involving demons speaking, 'humanly', but on the fuzzier ground of the purely somatic symptom. Mockers wrongly assume that the devil cannot cause epileptic symptoms, but Roland claims that in fact demons can imitate nature extremely accurately.²⁴ He therefore opens his discussion with a lengthy note asserting the diagnostic difficulty of differentiating demoniacs from melancholic or epileptic patients. Although he cites Constantine in several places in the *Summa*, he does not refer to (or show any sign of knowing) the discussion on epileptics and demoniacs in the *Pantegni*. Rather, to demonstrate how easily one can be mistaken for another, he relates a story from his personal experience:

I had a certain youth under my treatment, who fell and spun, and seemed to me to exhibit all the symptoms of epilepsy. Having no doubt therefore that he was epileptic, I applied the usual treatment, according to the method transmitted by the great masters: I purged him well and kept him on a suitable diet. After he received medicinal treatment and underwent multiple rounds of purging, those who stayed with him in the infirmary told me that he was now falling ten times a day, which is unusual for this disease, while before he was treated with any medicine, he hardly fell once in a month. I have sent him to his homeland, wherefore I have heard from a friar who stayed at the same house that a demon manifested himself. I have seen a similar case with my own eyes somewhere else. ²⁵

²³ For an analysis of commentaries on the Gospels by Origen, Jerome and others, and the ancient Christian approach towards epilepsy in general, see Nicole Kelley, "The punishment of the devil was apparent in the torment of the human body": epilepsy in ancient Christianity', in Candida R. Moss and Jeremy Schipper (eds), Disability studies and biblical literature, New York, NY 2011, 205–21, esp. pp. 215ff.

²⁴ 'Putant enim quod demon non possit facere signas vel accidentia epilepsie in aliquo qui non est epilepticus': MS Barb. Lat. 729, fo. 84b.

²⁵ 'Sed hic notandum est quod aliquando creditur de aliquibus quod sint demoniaci, et sunt melancolici vel etiam epileptici, et aliquando creditur de aliquibus quod sint epileptici et sunt demoniaci, sicut et mihi accidit. Quia habui quemdam iuvenem in cura, et cadebat et spinnabat, et omnia accidentia epileptici videbantur mihi fuisse in illo. Unde iam non dubitavi an esset epilepticus, et agressus sum curam secundum artem traditam a maioribus, et purgavi eum bene et custodiebam eum in dieta. Et post medicinas et purgationes dixerunt mihi qui stabant secum in infirmaria quod cadebat decies

As medical treatment led the patient's condition to worsen, Roland withdrew his diagnosis, changed strategy and sent the youth back to his homeland, but still did not suspect a demonic intervention, for he tells only of his doubts, but not of any attempt to apply a test like those suggested by Constantine. Only later did he find the demon to be the cause.²⁶ In addition to confessing his own mistake, Roland invokes his insider status to reveal doubts regarding epilepsy, ranging throughout the naturalistic camp. Aristotle and Galen, he discloses, differed greatly in their opinions on epilepsy. Galen's opinion that it is caused by a humour filling the ventricles of the brain was accepted by most medieval writers. Yet if such a great authority as Aristotle could be confused about the true cause of epilepsy, Roland maintains, why should the evangelists, as well as simple folk, be mocked for the same confusion?²⁷ Furthermore, the human ability to formulate a confident diagnosis is impeded by the operation of the devil himself. The devil could indeed cause symptoms extremely similar to those of epilepsy in order to cause such people to doubt his own existence and by extension the authority of Scripture.

