HAL
open science

The Learned Physician as a Charismatic Healer

Maaike van der Lugt

To cite this version:

Maaike van der Lugt. The Learned Physician as a Charismatic Healer. Bulletin of the History of Medicine, 2013, 87, pp.307-346. halshs-00999403

HAL Id: halshs-00999403

https://shs.hal.science/halshs-00999403v1

Submitted on 3 Jun 2014

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

PROJECT MUSE®

The Learned Physician as a Charismatic Healer: Urso of Salerno (Flourished End of Twelfth Century) on Incantations in Medicine, Magic, and Religion

Maaike van der Lugt

Bulletin of the History of Medicine, Volume 87, Number 3, Fall 2013, pp. 307-346 (Article)

Published by The Johns Hopkins University Press
DOI: 10.1353/bhm.2013.0038

For additional information about this article
http://muse.jhu.edu/journals/bhm/summary/v087/87.3.van-der-lugt.html

Access provided by Johns Hopkins University (21 Oct 2013 15:59 GMT)

The Learned Physician as a Charismatic Healer: Urso of Salerno (Flourished End of Twelfth Century) on Incantations in Medicine, Magic, and Religion

MAAIKE VAN DER LUGT

SUMMARY: Urso, the last of the great Salernitan physicians, was both an ardent defender of a theoretical, scientific medicine and the first in the medieval West to propose, in his aphorisms, a rational and naturalistic explanation of the healing power of incantations. The article explores this paradox and provides an in-depth analysis of Urso's highly original and hitherto ignored argument, as well as its intellectual and social background. According to Urso, the efficacy of incantations relies not on the power of words, but on the charismatic physician's "aura"—spirits emanating from his body—and the patient's confidence in and conformity with the physician. Urso compares medical incantations to teaching, fascination, demonic magic, sacraments, and prayer. It is argued that Urso's incursions into theology are both a tactic to defend his bold naturalism against accusations of unorthodoxy and a reflection of his ambition to create a comprehensive "science of everything." Urso's text and an English translation are provided in an appendix.

KEYWORDS: incantation, fascination, charisma, spirits, medicine, magic, demons, sacraments, prayer, aphorisms, Salerno

What makes for a good physician? In the later Middle Ages, the short answer to this timeless question could be expressed in one word: learning. Skill and bedside manners are certainly useful, but they are not enough. Or, better put, in order to be successful and respected, physicians must be learned. They cannot stop short at symptoms, but must know the

Earlier versions of this article were presented at a workshop on medicine and religion organized by William Maclehose at the Wellcome Institute for the History of Medicine at UCL in London, and at Caroline Bynum's seminar at the Institute for Advanced Study in Princeton. Many thanks to all participants for their helpful remarks. Special thanks go to the anonymous reviewers and Charles de Miramon for their careful reading of the article and constructive criticism and to the editors for their help in polishing my English.

deeper causes of disease; they must base their diagnosis, prognosis, and treatment on logical reasoning and the Hippocratic, Galenic, and Arabic heritage. Mastering the authoritative texts implies, in turn, the need for Latin literacy.

In the medieval West, this ideal of book-learned medicine was first articulately defended by a group of twelfth-century physicians linked in one way or another with the town of Salerno in southern Italy.[1] Calling themselves no longer simply "healers" (*medici*), but also "experts in natural philosophy" (*physici*), Salernitan physicians claimed scientific status for the medical art by developing its theoretical dimension. They linked up their causal models with the theory of the four elements (fire, air, water, earth) and actively contributed to contemporary cosmological debates. Inscribing their pharmacology into the physics of the elementary qualities (hot, cold, wet, dry), they eliminated, like Galen before them,[2] the recourse to charms and blessings, effectively separating medicine from magic and religion.[3] In their pursuit of a rational and theory-based medicine, Salernitan physicians set the stage for the even more technical and speculative medicine developed in the universities of Montpellier, Bologna, and Paris from the middle of the thirteenth century onward.

Short answers, however, are usually oversimplifications. A longer, more nuanced reply to our initial question would, of course, have to take into account that learned physicians only ever represented a small elite among all medieval practitioners. Nor did learned physicians outright deny the possibility of demonic or divine intervention, but tended only to limit its scope.[4] Moreover, even within the literate tradition, the frontiers between medicine, magic, and religion remained far from clear-cut. There was room, in mainstream medical theory, for marvelous properties of stones and plants for which the concept of elementary qualities could

1. For an introduction to Salernitan medical tradition and bibliography, see s.v. "Salerno," 452–53 (Monica Green) and "Medicine, Theoretical," 336–40 (Faith Wallis), both in *Medieval Science, Technology and Medicine: An Encyclopedia*, ed. Thomas F. Glick, Steven John Livesey, and Faith Wallis (London: Routledge, 2005), complemented by *La scuola medica salernitana. Gli autori e i testi*, ed. Danielle Jacquart and Agostino Paravicini Bagliani (Florence: SISMEL, 2007).

2. Galen, *De simplicium medicamentorum temperamentis ac facultatibus*, 6, prologue, ed. Kühn, 11, 792. A Latin version of this text circulated already in the early Middle Ages. I have not been able to consult Nicholas Everett, *The Alphabet of Galen: Pharmacy from Antiquity to the Middle Ages. A Critical Edition of the Latin Text with English Translation and Commentary* (Toronto: University of Toronto Press, 2012).

3. For the blurring of these categories in the early Middle Ages, cf. Peregrine Horden, "What's Wrong with Early Medieval Medicine," *Soc. Hist. Med.* 24 (2011): 5–25.

4. For an example, cf. Maaike van der Lugt, "The *Incubus* in Scholastic Debate: Medicine, Theology and Popular Belief," in *Religion and Medicine in the Middle Ages*, ed. Peter Biller and Joseph Ziegler (Woodbridge, UK: York Medieval Press/Boydell, 2001), 175–200.

not account. These powers could be known only by experience and were attributed to some kind of hidden force or form, magnetic attraction serving as the paradigmatic example.[5] While natural marvels were not considered magical in themselves, the recognition of hidden, yet natural, forces opened the door to the notion of a magic based solely on the exploitation of the powers of nature.[6] As such, medical naturalism could express itself not as a tendency to dismiss magical or religious healing practices, but rather as an effort to *integrate* these practices into learned medicine. The term "naturalism" must consequently be handled with some caution.[7]

The multilayeredness of medical naturalism found expression in Urso of Salerno, who flourished from circa 1160 to circa 1200.[8] In Urso's works, the Salernitan effort to connect medicine to natural philosophy reached its apogee. At the same time, this last of the great Salernitan masters seems also to have been the first, in the medieval West, to propose a rational and naturalistic account of the healing power of incantations, more or less in accordance with the basic tenets of medicine and natural philosophy.

Urso discussed incantations in one of his aphorisms and developed his argument in the lengthy commentary he later composed on this collection of 109 encapsulations of medical and philosophical doctrine (the text of this aphorism and the gloss, as well as an English translation are provided in Appendix 2).[9] Urso's views on incantation, which have gone largely

5. See Nicolas Weill-Parot, *Points aveugles de la nature: La rationalité scientifique médiévale face à l'occulte, l'attraction magnétique et l'horreur du vide (XIIIe-milieu du XVe siècle)* (Paris: Les Belles Lettres, 2013).

6. See Jean-Patrice Boudet, *Entre science et* nigromance*: Astrologie, divination et magie dans l'Occident médiéval (XIIe–XVe siècle)* (Paris: Presses de la Sorbonne, 2006), chap. 3; Nicolas Weill-Parot, *Les "images astrologiques" au Moyen Âge et à la Renaissance: Spéculations intellectuelles et pratiques magiques (XIIe-XVe siècle*) (Paris: Champion, 2002); Richard Kieckhefer, *Magic in the Middle Ages* (Cambridge: Cambridge University Press, 1989), 8–17.

7. All causes deemed natural did not have the same status, and medieval authors did not always agree on what kinds of causes counted as natural. Astral influences are an important case in point, as are the powers of demons, which gradually came to be considered as analogous to and restricted by the powers of nature. On some of these issues, see Irène Rosier-Catach, "Le pouvoir des mots: Remarques sur la notion de causalité naturelle," *Revue de synthèse* 129 (2008): 611–16, and Maaike van der Lugt, *Le ver, le démon et la vierge: Les théories médiévales de la génération extraordinaire* (Paris: Les Belles Lettres, 2004).

8. Traditionally, Urso's death is dated to 1225, but Wolfgang Stürner has shown that 1200 is more likely. For the scant information on Urso's biography, the best accounts are Stürner, *Urso von Salerno: De commixtionibus elementorum libellus* (Stuttgart: E. Klett, 1976), 7–9, and Thomas Ricklin, "Conceptions of Time in Twelfth Century Salernitan Medicine," in *The Medieval Concept of Time: The Scholastic Debate and Its Reception in Early Modern Philosophy*, ed. Pasquale Porro (Leiden: Brill, 2001), 437–58, 451–52. See also Faith Wallis, s.v. "Urso of Calabria," in *Medieval Science* (n. 1), 499–500 for a bibliography and list of editions of Urso's works.

9. For a list of manuscripts and information about the edition by Rudolf Creutz, henceforth cited as Urso, *Aphorismi* (Creutz), see Appendix 1.

unnoticed by historians,[10] center on the idea that their efficacy rests not on some intrinsic power of words but on the physician's trustworthiness and physical presence, as well as the confidence, trust, and hope of recovery he inspires in his patient. According to Urso, being a good physician is a matter not of just knowledge and expertise, but also charisma, of having a good "aura." It is this paradox that I explore further in this article.

Interestingly, Urso starts out his argument with a description of religious forms of efficacious language, such as sacramental formulas, exorcisms, benedictions, maledictions, and prayers, as well as demonic incantations. The efficacy of these other forms of ritual language depends, so Urso claims, like that of medical incantation, on both the speaker and the beneficiary or target. Explicit references to religion, theology, and demonology repeatedly crop up in other parts of the aphorisms commentary as well.