Roland constructs the field, somewhat artificially, as a conflict between two epistemic and social communities: past and contemporary simple and clerical believers, who interpret 'falling men' as demoniacs, and those cognisant of natural medicine, who interpret them as epileptics and haughtily mock the former group. This construction provides a place for the well-informed theologian to intervene in defence of the former with the tools of the latter. While there is certainly a strand in the medical tradition that does recognise the possibility of demonic influence in some cases, its voice is not heard here. Yet even if it were, it is clear that the authors whom he cited as well as others do not step into this territory but at most note its presence. Avicenna, to whom Roland does not refer here, expresses it clearly, writing that while some physicians may attribute epilepsy and other phenomena to demons, we as physicians

in die. Quod non solet esse in illa passione, et forte antequam fieret ei aliqua medicina vix cadebat in mense semel. Et missi eum ad terram nativitatis sue. Unde a confratre suo qui stabat in eadem domo audivi quod demon postea manifestavit. Simile vidi oculis meis alibi': ibid. fo. 84a-b.

²⁶ Constantine suggests smelling the fumes of burned goat horns, eating a goat liver or wearing goat skin: an epileptic will fall immediately. Another test that he recommends is whispering a certain name in the patient's ears: a demonic would immediately fall as if dead for about an hour and then would answer any question: Pantegni, Practica 5.17, consulted in the edition in Omnia opera Ysaac ... cum quibusdam alijs opusculis, Lyon

'27 'Mentitus fuit Aristoteles de hac passione et putavit quod non posset fieri talis passio ex humore, quia ita subito replet ventriculos cerebri, sed putavit quod ex ventositate. Si tantus philosophus dubitavit de tali passione, non est mirum si multi alii dubitant, et etiam herrant circa eam': MS Barb. Lat. 729, fo. 84b. Roland does not reveal here his specific sources for Galen and Aristotle's views.

should not care much whether it was a demon that changed the humours' complexions or some other cause.²⁸

But Roland does. How precisely might the devil do what he does? Roland's education provides him with a basic theory of voluntary motion, the material embodiment of the will transferred from mind to limbs.²⁹ According to most medieval neurological perspectives, when we wish to raise a hand, our will's orders are carried by the motive powers through the *spiritus animalis* to the nerves, extending from the brain through the spinal cord and up to the ligaments, moving the requisite muscles to raise the hand. Where on this continuum should one locate demonic intervention? Roland considers both ends. On the one hand, he rejects on empirical grounds the possibility that demons act upon reason. A monk with whom he had personally spoken, who had been vexed by demons but returned occasionally to his senses, testified that he felt no control over his body when afflicted, but apparently still experienced reason.³⁰ There are also theological, moral grounds for arguing that the will must remain intact. In the absence of absolute free will, there would be no responsibility for sin. Demons can and do all they can to tempt people, but in the end, Roland affirms, choice must remain free, even if neutralised.

Roland also rejects the possibility of a demon acting completely externally upon the limbs, like a puppeteer pulling strings. In such a case, the soul would retain its ability to control the motive powers and speak freely, but clearly the devil moves one against one's will. In order to do so, he must enter the body and manipulate it from within, controlling the nerves and muscles. Roland admits that he cannot provide an adequate explanation for the problem of acting upon the motive powers. Only one's proper soul seems to have the right 'key' to operate the motor system. But for the time being, he suggests an internal-external mechanism: the devil creates obstructions (*oppilationes*) in the brain that keep the soul's orders from reaching the spirits and the nerves. Only then can he agitate the limbs from outside.³¹

²⁸ Rider, 'Demons and mental disorder', 56. Roland does not refer to Avicenna's *Canon* here and Filthaut does not name him among the medical authorities cited in the *Summa*. A critical edition together with a systematic mapping of Roland's medical sources – much desired – could however shed light on the question.

²⁹ For a detailed survey see Michael Frampton, Embodiments of will: anatomical and physiological theories of voluntary animal motion from Greek antiquity to the Latin Middle Ages, 400 BC-AD 1300, Saarbrücken 2008.

Gum diabolus intrat corpus alicuius, videmus quod impedit motus voluntarios, et ducit eum qui possidet malo velle suo, ut non vult. Sed rationem non impedit, sicut didici a sancto homine religioso qui vexabatur a demone, et aliquando erat in suo sensu, et tunc dicebat mihi. Unde quando vexabatur nullam habebat potestatem sui corporis': MS Barb. Lat. 729, fo. 84b.