The meaning of these incursions into theology is one of the focal points of this study. What do they tell us about Urso's training and milieu, his vision of nature, and ideas about the relationship between theology and science?[11] At the time of Urso's writing, theologians were intensively discussing the nature of the sacraments and other religious rituals. The implications of these debates for Urso, whether or not he was fully aware of all the details, are crucial for understanding his argument. Another important question concerns Urso's motivation for inserting an aphorism about incantations, given their near absence in Salernitan medical

10. In his remarkable edition of a collection of questions and answers on medicine and science written ca. 1200, Brian Lawn did, however, correctly identify Urso's gloss to aphorism 39 as the source of a question about fascination: *The Prose Salernitan Questions: An Anonymous Collection Dealing with Science and Medicine Written by an Englishman c 1200, with an Appendix of Ten Related Collections* (Oxford: Oxford University Press, 1979), B 179 (98). Béatrice Delaurenti briefly analyzes this Salernitan question, but does not follow up Lawn's lead in her otherwise valuable and detailed studies of incantation and fascination, *La puissance des mots. Virtus verborum: Débats doctrinaux sur le pouvoir des incantations au Moyen Âge* (Paris: Cerf, 2007); Delaurenti, "La fascination et l'action à distance: questions médiévales (1230–1370)," *Médiévales* 50 (2006): 137–54. Barbara Raczyńka, "Filozoficzna teoria człowieka w głównych traktatach salernitańskich (*Aforismi cum glosulis Ursonis Salernitani*; *Quaestiones Nicolai Peripatetici*)," *Acta mediaevalia* (Lublin) 11 (1997): 1–137, 94–95, paraphrases aphorism 39 in passing. Michael McVaugh's perceptive "*Incantationes* in Late Medieval Surgery," in *Ratio et superstitio: Essays in Honor of Graziella Federici Vescovini,* ed. Giancarlo Marchetti, Orsola Rignani, and Valeria Sorge (Louvain-la-Neuve: Fédération Internationale des Instituts d'Etudes Médiévales, 2003), 319–46, and Lea Olsan's "Charms and Prayers in Medieval Medical Theory and Practice," *Soc. Hist. Med.* 16 (2003): 343–66 concentrate on the period after 1200 and do not mention Urso.

11. The relationship between medicine and religion has in recent years been the object of growing interest among medievalists, such as Joseph Ziegler.

sources. There was no textual imperative to do so, no authority that would have been difficult to ignore. To answer these questions, we must first study Urso's theory of natural incantation in more detail.

Audacious Urso's Aphorisms

In Urso's lifetime, Salerno was still the hotspot for medical learning in the West, a position it would lose after the sack of the city in 1194. The town had been known for the skill of its physicians as far back as the ninth century, and it was here that medieval medicine developed, in the twelfth century, into a theory-based body of knowledge, with a formalized methodology. It was in Salerno that physicians started to read and comment on the growing corpus of Greek and Arabic medical texts, many of which had been translated into Latin in the late eleventh century by Constantine the African, a monk at nearby Monte Cassino. Among the medical writings studied in Salerno were the *Pantegni*, Constantine's adaptation of a voluminous Arabic medical encyclopedia by 'Ali ibn al' Abbas al Majûsi (known in the West as Haly Abbas), and the much more concise *Isagoge*, Constantine's version of an Arabic introduction by Hunayn ibn Ishâq (known as Johannitius) to Galen's more complicated *Tegni*. Both the *Isagoge* and the *Tegni* were part of a body of short introductory texts put together at Salerno that would serve as the basis of medical instruction until the end of the Middle Ages. Later known as the *Articella*, this cluster also comprised Hippocrates's *Aphorisms* and *Prognostics*, as well as a treatise on Urine by Theophilus and one on Pulse by Philaretus.[12]

Urso, however, did not want to be a mere commentator. Unlike his predecessors and colleagues, he left no commentaries on the *Articella*. All his works are free-standing treatises, the most important of which are his own aphorisms accompanied by his own glosses, and a highly technical treatise on mixtures, the *De commixtionibus elementorum libellus*.[13]

In both works, Urso self-confidently boasts of his sharp intellect (*ingenium*), while claiming the need for discovery (*inventio*). The "ancient founders of medicine and natural philosophy have not uncovered everything," he maintains in the prologue to the aphorisms glosses. Whether these unfortunate gaps stemmed from "negligence, ignorance, or from

12. On the *Articella*, cf. Cornelius O'Boyle, *The Art of Medicine: Medical Teaching at the University of Paris, 1250–1400* (Leiden: Brill, 1998), chap. 3.

13. Urso lists his works in the prologue to the *De commixtionibus*. The list includes the aphorisms, but not the glosses. The latter, in turn, cite the *De commixtionibus* and are his last known work. For Urso's other works and editions, cf. Stürner, *Urso von Salerno* (n. 8), 9–12, 14, 225; Wallis, "Urso" (n. 8), 500.

the daunting magnitude of the task" Urso finds difficult to determine. Urged by his students, he decided, however, to rise to the challenge to come up with a comprehensive doctrine. Since the brevity of the aphorisms had left many readers baffled, he decided to write his own commentary on them.[14] As such, Audacious Urso, as he called himself in the *De commixtionibus*,[15] staged himself as a new Hippocrates and Galen combined.

Both the treatise on mixtures and the aphorisms indeed far extend beyond the traditional domain of medicine. A large part of the *De commixtionibus* is concerned with calculating systematically the number of mixtures, in order to bolster Urso's claim that all natural phenomena—but especially biological rhythms and cycles—can be explained by the interaction of elementary qualities.[16] However, despite its originality and scope, the *De commixtionibus* is part of the Salernitan project of connecting medicine to physics. It contains no obvious references to religion or magic.

The aim of the aphorisms is, as Urso states in the prologue, to demonstrate the links between causes and effects and understand the nature of things (*de naturis rerum*). Hippocrates's *Aphorisms* lacked a clear plan, but Urso insists that his collection corresponds to the structure of nature itself, which he compares to a house. The aphorisms move, so Urso tells his reader, from general statements that constitute the foundation and the walls of the house, to more specific and particular ones that form the roof.[17] The very first aphorism, however, is "theological" (*theologicus*) and acknowledges God's power to work wonders.[18]

14. Urso, *Aphorismi*, prologue (Creutz, 18): "Cum physicalis scientiae inventores, aut negligentia taediosi aut ignorantia obfuscati, aut mole profundae materiei oppressi de rerum naturalis indagandis nullam plenam successoribus reliquerunt doctrinam, idcirco inveniendi fretus ingenio, et rationum fulcitus caterva, necnon et sociorum precibus et caritate devictus, de Dei confidens auxilio, de naturis rerum hunc libellum edidi necessarium." On the prologue and Urso's ideas about *inventio*, see Danielle Jacquart, "L'écriture par excellence du texte médical: Les aphorismes," in *L'écriture du texte scientifique: Des origines de la langue française au XVIIIe siècle*, ed. Claude Thomasset (Paris: Presses de l'université Paris Sorbonne, 2006): 133–40, 135–38. Cf. also Maaike van der Lugt, "Chronobiologie, combinatoire et conjonctions élémentaires dans le *De commixtionibus elementorum* d'Urso de Salerne (fin XIIe siècle)," *Micrologus* 19 (2011): 277–324, 296–97. On the limited place for novelty and progress in medieval medicine, see Chiara Crisciani's classic essay, "History, Novelty, and Progress in Scholastic Medicine," *Osiris*, 2nd ser. 6 (1990): 118–39.

15. Urso, *De commixtionibus elementorum libellus*, prologue, ed. Stürner, *Urso von Salerno* (n. 8), 38: "Ursus audax."

16. Edition by Stürner, *Urso von Salerno* (n. 8). See also van der Lugt, "Chronobiologie" (n. 14).

17. Urso, *Aphorismi*, prologue (Creutz, 18–19). See Jacquart, "L'écriture par excellence" (n. 14) for a more detailed analysis.

18. See infra, 330.

If the announced transition from general to particular aphorisms is not self-evident, the subjects treated are, indeed, extremely varied. They include the speed of growth, generation, and decay in different kinds of organisms (36); the cause of birth defects (31); the power of attraction and repulsion (26); the cause of color (58); and the influence of the stars on the sublunar world (32). The aphorisms also touch on sense perception and the body/soul nexus (38 on vision, 24–25 on the imagination, 41 on dreams). Aphorism 39 on incantation falls partly into this latter group.

Several glosses appeal to the theory of mixtures and the elements developed in the *De commixtionibus*. However, in the aphorisms Urso also insists on the humors and, especially, on the circulation and diffusion of spirits. Aphorism 39 is an important case in point. Before turning to this aphorism, a word about Urso's concept of spirit may be helpful, because s*piritus* is a highly polysemous term. In medieval texts it could stand for the likeness of God in humankind, the Holy Spirit, the world soul, demons and angels, the human mind, intelligence, imagination, or sentiments, but also, more prosaically, for a breeze or wind, or air inhaled and exhaled. Urso, for his part, uses *spiritus* in a technical, medical sense. In Galenic medicine, spirits are invisible yet material substances of a subtle and rarefied nature, rather like a hot vapor. Flowing throughout the body, they ensure all the human life functions, from digestion, growth, and generation, heartbeat, pulse, respiration, and the emotions, to movement, sense perception, imagination, reason, and memory.[19] In Galen's own work, references to spirits are, however, still sporadic and dispersed; the systematization of his pneumatology and the increased importance of spirits in physiology is of Arabic origin.[20] Urso is heir to this Arabic pneumatic physiology and uses the concept of medical spirits to construct his notion of the physician's healing aura.

The Aura of the Good-Natured Physician

Urso starts out his aphorism 39 by stating that incantations are efficacious "by themselves" (*ex se*) (l. 3, text; l. *1*, translation). Clarifying this claim in the gloss, he compares their power to that of "stones and things born from the earth." However, Urso hastens to establish a crucial difference between the natural and autonomous powers of plants, gems, or metals,

19. Cf. James J. Bono, "Medical Spirits and the Medieval Language of Life," *Traditio* 40 (1984): 91–130; Nancy Caciola, *Discerning Spirits: Divine and Demonic Possession in the Middle Ages* (Ithaca, N.Y.: Cornell University Press, 2003), 179–80. See also infra.

20. Cf. Danielle Jacquart, "Les antécédents gréco-latins de l'*Isagoge Iohannitii*," 1994, reprinted in *La science médicale occidentale entre deux Renaissances* (Aldershot, UK: Variorum, 1997), II.

and those of "intently pronounced words." The efficacy of incantations does not depend on some intrinsic power of the words themselves. It is not automatic; incantations do not always work. Nevertheless, when the physician pronounces a charm while administering a drug, the incantation can sometimes be efficacious and enhance the power of the medicine (l. 8–15; *10–19*). If the charm works, it is thanks to the "confidence and merit" of the actor and the subject, the enchanter and the enchanted (l. 1–2, 20–22; *1–5*, *24–28*).

For Urso, the natural power of incantations is a side effect of speech. In the act of speaking, the healer exhales pure spirits, which purify the air between himself and the patient. The purified air is inhaled by the patient, leading to the purification of his own spirits, or the production of new, purer, spirits. The circulation of these pure spirits inside the patient's body leads to a purification of his humors and organs, causing his condition to improve. Alternatively, the purified spirits strengthen the patient's body so much that it is able to expel harmful substances, leading to full restoration of health (l. 73–84; *87–102*).