³¹ 'Constat quod diabolus quando ita vexat hominem movet nervos et musculos. Sed quomodo potest movere, cum vires motive que sunt in nervis et musculis non sunt

Medieval medical theorists explained a wide range of bodily disorders by way of obstructions, created by lack of breath, or by surplus or excessively thick humours. Such obstructions were also seen as the cause of epilepsy. Gilbert the Englishman, Roland's contemporary, attributed epilepsy to the obstruction of the principal ventricles of the brain and of the origin of the nerves by a humid humour.³² Roland proposed, therefore, a striking diabolical mimicry of a somatic process, which at the same time keeps the diabolical will in the picture. According to his theory, the main function of the obstructions is to disconnect the soul's orders from the nerves and muscles. These being paralysed, the demon could then freely move the limbs externally according to his will. The devil can even mimic the dynamics of disease. Since epilepsy was believed to be caused by a cold humour, and humid bodies to be influenced by the moon, many theorists, including Gilbert, believed epileptic patients to be under the influence of the moon's phases.³³ The devil, Roland argued, can mimic lunar influence by vexing his subjects more violently during these times.³⁴

Controlling the imagination: seductive dreams and the neurology of sense perception

Whereas Roland explained how demons vex human bodies through the psycho-motor system, the belief that the devil and his demons could impress images into human minds directed him to cognitive mechanisms.³⁵ Roland assumed that his reader was familiar with the contemporary

appropriate suo imperio anime, ut cum anima, nisi sit impedimentum, velit nervos et musculos movere, et membra moventur? Forte dicet quod talis motus non est voluntarius sed violentus. Non movet ergo vires, sed membra per violenciam. Ad hoc ergo oportet quod intret corpus? Nonne posset ita bene facere si esset extra corpus? Immo videtur quod melius. De hac materia paro intelligimus. Tamen dicimus quod non posset illo modo vexare si esset extra sicut est intra. Quia si esset extra, anima posset imperire viribus motivis et posset libere loqui et multa alia que nollet diabolus. Sed cum est intra facit quasdam quasi oppilationes, ne imperium anime veniat ad spiritus et ad nervos. Postea impedita influentia ab anima super vires motivas et super nervos et musculos, agitat membra vexati per violentiam, et sicut permittitur ei a deo': ibid.

³² 'Oppilatio principalium ventriculorum cerebrum cum diminutione sensus quousque natura se expediat ... humor humidus ventriculos cerebri replens animales operationes impediens ... panniculos replens et oppilat originem nervorum': Gilbertus Anglicus, *Compendium medicinae*, fo. 10gr.
 ³³ Ibid. fos 10gv–11or.

³⁴ 'Et potest fieri ut diabolus etiam faciat quod illi maxime vexantur in plenilunio, quos vexat, ut faciat apparere evangelium falsum, et faciat dominum derideri quasi inexpertum artis medicine, et etiam ut faciat infamari creaturam scilicet lunam, eo quod tales concitet morbos': MS Barb. Lat. 729, fo. 84b.

³⁵ For brief accounts of Roland's doctrine of the soul see Dag N. Hasse, Avicenna's De anima in the Latin West, London 2001, 34–42, and Magdalena Bieniak, *The soul-body problem in Paris ca. 1200–1250: Hugh of St. Cher and his contemporaries*, Leuven 2010, 28–31.

ventricular theory, according to which different mental operations take place in the ventricles of the brain. Sensible forms received by sense organs were believed to be processed by the common sense, usually located at the anterior ventricle in the forefront of the head, then by the imaginative power in the rear part of the same cell where they were reorganised or divided into new combinations. Usually, the next ventricles hosted estimation, cogitation and memory.³⁶ The *spiritus animalis*, a refined substance, filled the ventricles. In its function as the 'spirit of imagination', it was believed to accept the received bodily form, then present it to the power of imagination as to a mirror.