The physician's capacity to clean the air and set into motion this virtuous cycle depends on the condition of his own body. If he is made from bad matter, and if his humors and spirits are corrupt, the physician will exhale bad spirits, infect the air, and only make matters worse. By causing a snowball effect of corruption—from the spirits, to the humors, and finally to the members—he may even kill his patient (l. 106–14; *128–39*). Urso establishes a parallel between the physician and the teacher. If the latter exhales clean spirits, these will purify the student's spirits, allowing him to assimilate the teaching, since spirits are instruments of both soul and body (l. 85–91; *103–11*). On the other hand, if the student's mind is obfuscated by bad spirits exhaled by his teacher, he will be unable to understand or retain anything. Urso compares such pernicious influence to the power of fascination over fawns and lambs, to the bites and stings of poisonous animals, and the transmission of leprosy and scabies by extended contact with the sick (l. 119–30; *144–69*).

When meeting a leper, healthy people are instinctively swept with horror and revulsion, a natural reaction in anyone confronted with someone or something very dissimilar in spirit and body from oneself. Conversely, the incantation will be most beneficial if there is a conformity between the spirits of the physician and his patient. This spiritual harmony is not necessarily a given; it can also be a second nature. Such acquired conformity also explains the unbreakable bond between husband and wife after long years of marriage, or the love for one's home country. By breathing the local air and eating the local food, one becomes completely attuned to one's surroundings. Traveling can weaken health to the point where the only remedy is to return home. Conformity can, according to Urso,

be manifest or hidden, as in the case of the attraction of a handsome man for an ugly woman (l. 92–105; *112–27*). Urso presents the conformity between physician and patient both as the precondition of the efficacy of the incantation and as its result. The spirits of the object of the incantation are gradually assimilated to those exhaled by the physician. Charismatic healing appears, as such, as a dynamic process, a virtuous cycle.

The state of mind of the patient, however, also contributes to the success of the incantation. It does so not by purifying the spirits but by ensuring sufficient spirit supply and its unobstructed flow throughout the body. Fear of death constricts the heart, while a positive mood and hope of recovery make the heart expand, provoking the circulation of large quantities of well-aired spirit; the spirits invigorate the bodily faculties and can lead it to a perfect crisis (l. 3–6, 145–53; *5–9, 177–88*).

At the same time, the patient's mental state can alleviate pain by influencing the *direction* of the flow of the spirits. If the patient trusts his physician and concentrates on his comforting words, rather than on his illness, his spirits will be called away from the diseased member, toward the brain, leading him to forget his pain. The same mechanism explains the insensitivity to pain of the martyrs and their ability to resist torture, as well as the fact that those in battle who think intently of victory do not feel their injuries.

It is thus of great importance that the physician create a climate of trust. The soothing tone in which he speaks and the content of his words (the promise of health) contribute to his success. He must not reveal the seriousness of the disease to his patient, because if the patient is shaken by fear, the spirits can easily be obstructed, precipitating death (l. 153–80; *189–222*).

Inspiration and Invention

Urso rarely cites his sources, so we cannot determine if his work was driven by intellectual or practical concern or both. When reading his striking remarks on homesickness and the love of one's homeland, topics not usually addressed in medical treatises, it is difficult not to wonder if he speaks from personal experience. We know little about his biography, but contemporaries like Gilles of Corbeil had traveled far from home to Salerno. Whatever the impulse, Urso's account of homesickness is clearly based upon Hippocratic and Galenic thinking about the influence of climate and diet upon the body. The Hippocratic text *Airs, Waters, Places*, which was available in Latin translation in Urso's time, demonstrated how climate and geography shaped physical and cultural differences. Air, food, drink, and other such variables had become systematized in Arabic

medicine into a list of "non-natural things."[21] Air, for example, keeps the body alive by replenishing spirits and innate heat through respiration.[22] Since the non-naturals also maintain the body's complexion, or balanced proportion of elementary qualities, a change in diet or environment can throw the body off balance, and thus travel can be a health hazard, and homesickness have a physical basis.[23]

The question of inspiration becomes even more complex if we turn to incantations. About the act itself Urso says no more than that "some people sometimes simulate an incantation while administering the drug" (l. 11–13; *14–15*). The association of incantation and medication is also hinted at in the aphorism itself (l. 2–3; *1–2*). However, in the rest of the discussion the medicine is not mentioned, and attention shifts to the incantation itself, or rather, the act of speaking. Urso says nothing about the incantatory formula and does not spell out the conditions for which he considered incantations to be necessary or whether he thought of them as fairly routine or only to be tried in complex or desperate cases.

One piece of background to Urso's account of the clinical use of charms can, perhaps, be found in Salernitan masters' commentaries on Hippocrates's aphorisms. Salernitan masters suggested that the ancient Methodists had used incantations.[24] The anonymous "Digby commen-

21. On the non-naturals, see the introduction by Dianne Bazell to Arnau of Villanova's *De esu carnium*, AVOMO, 11 (Barcelona: Publicacions de la Universitat de Barcelona, 1999), 156 and references. On *regimen*, see Pedro Gil-Sotres, introduction to Arnau of Villanova, *Regimen sanitatis ad regem Aragonum*, AVOMO, 10.1 (Barcelona: Publicacions de la Universitat de Barcelona, 1996).

22. Cf. Urso, *Aphorismi*, ad 10 (Creutz, 32). For the idea that the air replenishes spirits, cf. Costa ben Luca, infra.

23. For complexion, see Nancy Siraisi, *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice* (Chicago: University of Chicago Press, 1990), 101–4; Danielle Jacquart, "De *crasis* à *complexio:* Note sur le vocabulaire du tempérament en latin médiéval" in *Mémoires V. Textes médicaux latins antiques*, ed. Guy Sabbah (Saint-Etienne: Université de Saint-Etienne, 1984), 71–76, reprinted in *La science médicale occidentale* (n. 20), VI. In the gloss to aphorism 10 (Creutz, 82), Urso states that people from the south die sooner if they move to the north, and conversely. Avicenna's *Canon* (I.3.5.2–8, Venice, 1507, reprint, fols. 66r–67v) contains several special regimens for travelers, according to the climate of the region of transit or destination. Urso's work does not betray knowledge of the *Canon*, but ideas about travel hygiene may well be contained in sources available at Salerno, even though I have not found travel regimens in either the *Pantegni* or the *Viaticum* (Constantine's adaptation of a small medical handbook by the tenth-century Arabic physician Ibn al-Jazzar and paradoxically intended as a self-help book for travelers without access to medical care). On travel regimen, see Gil-Sotres, introduction (n. 21), 851–61.

24. As pointed out by Brigitte Maire, magical practices are quite incompatible with Methodism; cf. "Le triangle méthodique: Soranos, Caelius Aurelianus et Mustio," in *Rationnel et irrationnel dans la médecine ancienne et médiévale: Aspects historiques, scientifiques et culturels*,

tator" and the master known as Archimattheus used the association to discredit Methodism and exalt the rational tradition of Hippocrates in which they inscribed themselves, while Bartholomew of Salerno countered that Galen never mentioned incantations when he talked about the Methodists. According to Bartholomew, the root of the name of the sect is "method," teaching or rule, rather than *methoys*, charm, as his predecessors had claimed. His point is not to endorse the use of incantations, but Urso may have read Bartholomew's argument as a portrait of learned practitioners who used charms in their practice, and as a justification of the integration of incantations into rational medicine.

Actual charms and blessings are very rare in the texts that constitute the basis of Salernitan learning. In the *Pantegni*, the only incantations are for epilepsy,[25] a mysterious disease often associated with the demonic and the divine.[26] The first of these is diagnostic as well as curative and supposes a distinction between the idea that epilepsy is a natural disease like any other (a claim that goes back, ultimately, to the Hippocratic treatise *On Sacred Disease*), and the recognition of the reality of demonic possession. It involves speaking in the patient's ear and summoning the demon to leave. If the patient appears to be dead for an hour, and then awakens, he was possessed by a demon (*lunaticus vel demoniacus*), but if he falls to the ground (implying that the charm has not worked) he is a true epileptic (*epilepticus*) and must be treated with natural remedies. These include washing with salty water and other mundane dietary advice, but also suspending a peony, the hair of a white dog, or different kinds of stones around the neck of the patient. The peony amulet goes back to Galen, who, although virulently opposed to incantations, allowed, in some cases, for the suspension of medicinal substances.[27]

The second incantation is useful for epileptics and the possessed alike. It is clearly an addition by Constantine to the original Arabic text, because it refers to a Christian feast of the Roman Church. It involves taking the afflicted person to church, and having a priest or monk write down a

---

ed. Nicoletta Palmieri (Saint-Etienne: Publications de l'université de Saint-Etienne, 2003), 215–30, 220. The Salernitans' source may have been a lapidary statement in Isidore of Seville, *Etymologiae*, IV, 4, ed. W. M. Lindsay (Oxford: Oxford University Press, 1911): "Prima Methodica inventa est ab Apolline, quae remedia sectatur et carmina." Manuela Tecusan, *The Fragments of the Methodists: Methodism Outside Soranos* (Leiden: Brill, 2004), 594–95, translates *carmina* as "music," but for a medieval reader the term could also mean "charm."

25. Constantine the African, *Pantegni*, practica, 5, 17, ed. Lyons (1515), fol. 99r.

26. Cf. Owsei Temkin, *The Falling Sickness: A History of Epilepsy from the Greeks to the Beginnings of Modern Neurology* (Baltimore: Johns Hopkins University Press, 1945).

27. Galen, *De simplicium medicamentorum*, VI, 3, 10 (Kühn), 11, 859–60.

passage from the Gospel, presumably to be used as an amulet. In this case, however, the words are written, rather than spoken.[28] Amulets with characters, words, and phrases written on them also occur in Constantine's chapter on impotence (another affliction often associated with magic), both as a cause and a remedy.[29]

The incantations in the *Pantegni* do not bear much resemblance to Urso's description, however vague, which seems closer to the incantations commonly found in less learned Latin and vernacular remedy collections.[30] Pagan prayers to personified herbs still circulated in Urso's time, and some of these had to be said while administering the herb to the patient (rather than while gathering it, a practice Galen had vilified).[31] As a Christian doctor, Urso was, however, more likely thinking of charms involving prayers to God or the invocation of saints to bless the medicine or help the patient. Benedictions of medicines, invocations, and adjurations accompanying their administration, often associated with the sign of the cross or other gestures, and borrowing the form and vocabulary of the liturgy of prayer and exorcism, are very common in "middle brow" receptaries;[32] they can also be found in liturgical texts,[33] a sign of their multivalent nature.

Did Urso or his colleagues, despite the near absence of incantations in "high" medicine, have recourse to charms and blessings? And if they can, indeed, be identified with the *quidam* of Urso's gloss, could it be that they were using incantations to cater to their patients' demands or expectations and ward off competition? The Salernitan masters were far from the only health care option in twelfth-century Salerno. There is evidence of many other healers, male and female alike, with varying levels of learning; some pure empirics, others, like the famous Trota, almost as

28. For more detail and references, cf. Delaurenti, *La puissance des mots* (n. 10), 80–81.

29. Cf. Catherine Rider, *Magic and Impotence in the Middle Ages* (Oxford: Oxford University Press, 2006), chap. 3 and Appendix 1.

30. On charms, incantations, and prayers to heal or protect from harm as a genre, cf. Edina Bozóky, *Charmes et prières apotropaïques* (Turnhout, Belgium: Brepols, 2003); Kieckhefer, *Magic* (n. 6), 69–75.

31. Examples of both are in medieval manuscripts of the Herbal by ps-Apuleius; cf. Bozóky, *Charmes* (n. 30), 91–92 and n. 10. Other prayers address all plants and the earth indiscriminately; cf. John I. McEnerney, "Precatio terrae and precatio omnium herbarum," *Rheinisches Museum* 126 (1983): 175–87.

32. Cf. Bozóky, *Charmes* (n. 30), 78–82, 98–103.

33. Ernest Wickersheimer, "Benediction des remèdes au Moyen Âge," *Lychnos* 14 (1952): 96–101 for examples. For healing rituals sanctioned by the Church, cf. Adolph Franz, *Die kirchlichen Benediktionen im Mittelalter* (Freiburg im Breisgau: Herder, 1900).

lettered as the masters.[34] We know little about the practice of these men and women, especially the more hands-on among them, but if the receptaries mentioned above are something to go by, it seems fair to surmise that at least some of these Salernitan healers used charms and blessings.

However, instead of seeing Urso's efforts at integrating incantations into high medicine primarily as a response to the forces of the Salernitan medical marketplace, we can also read his aphorism in light of the rise of a new, learned, natural, magic. Until the twelfth century, medieval magic had, like medicine, been an aggregate of definitions, recipes, rituals, and practices, devoid of a theoretical underpinning and without much of a unifying structure or identity. Under the influence of new magical texts, translated from the Greek, and, especially, the Arabic, magic developed, during the twelfth and thirteenth centuries, into something of an organized field, with a certain claim to scientific status.[35]

The notion that incantations cause a psychosomatic response has a clear parallel in a treatise on medical talismans by Costa ben Luca, a Melkite physician and translator from Greek to Arabic who worked in Bagdad in the ninth and early tenth centuries. Probably translated from Arabic into Latin by Constantine the African, and certainly available in Urso's time, the *De physicis ligaturis* describes all kinds of incantations and suspensions around the neck. Costa attributes their use to the Indians and proposes a theoretical justification for their efficacy. Like the lodestone, some gems and certain animal and mineral substances contain a hidden property that can be established only by experience. Other remedies have no inherent powers, but can be effective if the patient believes in his physician's competence and in the efficacy of the treatment.[36] To back up this theory of the placebo effect avant la lettre, Costa recounts a story about a noble patient of his who was convinced he suffered from magically caused impotence. Having failed to persuade him otherwise, Costa gave him a book recommending smearing raven's gall and sesame oil on the whole body. The patient believed, complied with the advice, and was promptly cured (the fact that Costa gave his patient a book

34. Cf. Patricia Skinner, *Health and Medicine in Early Medieval Southern Italy* (Leiden: Brill, 1997), chap. 5; Monica Green, *Making Women's Medicine Masculine. The Rise of Male Authority in Pre-modern Gynaecology* (Oxford: Oxford University Press, 2008), chap. 1.

35. On the rise of learned magic, cf. the studies cited supra, n. 6.

36. J. Wilcox and J. M. Riddle, "Qustâ ibn Lûqâ's *Physical Ligatures* and the Recognition of the Placebo Effect. With an Edition and a Translation," *Mediev. Encounters* 1 (1995): 1–50; Roberto Casazza, "El *De phisicis ligaturis* de Costa ben Luca: un tratado poco conocido sobre el uso de encantamientos y amuletos con fines terapéuticos," *Patristica et mediaevalia* 27 (2006): 87–113. See also Delaurenti, *La puissance des mots* (n. 10), 176–85.

suggests that he did not want to endorse his patient's belief nor prescribe a remedy that he considered useless).[37] Perhaps Costa was the model for Urso's "people who sometimes simulate an incantation." The placebo that cured the nobleman is admittedly not an incantation, but Costa explicitly includes incantations among the remedies that work only because the patient believes in them. Moreover, Costa claims that incantations are particularly useful when they are combined with medication, because the incantation targets the soul, and indirectly the body, while the medicine works directly on the body.[38]

Costa ben Luca's views on incantations are part of a broader argument about the importance of gaining the patient's trust, and about the intimate relationship between mental and physical health. Like Urso, Costa did not develop this argument from scratch. Good communication with the patient was already considered a priority in the Hippocratic corpus,[39] and the concern for raising the patient's spirits is also in accordance with Galenic thought, since mental states and emotions (*accidentia animae*) are among the non-naturals.[40]

Costa ben Luca does not dwell on the mechanism underlying the soul's influence on the body. However, in another treatise, *De differentia spiritu et animae*, well known in the West from the middle of the twelfth century, Costa identifies *spiritus* as the medium between the body and the soul and as the instrument of bodily and mental powers.[41] He distinguishes two kinds of spirit, linked with two clusters of functions and mapped to spe-

37. Costa ben Luca, *De physicis ligaturis*, ed. Wilcox and Riddle (n. 36), 34, 1.63–73.

38. Ibid., 1.47–54.

39. For examples, cf. Delaurenti, *La puissance des mots* (n. 10), 175n1.

40. Cf. Luis García-Ballester, "Soul and Body: Disease of the Soul and Disease of the Body in Galen's Medical Thought," in *Le opere psicologiche di Galeno*, ed. P. Manuli and M. Vegetti (Naples: Bibliopolis, 1988), 117–52, reprinted in *Galen and Galenism: Theory and Medical Practice from Antiquity to the European Renaissance* (Aldershot, UK: Variorum, 2002). Johannitius, *Isagoge*, 41, ed. Gregor Maurach, *Sudhoffs Archiv* 62 (1978): 148–74, 160; Constantine the African, *Pantegni*, theorica, 5, 37, ms. Den Haag, Koninklijke bibliotheek, 73 J 6, fols. 36r–36v http://www.kb.nl/bladerboeken/liber-pantegni (last accessed June 11, 2013).

41. Costa ben Luca, *De differentia spiritus et animae*, ed. in Constantine the African, *Opera omnia* (Basel, 1536), 308–17, reproduced in Marielene Putscher, *Pneuma, Spiritus, Geist: Vorstellungen vom Lebensantrieb in ihren geschichtlichen Wandlungen* (Wiesbaden, 1973), 145–50; and the edition by Carl S. Barach (Innsbruck, 1878). I have not seen Judith Wilcox, "The Transmission and Influence of Qusta ibn Luqa's 'On the Difference between Spirit and the Soul'" (Ph.D. diss., City University of New York, 1985). See also J. W. Livingston, "Qusta ibn Luqa's Psycho-Physiological Treatise *On the Difference between the Soul and the Spirit*," *Scripta mediterranea* 2 (1981): 53–77 (with English translation of the Arabic version); José Martínez Gázquez and Anna Maranini, "La *recensio* única del *De differentia inter spiritum et animam* de Costa Ben Luca," *Faventia* 19, no. 2 (1997): 115–29.

cific anatomical structures. The vital spirit (*spiritus vitalis*) maintains life, heartbeat, pulse, and respiration. It arises in the heart, is replenished by air intake, and is transmitted throughout the body through the pulse. The animal spirit (*spiritus animalis*) arises in the brain and is replenished by the vital spirit; it covers the mental faculties such as reason and memory and is distributed through the nerves to the other members to ensure sense perception and motion.[42] The *Isagoge* and the *Pantegni* provide similar accounts with some extra details, such as the idea that the vital spirit also covers the emotions. They also mention a third spirit (*spiritus naturalis*), which arises in the liver, is diffused through the veins, and pertains to nutrition, digestion, expulsion, growth, and generation.[43]

Urso's explanation of the effect of positive or negative emotions uses the concept of the *spiritus vitalis*,[44] whereas his description of pain management appeals to the *spiritus animalis*, as well as the localization of cognitive functions in the brain.[45]

The inspiration of trust and admiration in the patient as a means to influence the production and flow of spirits in the patient is only part of the story. By diffusing his own pure spirits in the air, the physician also purifies the spirits of the patient, leading to the purification of his humors and members, or to the expulsion of harmful substances. This aspect of Urso's explanation is not found in Costa ben Luca. It is a crucial innovation,[46] because it marks the difference between what remain essentially excellent bedside manners—despite their real impact on the patient's health—and the physician literally and physically "becoming the cure."[47]

42. Cf. Bono, "Medical Spirits" (n. 19), 92–97.

43. Johannitius, *Isagoge* (n. 40), 12–15 (153–155) and 17 (155); Constantine the African, *Pantegni*, theorica, 4 (n. 40), fols. 21r–25v.

44. Urso does not base himself, however, on these chapters on the *accidentia animae*. The *Isagoge* and the *Pantegni* describe the mechanism of the *accidentiae animae* not in terms of dilation and contraction, but as the movement of natural heat from the heart to the outside of the body, or from the outside of the body toward the heart. The directions of these movements for each emotion are incompatible with Urso's account. Johannitius, *Isagoge* (n. 40), 41 (160); Constantine the African, *Pantegni*, theorica, 5, 37 (n. 40), fols. 36r–36v. See also Gil-Sotres, introduction (n. 21), 815–27. Urso also discusses the effects of fear on the heart and the spirits elsewhere: *Aphorismi*, 10 (Creutz, 33–34) and 24 (Creutz, 50).

45. On the localization of the cognitive functions, cf. Irene Caiazzo, "Imagination et intellect chez les maîtres salernitains," in *Intellect et imagination dans la philosophie médiévale: Actes du XIe congrès international de philosophie médiévale de la Société Internationale pour l'Etude de la Philosophie Médiévale (S.I.E.P.M.)*, ed. M. C. Pacheco and J. F. Meirinhos (Turnhout, Belgium: Brepols, 2006), I, 923–39.

46. In the original aphorism, Urso presents only the psychosomatic part of the causal mechanism. The notion of the physician's aura (rather than his trustworthiness) as detailed in the gloss may well correspond to a later development of his thought.

47. I borrow this phrase from Fernando Salmón, who uses it, however, to refer to scholastic debates about the patient–physician relationship and the importance of trust: "The

The notion of spirits emanating from the physician's body implicitly opens up the possibility for incantations to work on patients who fail to cooperate, or who are too young or too sick to understand the physician's words.

The key to this extension to Costa ben Luca's explanation lies in the analogy between incantation and fascination.[48] The notion that some people and animals can harm others simply by looking at them intently goes back, at least, to Antiquity. In the later Middle Ages, the evil eye became the attribute of the witch accused of killing innocent infants with her noxious gaze.[49] Urso, however, singles out wolves as fascinating animals, and mentions only fawns and lambs as falling victim to fascination.[50] We are still far removed from the figure of the *vetula*.[51] To Urso's mind, vision is not crucial to fascination; the central idea is, rather, the body's exhalation of spirits, whether through the eyes, the nose, or the mouth.[52]

Fascination is always harmful, while medical incantations can be beneficial. The explanation of incantation in terms of the purification of the intermediate air is a positive variation on the explanation of fascination in terms of infection. Both rationalizations seem to be Urso's, although based on key medical concepts about air quality and the spread of disease.