Focusing on sexual dreams, Roland attempted to explain how the devil could take the sensible forms of women and induce them directly into the brain. The principal difficulty with this idea, he explains, is that bodily forms cannot exist independently, but must reside in a certain subject. Demons could not simply carry them without becoming this subject themselves. Yet if they did so, they would not be able to penetrate the brain.

One might suggest here that the devil could connect somehow to the spirit of imagination and inform it during our sleep. This suggestion leads Roland to the question of why these dreams feel so vivid, upon which he later elaborates, quoting Aristotle's *On sleep* regarding activities of imagination while external sense perceptions cease to stimulate the mind.³⁷ But the question of how demons connect to the imaginative faculty, whether during sleep or not, remains challenging. Before presenting his solution to the problem of implanting images and forms, Roland suggests a more powerful diabolic mechanism which does not operate directly on the mind, and which explains the acute temptations felt by Paul and the desert Fathers. Demons know certain natural aphrodisiac materials, which they disperse inside the members and humours of the human body. An extremely harsh attack such as this, Roland continues, will not be repelled by any fasts or vigils, but by God alone.³⁸ Yet given this material and corporal focus, a physician may be of assistance, for Roland

³⁶ Cf. Avicenna Latinus, *Liber de anima seu sextus de naturalibus IV–V* 5.8, ed. Simone Van Riet, Leiden 1968, 182; Inez Violé O'Neill, 'Diagrams of the medieval brain: a study in cerebral localization', in Brendan Cassidy (ed.), *Iconography at the crossroads*, Princeton 1993, 91–106; and Simon Kemp, *Cognitive psychology in the Middle Ages*, Westport 1996, 45–57.

³⁸ 'Bene video quod propter permissionem dei demones possunt inflamare aliquem ad luxuriam alio modo quam per ostensionem figurarum mulierum. Et est iste modus vehementior et periculosior ... Et forte ita tactus fuit Paulus ... et sancti qui erant in deserto, et beatus Benedictus, ita quod disposuerunt redire ad seculum et fornicationem ... Ipsi [*i.e. demones*] bene sciunt que sunt illa que irritant luxuriam. Illa possunt spargere intra humores et membra ... Et quando sancti molestantur tali peste, nec ieiunia vel vigilie aliquid valent ... Sola miseria dei est imploranda, et fortasse per aliquas consolationes vel exercitia': ibid. fo. 83a.

recommends various modes of alleviation and physical exercise in line with contemporary medical practice.³⁹

Roland's principal explanation of diabolic dreams also restricts the devil's activity to the material realm. As in the case of epilepsy, he must sideline the natural explanation for dreams found in Aristotle. Any dream involves the resurfacing of forms impressed earlier, which present themselves again to the imaginative faculty. The diabolically induced dream, however, involves creativity. Roland suggests that the devil fashions, like a human sculptor, a tiny corpuscle in the form of the woman that the subject desires, rather than use the already existing form impressed in the subject's mind. He paints this nano-doll and places it in the ventricle of the imagination, so that its form and colour will inform the spiritus. The spiritus would then present it to the 'mirror' of the imaginative faculty. Like normal dreams, this operation works better during the night, for during the day the animal powers interrupt, just as sensory stimuli prevent dreaming during the day. How would this corpuscle enter the brain? Roland conjectures that the devil may fashion it from already existing materials: vapours, nutritional surpluses or parts of the spiritus.40 Illusion is thus affected through a manipulation of the brain's materiality, turning bodily fluids into actual artificial sensual objects.

Roland compounds this question with the further problem of dreams that involve multiple women and men, as one devil cannot wear diverse forms simultaneously. The ventricle of the brain is also too small to host several demons wearing their separate bodily forms. How might the induction of a plurality of forms then be explained? Here Roland discloses a

³⁹ On medical recommendations of exercise see Pedro Gil Sotres, 'The regimens of health', in Mirko D. Grmek and Bernardino Fantini, *Western medical thought from antiquity to the Middle Ages*, trans. Antony Shugaar, Cambridge 1998, 291–318, esp. pp. 305–7; and Fabiola I. W. M. Van-Dam, 'Permeable boundaries: bodies, bathing and fluxes', in Patricia A. Baker, Hand Nijdam and Karine van 't Land (eds), *Medicine and space: body, surroundings and borders in antiquity and the Middle Ages*, Leiden 2012, 117–43 at p. 127.

⁴⁰ 'Ad secundo obiectum dicimus, quod diabolus potest representare formam mulieris vel aliam ymaginative vi anime. Duobus modis potest hoc fieri. Primo modo quia potest aliquod corpusculum plasmare sicut posset et aliquis homo. Non tamen ideo est ipse creator, sicut nec illi qui faciunt ymagines. Et potest illud corpusculum facere ita ut sit illius figure, cuius figure est vel fuit illa mulier quam vidit te diligere. Et hoc vidit per signa exteriora. Et potest illud corpusculum formare aliquo pulcro colore et ponere ipsum in ventriculo ymaginationis, ut illud corpusculum secundum suam figuram et suum colorem immutet spiritum ymaginabilem, et illa forma representetur ymaginative vi. Sed quomodo ponet illud corpusculum intra ventriculum ymaginationis? Ego dico quod sicut ipse posset formare aliquod corpus de aere, et inspirare ipsum aerem et colorare, et ita de multitudine fumositatum et superfluitate nutrimenti cerebri, vel etiam de parte ipsius spiritus ymaginarii posset ipse formare illud corpusculum. Et fortasse in die aliquando hoc facit, sed non ita bene posset in die sicut in nocte, quia tunc quiescunt vires animales que in die suis motibus impdirent plasmationem illam': мs Barb. Lat. 729, fo. 83b.

lively discourse, unknown in other sources. Certain masters assert that after the devil impresses in the spirit the one form that he wears, the *spiritus* is divided so that each of its parts mirrors the complete female image. Yet Roland sees this solution as insufficient, for if the informed spirit is divided, the form must be as well, and thus the mirror of imagination would reflect a mutilated form rather than several intact ones. He considers whether a certain vapour might divide the mirror, so that each part of the spirit would show the same image, just as each part of a broken mirror reflects a whole image. Inviting his disciples to examine the mirror 'in front of us', he displays a deep awareness of the proper use of metaphors as he excludes this hypothesis. In the mirror analogy for cognitive processes, the mirror is equivalent to the imagination, while the spirit is equivalent to a body presenting a bodily form to the mirror. If one could prove that the imaginative faculty itself could be divided, then the broken mirror metaphor would be valid, but without this, it would remain invalid.41 Ultimately, Roland accounts for the plurality of persons in such a dream by describing a peculiar form of recollection. Perceived forms of people known to the dreamer leave vestiges of potential forms in the spiritus. These vestiges are actualised by the presence of the single actualised form of the little doll and thus a multi-person dream is executed.