Physician as Cure in Medical Scholasticism," in *Ritual Healing: Magic, Ritual, and Medical Therapy from Antiquity until the Early Modern Period*, ed. Ildikó Csepregi and Charles Burnett (Florence: SISMEL, 2012), 193–215.

48. If incantations work in the same way as fascination, they should also be effective on infants. But in that case, confidence cannot be the underlying cause. This insufficiency of Costa ben Luca's explanation is made explicit in the Salernitan question cited below.

49. Cf. F. Salmón and M. Cabré, "Fascinating Women: The Evil Eye in Medical Scholasticism," in *Medicine from the Black Death to the French Disease,* ed. Roger French et al. (Aldershot, UK: Ashgate, 1998), 53–84; Delaurenti, "La fascination" (n. 10). Neither of these studies cites Urso.

50. Admittedly, Urso mentions wolves and young animals separately and suggests that the latter are fascinated by people, not by other animals. Moreover, it must be noted that ms. Oxford, New College, 171 has "delicate children" (*pueri teneri*) instead of fawns (*cervi parvi*), a reading that seems to have left its mark on a Salernitan question, which directly reflects Urso's aphorism 39. However, even here fascination is not yet presented as a specifically female trait. Lawn, *Prose Salernitan Questions* (n. 10), B 170, 98. See also ibid., B 284, 137, for the idea that the gaze of a wolf may make a person lose his or her voice.

51. On the figure of the *vetula*, cf. Jole Agrimi and Chiara Crisciani, "Savoir médical et anthropologie religieuse: les représentations et les fonctions de la *vetula* (XIIIe-XVe siècle)," *Annales ESC* 48 (1993): 1281–1308.

52. According to Galenic doctrine, vision relies on the emission of animal spirits present in the eye, which transform the air between the eye and the object into the instrument of vision. Cf. David Lindberg, *Theories of Vision from al-Kindi to Kepler* (Chicago: University of Chicago Press, 1976), 9–11. We may surmise that Urso supposes bad spirits leave the body through the eyes, but he does not feel the need to spell this out. In aphorism 38 (Creutz, 68–69) he explains the difference in visual acuity between animal species by the different quality of the spirits in the eye.

As mentioned, ambient air is one of the non-naturals influencing health. Hippocratic and Galenic sources explain that air can be rendered insalubrious by a qualitative alteration (it can, for example, become too hot in summer), or by the contamination of its substance. Air that has been corrupted by impurities emanating from humid and decaying matter (marshes, dead bodies, excrement, etc.) causes "pestilence": epidemic disease.

Pestilence supposedly spreads by two routes, either directly, when healthy individuals inhale the pestilential air, or indirectly, through contact with an affected individual. In the latter case, the sick individual infects the intermediate air with his corrupt respiration, and this corrupted air is then inhaled by others.[53] Urso draws upon this model of disease transmission, citing leprosy and scabies as examples.[54]

Urso calls infectious spirits not only corrupt, but also poisonous, and compares their effect to the sting or bite of venomous animals. The analogy between pestilence and poison was not new; Galen had already made the comparison, in view of the apparent incommensurability between cause and effect in both cases.[55] A minuscule wound inflicted by someone with poisonous spirits can be fatal, says Urso, whereas the victim would survive a much more serious injury caused by someone less pernicious (l. 132–36; *162–65*).[56]

53. Armelle Debru, *Le corps respirant. La pensée physiologique chez Galien* (Leiden: Brill, 1996), 231–42; Véronique Boudon, "Galien face à la 'peste antonine,'" in *Air, miasmes et contagion. Les épidémies dans l'Antiquité et au Moyen Âge*, ed. S. Bazin-Tacchela, D. Quéruel, and E. Samama (Langres, France: Dominique Guérniot, 2001), 29–54. Johannitius, *Isagoge* (n. 40), 31 (158); Constantine the African, *Pantegni*, theorica, 5, 10–11 (n. 40), fols. 28v–29r.

54. Urso's choice of leprosy seems, however, rather atypical for the twelfth century. In Salernitan sources leprosy is associated with corruption of the body, but transmission by contact with lepers is cited only in passing. Moreover, leprosy is—correctly—not considered to be highly contagious. Physicians started to stress contagion, and in some cases the medical need for segregation, only in the fourteenth century, after the Black Death; cf. François-Olivier Touati, "Historiciser la notion de contagion: l'exemple de la lèpre dans les sociétés médiévales," in *Airs, miasmes et contagion* (n. 53), 157–88; Luke Demaître, *Leprosy in Premodern Medicine: A Malady of the Whole Body* (Baltimore: Johns Hopkins University Press, 2007). Urso, for his part, would seem to be reading the medical sources on leprosy in the light of Old Testament precepts about pollution (e.g., Leviticus 13 and 14). However, as has been shown by Touati, Demaître, and most recently Carole Rawcliffe (*Leprosy in Medieval England* [Woodbridge, UK: Boydell, 2009]), the medieval image of the leper was much more complex.

55. Armelle Debru, *Le corps respirant* (n. 53), 238–40.

56. One is reminded of the practice of poisoning weapons. Unexpected wound infection or death often raised the suspicion that the inflicting weapon had been poisoned. Cf. Franck Collard, "Le poison et le sang dans la culture médiévale," *Médiévales* 60 (2011): 129–56, 136–37.

However, Urso does not follow through the causal parallel between incantations, poisoning, and fascination on all accounts. While a poisonous sting, gaze, or breath is most effective (harmful) when the actor and the subject are very *different*, healing incantations are most effective (beneficial) if there is already a certain *conformity* between the physician and the patient.[57] This asymmetry stems from Urso's combination of the concept of purification/infection with another important principle in medieval medicine: the idea that similar things attract each other, while dissimilar things push each other away; Urso elsewhere calls on this principle to explain the power of the lodestone to attract iron.[58] The conformity between the physician and the patient allows the patient to become, through the incantation, even more like the physician.

With the notion of assimilation and conformity we touch upon one of the most personal aspects of Urso's discussion. Its background would seem to be both medical and social. On the one hand, Urso makes creative use of medical theories about health and balance. According to the Hippocratic and Galenic tradition, the body's point of balance is not static but dynamic. The classic adage "habit is like a second nature" also applies to the state of body. The *Pantegni*, for instance, points to the effect of work conditions. Blacksmiths will, for example, gradually develop a complexion that is hot and dry, because they are exposed to an environment that is hotter and dryer than usual.[59] In another aphorism, entirely concerned with the relationship between the inborn and the acquired, Urso notes that second nature often prevails: the weak-stomached son of a peasant will eventually grow used to coarse food, while the robust son of a king will get so accustomed to delicate dishes that it would be unwise to prescribe a peasant diet.[60] The social and the natural order tend to coincide eventually.

The prolonged parallel between healing and teaching suggests that the backdrop to Urso's notion of conformity and assimilation was not solely medical. Urso was both physician and teacher, and his argument echoes contemporary pedagogy. Despite its prominence in the medieval West,

57. Urso does not apply this distinction rigorously. In order to explain that certain kinds of pestilence afflict humans, others animals only, Urso argues elsewhere that pestilence caused by human corpses is more harmful for humans than pestilence caused by the decaying bodies of other animals, on account of the greater similarity between living and dead human bodies, than between human and animal bodies; cf. Urso, *Aphorismi*, ad 24 (Creutz, 51).

58. Urso, *Aphorismi*, 26 (Creutz, 57–58).

59. Constantine the African, *Pantegni*, theorica, 1, 23. (n. 40), fol. 5v.

60. Urso, *Aphorismi*, 11 (Creutz, 34–35). See also 40 (Creutz, 73–74), for a similar argument. Urso uses the distinctions *naturalis/accidentalis* and *prima/secunda*, and the terms *assiduitas*, *consuetudo*, and *habitus*.

the twelfth-century medical "school" of Salerno was an informal gathering of masters and pupils. Salernitan medicine was rational and text-based, but close personal bonds between master and student were crucial to the transmission of knowledge. Only with the rise of the university in the following century would this model give way to more standardized forms of medical learning and teaching.[61] However, as confirmed by Giles of Corbeil's portraits of the masters he had known, the ideal of the charismatic teacher, whose fascinating personality and impressive physical presence has the power to transform his admiring students into his own likeness, was still very much alive in late-twelfth-century Salerno.[62]

Other Kinds of Efficacious Language

Urso's detailed analysis of the causal mechanism of incantation "according to natural philosophy" and "rational investigation" (l. 68–69; *80–81*) is preceded by a description of religious understandings of efficacious language. Urso first likens incantations pronounced over medicines to the sacraments, which also have a verbal and a material component, and then proceeds to talk about other forms of ritual language: "prayers, exorcisms, incantations, maledictions, and benedictions." He points out that the "merit and faith" (*meritum et fides*) of both the person who performs the ritual and its beneficiary determine its effectiveness. God will grant

61. On this change, see Jole Agrimi and Chiara Crisciani, *Edocere medicos: Medicina scolastica nei secoli XIII-XV* (Naples: Guerini, 1988), 186. More generally, on the transition between "charismatic pedagogy" to the new text-based pedagogy, see Stephen Jaeger's stimulating *The Envy of Angels: Cathedral Schools and Social Ideals in Medieval Europe, 950–1200* (Philadelphia: University of Pennsylvania Press, 1994), 76–83, 190–93; and Mia Münster-Swendsen, "Medieval 'Virtuosity': Classroom Practice and the Transfer of Charismatic Power in Medieval Scholarly Culture c. 1000–1230," in *Negotiating Heritage: Memories of the Middle Ages*, ed. Mette B. Bruun and Stephanie Glaser (Turnhout, Belgium: Brepols, 2008), 43–63. Jaeger's claim that charismatic pedagogy had, by the twelfth century, given way to the new pedagogy of texts seems overstated. It ignores, moreover, the rise of preaching in exactly the same period.

62. Giles of Corbeil, *De laudibus et virtutibus compositorum medicaminum*, ed. Ludwig Coulant, *Aegidius Corboliensis Carmina* (Leipzig, 1826), 51, v. 93–95, "Cuius (i.e. Petrus Musandinus, Maurus of Salerno's teacher) si fuerit resolutum funere corpus, / Spiritus exultat, et magni pectora Mauri / Tota replet" (Even though [Petrus Musandinus's] body was dissolved by death, his spirit exults, and fills great Maurus' breast entirely); 52, v. 107–9: "Suppleat et Petri Maurus mihi (i.e. Giles) damna reformet, / Pastor ovem, membrumque caput, famulumque patronus, / Doctor discipulum, noscat sua mater alumnum" (Maurus replaced him and attenuated for me the loss of Peter, as knows how to do a shepherd for his sheep, the head for the members, a master for his servant, a teacher for his pupil, a mother for her child). Passages discussed by Mireille Ausécache, "Gilles de Corbeil ou le médecin pédagogue au tournant des XIIe et XIIIe siècles," *Early Sci. Med.* 3 (1998): 187–215, 206–7.

prayers most readily when the worthy pray for the worthy, but the prayers of saints for sinners are effective as well, and God also lets himself be mollified when the undeserving pray for the deserving (l. 15–30; *19–37*).