⁴¹ 'Preterea quandoque homini representatur in nocte multitudo magna mulierum. Tot formas tantum diversas non potest diabolus simul indicere [read: induere]. Item representat infinitos homines et mulieres simul. Si dicat quod unus demon induit unam formam corporalem, sed oportet quod induat corpus ut probatum est, et alius demon induit aliam. Quomodo ergo poterunt stare tot corpora induta a demonibus in tam parvo ventriculo cerebri ymaginario? ... Forte dicet sicut quidam dicunt, quod una sola forma quam induit diabolus potest facere apparere tot formas ymaginabiles in ymaginativa, quia una forma imprimatur in spiritu ymaginativa. Sed spiritus ille dilatabitur, et in qualibet particula illius spiritus ymaginabilis apparet tota illa ymago. Contra. Ymago illa que representatur ymaginationi est in spiritu ut in subiecto. Ergo diviso subiecto dividitur forma. Ergo non representabitur illa forma per aliquam partem spiritus tota ymaginationi, sed membratim incisa. Ymaginativa est quoddam speculum, et in spiritu ymaginabili est forma que representatur illi speculo. Sed intelligamus unicum speculum materiale hic ante nos, et opponatur ei aliqua forma que debeat in eo resultare. Si quis divideret illam formam, numquid apparet ipsa integra in speculo? Nequaquam, sed divisa et mutilata. Preterea quis divideret illum speculum? Si dicat quod aliquis fumus, quod aliquando aliquis habet in nocte aliqua plures fumos quam in alia. Et tamen non videret illam multitudinem. Forte dicet quod in qualibet particula spiritus ymaginabilis est tota illa forma, sicut patet in speculo aliquo cum opponitur ei aliqua forma, et integrum est. Tunc apparet tantum una forma in speculo. Si autem speculum divideretur, tot forme apparent in illo quot partes facte essent in speculo. Hoc verum est quod dicit, sed nihil ad rem proponitam. Îpse enim spiritus ymaginabilis non est speculum, sed est sicut corpus representans speculo formam corporalem. Ipsa autem vis ymaginativa est ipsum speculum, in quo representantur ymagines, quas deferet vel opponit spiritus ymaginarius. Sed si posset mihi ostendere quod vis ymaginativa scinditur in tot partes, tunc haberent locum suum simile. Sed quia hoc non posset, ideo non habet locum': ibid. fos 82b-83a.

This curious scenario raises numerous questions, but the one that Roland anticipates of his readers is how one form can actualise other potential feminine and masculine forms. He likens the process to fish reproduction, probably relying on Aristotle's De generatione animalium. According to Aristotle, the male's semen, 'in virtue of the power it contains, causes the material and nourishment in the female to take on a particular character', that is, to actualise its potential. Fish provide the best demonstration of this theory, as the process takes place after the eggs are already laid in water: 'when the female fish has laid her eggs, the male sprinkles his milt over them; the eggs which it touches become fertile'.42 In the same manner, the single bodily form in act 'touches' the vestiges and actualises them, thus creating a diabolic multi-person dream.⁴³ This theory serves also to explain a story of uncertain source that Roland relates, about a child who had never seen women, but saw them in his dreams. Roland suggests that the one corpuscle with its womanly form actualised vestiges of manly forms the child did indeed see, but converted them to female forms. Yet here he openly discloses his uncertainty, representing this solution as plausible, but not necessarily true, granting that there may well be another, more hidden one. Once again, Roland shows his readers that the task of juxtaposing beliefs from different sources and case histories with physiological and cognitive theories requires imagination, creativity, logical thinking and discernment of false analogies, and nevertheless may produce limited results in the end.

Controlling the intellect: bodily effects on learning

Not only were demons reported to harass unlearned and learned men alike, they were also believed to be capable of inducing them to transform from one to the other with uncommon rapidity. Supposedly, demons could instantly implant arts and sciences in a person's mind, provided the person subjects himself to them, challenging the autonomy of the human soul yet again.⁴⁴ He refers to rumours about authorities as famous as Boethius,

⁴² Aristotle, Generation of animals 1.22, trans. Arthur L. Peck, London 1943, 117.

⁴³ 'Ad quarto quesitum dicimus quod ex una sola forma mulieris vel viri potest fieri quod representabuntur ymaginative quasi infinite ... aliquis homo videt aliquam multitudinem hominum simul et mulierum, et si non vidit, ymaginavit. Et licet per aliquas occupationes exteriores recedant ille forme actuales ab ymaginativa, tamen in illa relinquunt vestigia sua. Cum autem ymaginatione actualiter representatur una, reducuntur illa vestigia ad actum, sicut dicitur quod ova [MS Mazarine 795: illa] generat pisces, et illa sola [MS Mazarine 795: que] sperma masculini piscis tangit': MS Barb. Lat. 729, fo. 84a.