Belief and moral status also determine the efficacy of incantations that rely on the intervention of demons. If magicians are convinced that incantations can harm or help, demons will, with God's permission, reinforce this belief by executing the magicians' illicit commands in order to lead them ever further astray (l. 33–42; *38–49*). The moral status of the target of the incantation also plays a role, says Urso, suggesting that magic is most effective if demons find "traces of iniquity" in their victim (l. 57–59; *67–70*).

In Urso's description, the power of demons consists mostly in their capacity to create illusions (*praestigia*), either by planting images directly into people's minds, by acting on the spirits, or by assuming aerial bodies of all kinds and shapes. The magician's healing power is also an illusion; demons can inflict physical harm by applying certain things on the body, and then take these away, so that it seems that the patient has been cured (l. 46–56; *55–66*).[63]

Urso never cites his theological sources and favors paraphrases over literal citations. Much of what he says sounds Augustinian, such as the notion that magical incantations suppose an implicit pact between demons and the magician,[64] the idea that demons act with God's permission,[65] and the definition of the sacrament as resulting from the association of a verbal formula and an "element."[66] Augustine circulated widely in excerpted form, in *Sentences* collections and the like,[67] and his thought constituted a prime influence on twelfth-century theology as a whole. Urso's demonology is, overall, compatible with contemporary theology.[68]

Urso's command of theology strongly suggests that he was a cleric—like other learned Salernitan physicians and philosophers, such as Alfanus (d. 1085) and Romuald (d. 1181), who were both archbishops of Salerno, and possibly Urso's contemporary Johannes de Sancto Paulo, who can

63. On demonical illusions, see also Urso, *Aphorismi*, ad 24 (Creutz, 52–53), cf. infra, 329–30.

64. Augustine, *De doctrina christiana*, II, 20. See also *De Trinitate*, III, 7, 12.

65. Augustine, *De Trinitate*, III, 7, 12.

66. Infra, note 78. Likewise, Urso's first, "theological" aphorism is strongly influenced by Augustinian views on wonder, miracles, and creation; see infra, 330.

67. The passage from Augustine's *De Trinitate* and the passage from the commentary on John cited above are taken up integrally by Peter Lombard, *Sentences*, II, 7, 6, ed. I. Brady (Grottaferrata: Quaracchi, 1971), I, 362 and *Sentences*, IV, 3, 1 (II, 243).

68. This is the case, for instance, for Urso's statement that demons can only do harm, but not heal, except by stopping to harm. Cf. van der Lugt, *Le ver, le démon et la vierge* (n. 7), 228–29.

perhaps be identified with a monk at a Benedictine monastery in Rome. Between 1050 and 1200, most male healers in Salerno seem to have been clerics.[69] "Cleric" was a broad category and included those who had merely taken minor orders (and were not sworn to celibacy). All clerics were literate, but being a cleric did not always imply in-depth instruction in theology. While learned in theology, Urso was not, however, a "professional theologian,"[70] at least not at the level of Parisian contemporaries like Peter the Chanter, Simon of Tournai, or Stephen Langton. Salerno may have been a medical hotspot, but it was a theological backwater.

Urso plays around with the technical vocabulary and key elements of sacramental and moral theology. The expression "simulated incantation" underscores that medical incantations have no intrinsic power and do not always work, but the phrase also resonates with the theological question about what happens if someone feigns wanting to be baptized,[71] or if children jokingly baptize each other.[72] Urso's analogies, albeit suggestive, are, however, rather sloppy and vague. Make-believe baptisms have no effect because they are just games, whereas Urso's simulated incantations, based on a form of deception of the patient, can have real healing power.

Urso echoes, in a rather garbled way, a complex contemporary debate between theologians. Those of the "physical" school were ready to assign a limited inherent virtue to some sacred words or to the objects partaking in the sacraments. They took the well-worn metaphor of the sacraments as "medicine for the soul" a step further by comparing sacramental power to the power of herbs, stones, and medicines.[73] Other theologians, however, underscored the "institutional" or "contractual" nature of the sacraments, insisting that the priest uses conventional words and gestures that are powerless without the active will of God.[74] Urso's analogy between incantations

69. Cf. Skinner, *Health and Medicine* (n. 34), 83–84; Green, *Making Women's Medicine Masculine* (n. 34), 38n22. The evidence seems somewhat biased, since these *medici et clerici* mostly appear in charters as witnesses. They would have been chosen to figure there because of their literacy.

70. In his introduction to his edition (6), Rudolf Creutz called Urso a "Fachtheologen" because of his theological knowledge.

71. See for instance Simon of Tournai, *De sacramentis*, Spicilegium sacrum lovaniense 17, ed. Henri Weisweiler (Louvain: Spicilegium sacrum lovaniense, 1937): 24, and Peter Lombard, *Sentences* (n. 67), IV, 4, 2 (II, 252–54). See also infra.

72. See Peter Lombard, *Sentences* (n. 67), IV, 6 (II, 272–73), and references to other texts in the notes. When Urso calls the medicine the *res* (l. 14), this may also be an echo of sacramental terminology.

73. See Damien Van den Eynde, "Stephen Langton and Hugh of St Cher on the Causality of the Sacraments," *Franciscan Stud.* 11 (1951): 141–55.

74. Irène Rosier, *La parole efficace. Signe, rituel, sacré* (Paris: Seuil, 2004), 100–107 and passim.

and the "power of stones and things born from the earth" may recall the "physical" school, even though Urso insists that the power of the incantation itself (as opposed to the medicine it is associated with) derives from the merit of the physician and the patient. Moreover, whatever the divergences within twelfth-century sacramental theory, the baptismal formula does not enhance the power of the water, as Urso states. The water *has* no power. It is, rather, the conjunction of word and element that effects the sacrament. This is the meaning of the definition Urso cites as an analogy for the incantation pronounced over a drug (*cum verbum additum elemento faciat sacramentum*).[75]

Urso's tendency to lump together different forms of religious ritual language and his insistence on the importance of merit and faith for their efficacy gloss over crucial distinctions. In Augustine's wake, twelfth-century sacramental theology minimized the role of merit and intention in both the minister and the recipient. Those who take the sacrament sinfully, nevertheless receive it—that is, they receive the sacramental character—even though grace is withheld until they make themselves better disposed. Sacraments celebrated by unworthy priests are valid by virtue of their ordination and because sacraments have been instituted by God and the Church. The celebrant must merely have the intention "to do what the Church does," to actually procure the sacrament.[76] The same narrow interpretation of intention explains why would-be baptisms, during play, are invalid.[77]

Theologians also downplayed the roles of merit and intention in non-sacramental religious rituals, such as prayer, insofar as they are instituted by the Church or performed by an ordained priest. Merit can, however, play a part in the doctrine of intercession. Urso singles out prayer in his argument, but his suggestion that all prayers (and all religious forms of forms of efficacious language) depend upon merit is an oversimplification.

Urso's analogy between medical incantations and religious rituals ignores a vital difference. In medical incantations, the trustworthiness and physical "merits" of the physician and the hope and trust of the patient *directly and independently cause* the restoration of health. In the case of

75. The definition, in slightly different wording (*Accedit verbum ad elementum, et fit sacramentum*), ultimately goes back to Augustine's commentary on John (*Corpus christianorum series latina*, 36, 529). The passage was often cited by twelfth-century theologians, for instance Peter Lombard, *Sentences* (n. 67), IV, dist. 3, cap. 1 (II, 243).

76. For instance, Peter Lombard, *Sentences* (n. 67), IV, 5, 1 (II, 263–65); IV, 6, 2 (II, 268–69).

77. Ibid., IV, 6, 5 (II, 272–73); Guy d'Orchelles, *Tractatus de sacramentis*, cap. 3, art. 1, 21, ed. D. and O. Van den Eynde (St. Bonaventure, N.Y.: Franciscan Institute, 1953), 25–26.

answered prayers, it is God who acts; God is the principal cause. Urso significantly uses the term *fides*, faith, rather than *confidentia*, when speaking about religious ritual. Monks and the righteous merely have privileged access to God, and according to official doctrine, so do saints. God participates less directly in the sacraments, but it is still God who confers grace, even though the priest, as his minister, effects the sacrament by the association of word and element, and even though in late-twelfth-century theology sacraments are no longer mere vessels of grace.

Medicine and Religion

The description of religious understandings of efficacious language takes up more than a third of Urso's discussion. Similar digressions are found in several other glosses. The commentary on aphorism 41, for instance, discusses the content of dreams, including premonitory dreams and other presentiments, in terms of the powers of the soul and the sleeper's daytime occupations and desires. However, it also contains a long description of God-sent dreams and visions.[78]

In aphorism 24 Urso explores the power of the imagination to affect the body. In many ways it is aphorism 39's twin. Urso is particularly interested in the physical effects of suggestion, explaining, in terms of the circulation of animal and vital spirits, why making someone believe that his food contains flies will make him vomit, or why someone mistakenly led to believe that his food has been poisoned may die from fear, or why crossing a spot where someone has been killed makes one afraid. Terrifying thoughts can, however, also be provoked or exacerbated by an infectious environment: even if a person cannot actually smell the decomposing body, he senses the change in the air. This idea provides Urso with a rationalization for magically caused impotence quite similar to that for incantation and fascination. When a man lies with a woman who carries a needle that has been used for sewing up a corpse, the bad spirits spread by the needle will infect the air and disturb the man's spirits, provoking horrible thoughts; these thoughts in turn cause his spirits to retract from the extremities, with a paralyzing effect on the penis.[79] However, Urso

78. Urso, *Aphorismi*, 41 and ad 41 (Creutz, 14, 74–84), discussed by Thomas Ricklin, *Der Traum der Philosophie im 12. Jahrhundert. Traumtheorien zwischen Constantinus Africanus und Aristoteles* (Leiden: Brill, 1998), 85, 349, 354–55, 391. Urso is, of course, not alone in proposing naturalistic explanations of dreams.

79. Urso, *Aphorismi*, ad 24 (Creutz, 50–51); on this passage, see also Rider, *Magic and Impotence* (n. 29), 69–70.

also discusses at length how demons can provoke feelings of love or hate and cause nocturnal emissions by influencing the human imagination.