⁴⁴ 'De demonibus dicitur quod subito possunt et ualde cito instruere hominem in aliqua scientia, et quod possent in breuissimo tempore docere loycam [read: logicam] uel astronomiam. Unde dicitur quod aliqui se dederunt demonibus ad

Simon Magus – the notorious precursor of Faust – and Aristotle,⁴⁵ but may also have had in mind the *Ars notoria*, a late twelfth-century text that depicts a technique promising to effect instant knowledge in various sciences through a set of magical rites and figures.⁴⁶

Roland takes up the aspect of immediacy, arguing that demons cannot directly implant knowledge in one's intellect and therefore must employ the medium of their voices. This cannot be done instantly. Learning must involve the procession from first principles to conclusions to achieve a proper, demonstrative *scientia*, as it was understood in Aristotle's *Posterior analytics* and medieval theories of knowledge. Immediacy was therefore inconceivable.⁴⁷ Yet demons might speed up the process of learning. This is not because they are more efficient teachers, the speed of learning being dependent upon students' capacities for comprehension as well, but by indirect manipulation of the intellectual faculties.⁴⁸ First, just as they know how to incite desire in bodily members, they know the best

obediendum eis, ut docerent eos, et cito facti sunt sapientes. Unde quidam dicebant hoc esse verum de Boetio, quia cito didicit philosophiam. Et ad hoc dicitur, quando aliquis ad[d]iscit aliquam scientiam': ibid. fo. 87b.

⁴⁵ 'Unde Boetius dicit de se, dicuntur me polluisse conscientiam meam doctrina uillissimorum spirituum. Et beatus Petrus in Libro Clementis dicit quod Symon Magus ita habebat demones. Et etiam de Aristotele dicitur': ibid. For Boethius see 'Nec conuenie-bat uilissimorum me spirituum praesidia captare', in Anicius Manlius Boethius, De consolatione philosophiae: opuscula theologica, ed. Claudio Moreschini, Munich—Leipzig 2005, prose 1.4.39, p. 17. It has not been possible to trace a source for such a rumour about Aristotle.

⁴⁶ For the Ars notoria and similar practices see Julien Véronèse, L'Ars notoria au moyen âge: introduction et édition critique, Florence 2007; Richard Kieckhefer, Forbidden rites: a necromancer's manual of the fifteenth century, University Park, PA 1997, 293; Claire Fanger, 'Sacred and secular knowledge systems in the "Ars Notoria" and the "Flowers of Heavenly Teaching" of John of Morigny', in Andreas B. Kilcher and Philipp Theisohn (eds), Die Enzyklopädik der Esoterik: Allwissenheitsmythen und universalwissenschaftliche Modelle in der Esoterik der Neuzeit, Paderborn 2010; and Jean-P. Boudet and Julien Véronèse, 'Si volueris per demones habere scientiam: l'experimentum nigromantie attribué à Michel Scot', in Histoire et historiographie au moyen âge: mélanges offerts à Michel Sot, Paris 2012, 691–702.

⁴⁷ 'Sed uidetur quod non possit esse quod ita doceant subito, quia quomodo potest doceri aliqua scientia, uerbi gratia geometria, nisi addiscendo principia et conferendo ad conclusiones? Sed constat quod diabolus non potest inspirare scientiam. Ergo oportet quod uocaliter doceat, ergo oportet quod incipiat a principiis, et procedit per ordinem ad conclusiones. Et si non per ordinem non est scientia': мs Barb. Lat. 729, fo. 87b.