Why did Urso risk "boring his readers" (l. 67–68; *79–80*) with theology? One interpretation would be to see these incursions as a tactic to neutralize his blatant naturalism. Urso's first aphorism, which, it will be recalled, concerned God's power to work wonders by interrupting or changing the common course of nature,[80] would seem to have the same function. It suggested that the links between natural causes and effects uncovered in the rest of the collection were valid only in the absence of miraculous intervention, thus clearing the road to explore the order of nature on its own terms.[81] The first aphorism defines miracles, moreover, not just as interruptions of the natural order, but more emphatically, in Augustine's wake, as causes for awe and wonder. It also underscores, again like Augustine, that all phenomena, both the extraordinary and the common, derive from God's power.[82] As such, the first aphorism suggests that the person who investigates the natural links between causes and effects ultimately celebrates God's creative power.

At the time of writing the aphorisms, Urso seems to have felt that this initial acknowledgment of God's power was sufficient. Indeed, the remaining 108 aphorisms contain no references to religion. These occur only in the glosses, which Urso composed at the end of his career. When he took up the aphorisms again, the first aphorism apparently no longer offered enough protection. It is tempting to read Urso's claim that he wrote the glosses because the aphorisms had not been properly understood as more than a topos.

Aphorism 41 lends support to the idea that the digressions into theology are a form of self-censorship. Urso emphasizes that God-sent dreams and visions exceed human reason (*rationem humanam excedunt*) and cannot be subjected to rational investigation (*rationali investigatione*).[83] Like-

80. Urso, *Aphorismi*, 1 (Creutz, 10): "Consuetum et ordinatum rerum naturalium processum non miramur, sed insuetum et momentaneum. Qui enim solius verbi imperio et de nichilo cuncta produxit ad miraculum hominibus imprudentibus monstrare potuit insueta, et quod per temporum intervalla perficitur subito efficere valet."

81. This is also Jacquart's interpretation of the first aphorism; "L'écriture" (n. 14), 137.

82. Urso develops this Augustinian theme in the gloss to the first aphorism. For Augustine's subjective notion of miracles, see P. De Vooght, "La théologie du miracle selon saint Augustin," *Recherches de théologie ancienne et médiévale* 11 (1939): 197–222; Benedicta Ward, *Miracles and the Medieval Mind: Theory, Record and Event 1000–1215* (Philadelphia: University of Pennsylvania Press, 1982), 3–4. For the notion that exceptional phenomena provoke wonder, whereas the ordinary course of nature does not, cf. Augustine, *De civitate Dei*, XXI, 4–8.

83. Urso, *Aphorismi*, ad 41 (Creutz, 78–79).

wise, by recognizing demonic and religious incantations, Urso seems to be arguing that *his* incantations are different. They are only "simulated incantations": the medical enchanter is neither claiming that his words have intrinsic power, nor mimicking religious ritual, or invoking demons. At the same time, it is not entirely clear to what extent Urso really recognizes different *kinds* of incantation, or only different *ways of speaking about* them, a methodological distinction that would be used a century later by Parisian philosophers like Siger of Brabant, Boethius of Dacia, or Witelo.[84]

Urso employs the term *incantatio*, contrary to its common negative connotation, in a neutral, general sense.[85] Throughout, he emphasizes the parallels among medical, magical, and religious forms of efficacious language. The latter two serve as analogies to make his point that the efficacy of medical incantations does not rely on the power of the words themselves. Urso presents all kinds of incantation as based on structurally analogous mechanisms and seems to be developing a kind of general theory of efficacious language in which the speaker and the recipient are paramount. Similarly, Urso mentions martyrs and wounded soldiers in the same breath, ascribing their experience to the same psychological and physiological mechanism.[86]

As such, the incursions into theology appear not only as a defense mechanism, but also as further proof of Urso's bold intellectual ambitions. The aphorisms commentary is the crown of his career. Urso aims to come up with overarching theories that extend far beyond medicine, and even natural philosophy, into the realm of theology, the noblest of all sciences. There may be a link between the secondary position of Salerno as a theological center and Urso's borderline naturalism and attraction to magic. These interests allowed a would-be theologian like him to exist in relation to Parisian high theology.[87]

84. See Luca Bianchi, *Censure et liberté intellectuelle à l'université de Paris: XIIIe-XIVe siècle* (Paris: Les Belles Lettres, 1999), pt. 3, chap. 1. For Witelo, cf. van der Lugt, *Le ver, le démon et la vierge* (n. 7), 297.

85. On the term *incantatio*, cf. Bozóky, *Charmes* (n. 30), 36 and Delaurenti, *La puissance des mots* (n. 10), 88–94.

86. Urso describes the martyrs' insensitivity to pain in an ambiguous way that is consistent with the vagueness of contemporary narratives of martyrdom. See Esther Cohen, *The Modulated Scream: Pain in Late Medieval Culture* (Chicago: University of Chicago Press, 2009), chap. 8.

87. Here I am following an interesting suggestion by Charles de Miramon (pers. comm.), who points to similar tendencies at Bologna and Hereford in the same period: Charles de Miramon, "Innocent III, Huguccio de Ferrare et Hubert de Pirovano. Droit canonique,

Conclusion

If Urso aimed at disarming suspicions of unorthodoxy by acknowledging theological arguments, his efforts may well have backfired. The analogy between medical incantations and religious rituals only highlights the difference between their causal models. It points to the danger of the idea of the charisma of the physician, a power that derives neither from some higher cause or agent, nor from an institution, but solely from his personal qualities.[88]

On the other hand, the integration of incantations into "high" medicine also undermined the efforts of learned physicians to distance themselves from empirical healers. Urso may implicitly be arguing that the formulas of, say, the illiterate woman down the street are useless because words have no intrinsic power. However, if the power of medicine is largely a matter of charisma, why would physicians need technical book learning that takes years to master? Urso's notion of the physician's merit is physical, rather than intellectual, or even moral. A century later, the Italian physician and philosopher Pietro d'Abano took the measure of this danger. In an age already more preoccupied with demons than Urso's, Pietro was also more keenly aware of possible accusations of necromancy and witchcraft. He took pains to establish the superiority of the learned physician, even in the realm of incantations, by discrediting illiterate healers, especially women. *Mulierculae*, so Pietro claimed, are easy targets for demons; only wise and learned men have the necessary knowledge to manipulate incantations safely and to effect.[89]

If Urso was, indeed, the first medieval physician to discuss incantations, he wasn't the last. Apart from Pietro d'Abano, other later medieval physicians, including Arnau de Villanova, Gentile da Foligno, and Jacques Despars, also took up the question, as did philosophers and theologians like William of Auvergne, Roger Bacon, and Nicole Oresme. These later discussions have recently been studied in detail, William of Auvergne and Bacon having been credited with the invention of the concept of the natural power of words, Pietro d'Abano with its extension and incorporation into medicine.[90] Urso's aphorisms indicate that the theory originated in

---

théologie et philosophie dans les années 1180," in *Medieval Foundations of the Western Legal Tradition: A Tribute to Kenneth Pennington,* ed. W. P. Müller and M. E. Sommar (Washington, D.C.: Catholic University Press of America, 2006), 320–46.

88. According to official doctrine, a saint's miracles are really acts of God. Nevertheless, the Church has always been wary of the thaumaturgic powers of *living* saints.

89. Pietro d'Abano, *Conciliator*, diff. 156, propter tertium, ed. Venice, 1565 (reprint), fol. 213rb. Discussed in Delaurenti, *La puissance des mots* (n. 10), 306–25, 333–64.

90. Delaurenti, *La puissance des mots* (n. 10) and Delaurenti, "La fascination" (n. 10). For Arnau, cf. McVaugh, "*Incantationes*" (n. 10), 344.

medicine and must be antedated by several decades; so too for the rationalization of the belief in the power of fascination.

Urso's aphorisms and glosses circulated quite widely between the thirteenth and fifteenth centuries; some readers considered the compilation important enough to compose alphabetical tables on it.[91] Later medieval physicians and philosophers used Urso's theory of incantations, either directly or indirectly, in their accounts of fascination. Urso's notion of the purification or infection of the intermediate air by the exhalation of good or bad spirits (which, it will be recalled, was not found in Costa ben Luca) allowed them to reconcile the belief in fascination with the impossibility, in Aristotelian physics, of distant action.[92]

As far as incantations are concerned, later medieval debates about their efficacy concentrate, however, on the importance of the patient's trust in his physician. It is difficult to say whether Urso or Costa ben Luca is here the more influential source. Costa does not detail the causal mechanism of trust, but the impact of the passions of the soul on health and the necessity of good communication with the patient are, as we have seen, important themes in medieval medicine as a whole.[93]

Later physicians and philosophers also took the concept of natural incantation in several new directions, under the influence of new sources, most notably Avicenna's *De anima*. The claim that it was Avicenna's doctrine about the power of the soul to act, via the imagination, directly on other bodies that set off the debate on incantation and fascination in the West would seem to be in need of qualification. Urso was most likely still unaware of Avicenna's *De anima*, as well as of al-Kindi's *De radiis*, another important source for later debates.[94] Both insist on the importance of

91. See Appendix 1 and Maaike van der Lugt, "Aristotle's *Problemata* in the West: A Contribution to the Study of the Medieval Latin Tradition," in *Aristotle's* Problems *in Different Times and Tongues*, ed. Michèle Goyens and Pieter De Leemans (Leuven: Leuven University Press, 2006), 71–112, 83–87. Interestingly, ms. Oxford, Bodleian Library, Digby 153 (14c), copied and owned by a Franciscan from Canterbury, contains a charm taken from Gilbertus Anglicus's *Compendium medicine* right after Urso's Aphorisms commentary (fol. 99r).

92. For instance, Roger Bacon, *Opus majus*, IV, ed. J. H. Bridges (Oxford: Clarendon, 1897), I, 398–99. See also Salmón and Cabré, "Fascinating Women" (n. 49) and Delaurenti, "La fascination" (n. 10).

93. Arnau de Villanova cites Costa ben Luca explicitly in this context, see McVaugh, "*Incantationes*" (n. 10), 344.

94. Avicenna's *De anima* was translated in Toledo between 1151 and 1166. Dag Hasse, *Avicenna's* De Anima *in the Latin West* (London: Warburg Institute, 2000) does not provide information about the possible presence of the text in southern Italy. Given the date of translation, it is not impossible for Urso to have known the text, but nothing in his discussion on incantation and on the power of the imagination points in this direction. The same is true for al-Kindi, whose *De radiis* had also been translated in the mid-twelfth century.

intention and desire in the speaker and on the purity and nobility of the soul of the prophet/healer (Avicenna) and enchanter (al-Kindi).[95] This takes the notion of charisma to another level. The charismatic healer is a kind of superman; the fascinating woman an *Untermensch*. By comparison, Urso's notion of charisma, based on the quality of the body's aura, rather than nobility of soul, is rather more mundane.

MAAIKE VAN DER LUGT is associate professor in medieval history at the Université Paris Diderot—Paris 7 and member of the Institut universitaire de France.