⁴⁸ 'Sed quare docebat citius quam aliquis magister, de scientis demonstratiuis dico, cum non sit ibi nisi unus modus ad[d]iscendi, ut iam dixi? Si dixeris citius docebat demon quia magis erit sedulus, et plura dicet quam magister, hoc non est, quia magister potest dicere tot et tanta, quod discipulus non poterit capere medietatem. Et poterit esse ita sedulus circa discipulos, quod discipulus non poterit sustinere illam sedulitatem. Nihil ergo uidetur quod subito doceant homines, quod bene concedo': ibid.

foods to strengthen memory and imagination, or make the spirit subtle enough to improve ingenuity. Second, they can also induce useful images, similar to non-magical medieval mnemonic aids.⁴⁹ As this magic targets aspiring scholars, Roland distinguishes the disciplines accordingly: imagination and memory are highly involved in quadrivial and legal studies, while theology and logic require a more acute intellect, so a demon, or a wise physician for that matter, can prescribe each student a special diet.⁵⁰

Roland of Cremona, the physician who became the first Dominican master of theology in Paris, authored a unique demonological tract. He attempted to adjust unarticulated religious beliefs about demonic possession and illusions so as to be compatible with physiological mechanisms as understood by physicians of his day. Emphasising the medical account of the somatic aspect of mental behaviour, he restricted demonic influence to manipulation of matter and body alone. Like the rest of Roland's work, his demonology was largely forgotten and ignored in the decades to follow. Few have copied his texts and there is no no evidence that anyone embraced these theories or even responded to them. But sometimes forgotten, marginal figures delineate the intellectual field and its boundaries better than anyone else. Freely moving between anecdotal case studies and biological perspectives on fish reproduction, from medical theories to Pseudo-Clementine literature, and to conversations with possessed youths and monks, Roland combined imagination, originality and an open-minded sense of doubt with a remarkable awareness of his and his contemporaries' limits and of the difficulties of reaching clear-cut solutions. He did not set the religious approach aside as a distinguished discipline and point of view, but constructed a niche for theology out of its supposed clash with other theoretical modes of interpreting the world. While the option to ignore popular approaches or dismiss them as due to ignorance exists in his

⁴⁹ On such non-magical techniques and visual aids see Mary Carruthers, *The book of memory: a study in medieval culture,* New York 1990.

^{50 &#}x27;Unde possunt facere aliqua signa, in quibus de facili multa retinentur in memoria, sicut et Tullius docet in Rhetorica, et dicitur quod Plato fecit artem memorie. Et alio modo ipsi sciunt quomodo spiritus ymaginarius artificio possit aptari, ut homo melioris sit ymaginationis, et similiter de spiritu memoriali, ut homo sit magne memorie. Hec enim accidunt ex dispositionibus corporalibus. Sciunt aliqua cibaria ex quibus spiritus generantur subtiles, ut homo sit acuti ingenii, quia quedam scientie sunt que requirunt magnam memoriam et ymaginationem, ut sunt leges seculares. Et etiam quadriuiales scientie requirunt bonam ymaginationem, propter figuras. Quedam autem scientie [sunt], que requirunt potius acutum intellectum, ut lo[g]yca et theologia, et diuersis diuersa conueniunt': Ms Barb. Lat. 729, fo. 87b. On dietary recommendations for strengthening the memory in Roland's times see Boncompagno da Signa, 'On memory', trans. Sean Gallagher, in Mary Carruthers and Jan M. Ziolkowski (eds), *The medieval craft of memory: an anthology of texts and pictures*, Philadelphia 2003, 103–17 at p. 109.

repertoire, he refrained from using it. His discussions of demonic influence, joined to his rare account of the popular cult or belief in the *cursus*, situate the field of demonology at the crossroads of theology and medicine, religion and science, the learned and the popular, Christianity, paganism, Judaism and Islam. Alexander of Hales and his collaborators in composing the *Summa Halensis*, Roland's Dominican successors, and especially Albert the Great in his commentary on the *Sentences*, would all continue this spirit of trying to explore the mechanisms lying behind demonic operations and magic with new eyes with the aid of natural philosophy.