Appendices

Appendix 1: Urso of Salerno's Aphorisms and Commentary

Incipit
Aphorisms: "Consuetum et ordinatum rerum naturalium processum."
Prologue to the glossed Aphorisms: "Cum physicalis scientiae inventores."

Manuscripts
*Erfurt, Bibliotheca Amploniana, Q 230, fols. 162–65 (14c, Aphorisms only). *Erfurt, Bibliotheca Aploniana, Q 226, fols. 6–30 (14c). *Erfurt, Bibliotheca Q 226, fols. 31–44 (13c). *Munich, Bayerische Staatsbibliothek, CLM, 7971, fols. 116r–143v (14c). Oxford, Bodleian Library, Digby 153, fols. 67v–101v (including a table). Oxford, Bodleian Library, Digby 206 (two tables extracted from the glossed Aphorisms). Oxford, New College, 171, fols. 21r–37r (13c).

95. Hasse, *Avicenna's* De Anima (n. 94), 162–63; Pinella Travaglia, *Magic, Causality, and Intentionality. The Doctrine of Rays in al-Kindi* (Florence: SISMEL, 1999). For their influence on Bacon, cf. Irène Rosier, *La parole comme acte. Sur la grammaire et la sémantique au XIIIe siècle* (Paris: Vrin, 1994), 215–23; Delaurenti, *La puissance des mots* (n. 10), 146–50, 161–66.

Additional Manuscripts
(not seen; cited in the eTK database http://cctr1.umkc.edu/search)
Bruges, Stedelijke bibliotheek, 486, fols. 135v–158v (14c). Cambridge, Trinity College, 1154, fols. 148v–151 (15c). London, British Library, Royal, 5.C.III, fols. 17v–22r (15c, table on the Aphorisms). Vatican, BAV, Barb. lat. 302, fols. 1–19v (14c).

Edition
Rudolf Creutz, "Die medizinisch-naturphilosophischen Aphorismen und Kommentare des Magister Urso Salernitanus," *Quellen und Studien zur Geschichte der Naturwissenschaften und der Medizin* 5–1 (1936): 1–192.

Creutz's edition is based on the manuscripts above marked with an asterisk.

Appendix 2: Text and Translation of Aphorism 39 and Gloss

The Latin text of Urso's aphorism 39 and gloss provided here is based on Rudolf Creutz's edition (*C*) with corrections based on ms. Oxford, New College, 171 (*NC*). When *NC* is better, Creutz's reading (*C*) is relegated to the apparatus. It must be stressed that the text provided here is not a critical edition.

In preparing the translation I have tried to strike a balance between fidelity to Urso's Latin, respect for the aphorisms as a genre, and the need for clarity. As such, I have often adapted the syntax—mostly by turning passive into active forms—but only occasionally added words to make the text more easily understandable.

[Aphorismus 39]
Incantatio ex omnimoda confidentia et merito incantantis
vel eius in quo perficitur, cooperante eo ad quem pertinet[1]
incantatio, ex se habet effectum. Profectam namque credens
incantationem ipsiusque[2] effectum ymaginans delectatur,
sicque spiritus depurati[3] per motum et ad incantanda inde[4] (5)
deducti effectum incantationis prosecuntur. Ex contrariis
vero contrarium sequitur.

1. pertinent *C* 2. ipsius *C* 3. deputati *C* 4. iam *C*

[Glosula]
Cum lapides et terrae nascentia virtutes habeant varias
credimus et verba attente prolata, quoniam saepe virtutes
habere. Aliquando enim sicut nec maledicta obsunt (10)
perfectis, sic nec benedicta ipsis prosunt. Quidam
tamen in medicinae exhibitione quandoque simulant
incantationes, non quia simulata incantatio effectum
habeat, sed tantum res exhibita competenter. Et aliquotiens
unum alteri iunctum alterius auget effectum, cum verbum (15)
additum elemento faciat sacramentum. Orationes igitur
et exorcismata, incantationes, maledictiones et benedictiones
et caetera quaelibet talia, cooperante etiam virtute illius ad
quem principaliter praedictorum aliqua pertinent, effectus
suos prosecuntur. Et dupliciter: vel merito vel fide proferentis (20)
ea, vel merito et fide illius, cui proferuntur, vel meritis
utriusque. Inde est quod iustis sanctorum meritis et
operibus Deus placatus eorum orationes exaudit in
tantum, ut ipsorum precibus immeritos solvat[5] et liberet
et a dignis poenis praeservet; et ut subversos convertat, (25)
vel boni meliores fiant, iuxta eorum petitiones prodigia
et signa manifestat. Multotiens orant indigni pro dignis et
Deus orationes eorum exaudit, non ipsorum meritis, sed
eorum pro quibus oratur. Multo magis igitur si digni pro
dignis orationes effundant. (30)

Multotiens iusto Dei iudicio agitur,[6] ut viri iniqua sectantes
erroribus variis implicentur et ut sordibus obvoluti
sordescant[7] amplius. Credentes incantationes posse
laedere vel iuvare incantationum laqueis eos innodari
Deus permittit, cum potestate accepta daemones,[8] (35)
ad credendum incantationibus ut[9] seducant amplius in
cantantium vel incantatorum corda inclinant. Unde fit
ut daemones scientia abutentes facilius verborum
effectus compleant, quae iam ipsi corde credant et ore
profitentur. Unde sequitur ut eorum obtemperando (40)
precibus et desideria illicita adimplendo, eos in suis
erroribus amplius involvant. Hac itaque ratione
incantantis fide et merito draco per incantationem a
profundis terrae cavernis extrahitur, insurgunt
ventorum impetus et maris accrescit tempestas, (45)
quorundam sensus mutantur vel ad aliter sentiendum[10]

5. solvet *C* 6. agatur *C* 7. sordescunt *C* 8. ut *C add* 9. *C om* 10. sentiendum *C*

corporea protrahuntur dum praestigia varia ostenduntur
quam fuerint, vel quia daemones iuxta eorum desideria
diversarum rerum formas aeri imprimunt inspissato,
vel quia aereo induuntur vestimento, per quod se (50)
transformantes immutando idem corpus aereum
diversorum animalium vel aliarum rerum ymagines
et actiones sensibiles quibus conantur decipere visibus
repraesentant.[11] Sicut et daemon in quodlibet animal
brutum poterit transformari, sicut olim potuit in (55)
angelum lucis fictae mutari.

Aliquando merito eorum pro quibus fit incantatio,
cum iniquitatis in eis reperiantur vestigia, daemon iuxta
incantationis intellectum illarum rerum ymagines per
spiritum animae repraesentat, ut superius diximus, per (60)
quas ad rerum odium vel amorem eorum corda vehementer
accendant,[12] ut posse vivere credantur ymagines, quas
spiritibus inducunt, vel res alias quas corpori applicant ad
eorum animalium laesionem aliquando subtrahunt, ut a
laesione cessando curare videantur. Inde ex operibus (65)
idololatriae variis ad varia daemones incitantur.

Ne igitur his diutius immorando legenti fastidium
generemus, huius quaestionis articulum ad physicam
devolvamus. Rationabili investigatione comprehenditur,
quod iuxta physicae intellectum verba ex proferentis natura (70)
vel proferendi modo, vel ex natura, seu intenta consideratione
eius cui verba proferuntur habent effectum.

Ex natura proferentis, dum medicus ex pura materia
generatus, puris spiritibus vegetatus,[13] aegrum blando sermone
frequenter alloquendo, aerem circa ipsum contentum spiritibus (75)
suis puris respiratione emissis immutando depurat; qui cum
saepius inspiratione ab aegro trahatur, cuius spiritus eiusdem
unione alteratus[14] depuratur, vel ex eo purior renovatur.
Sicque fit, ut purioribus spiritibus per membra diffusis,
humorum et membrorum fiat depuratio, unde aegri (80)
sequitur allevatio, vel quia dum ex ipsis spiritibus membra
amplius confortantur, facilius expellenda nociva a loco dolenti
per roboratam naturam amoventur, unde morbo devicto patiens
liberatur.

11. repraesentando *C* 12. attendant *C* 13. vegetatur *C* 14. alternatus *C*

Hac eadem ratione discipulus audita magistri verba facile (85)
intelligendo addiscit, dum eius spiritus attractione aeris
depuratus spiritu[15] docentis renovatus et defaecatus facilius
virtutem movet logisticam ad auditorum congruam
investigationem et sic assiduitate loquendi addiscentis
spiritus docentis spiritibus conformantur, ut levitate discendi (90)
eius doctrinis facile instruatur.

Hac etiam causa cohabitatione[16] assidua sic vir feminae
conformatur, ut in eius dilectione quandoque indissolubiliter
vinciatur. Sic dulce est solum natalis patriae! In aliqua
enim regione exortus sic eius spiritus eiusdem regionis aeri (95)
et sua membra cibis ibidem exortis conformantur, ut linquens
patriam insueti aeris vel cibi attractione laedatur et non
convalescat facile, nisi ad suam redeat regionem. Hac ratione
quilibet[17] res eas[18] desideranter[19] appetit, quibus sui spiritus
vel partes naturali vel accidentali conformitate innituntur. Qua (100)
de causa quidam favunt[20] sibi in plurimo, dum[21] quadam
naturae conformitate occulta vel manifesta sic alter alteri
compatitur, ut neuter alterius ruinam patiatur. Hac etiam
ratione[22] aliquis, licet pulcher, citius in amore turpis[23] quam
pulchrae mulieris accenditur. (105)

Et e contrario accidit quandoque praedictis contrarium,
ut medicus de corrupta materia generatus, corruptis humoribus
nutritus,[24] impuris spiritibus vegetatus, sedula collocutione
aerem circa aegrum suo anhelitu alterando[25] corrumpat. Qui
inspiratione attractus aegri spiritum perturbando immutat, qui (110)
corruptus et per membra diffusus humores et membra
afficiendo corrumpit. Quorum trium constituentium
corruptione[26] morbus in corpore invalescit et invalescendo
quam saepe perimit patientem.

Praeterea cum spiritus virtutum omnium sint (115)
instrumenta, eorum corruptione quaelibet vis animae
vel naturae in sui turbatur actione, ut horribilitate
spirituum natura deficiens etiam facili morbo succumbat.
Sic et docentis spiritus corrupti mediante aere malitiam
suam spiritibus addiscentis infundunt, ex quibus iam (120)
corruptis anima in sui turbata actione hebescit, ut vix aut

15. spiritus *C* 16. habitatione *C* 17. quaelibet *C NC* 18. ea *C NC* 19. desiderante *C* desiderant *NC* 20. favet *C* 21. de *C* 22. consideratione *C* 23. ipsius *C* 24. in *C add* 25. alternando *C*; *NC om* 26. corruptionem *C*

nunquam lectiones auditas intelligendo addiscat. Qua
ratione cervi parvi[27] fascinantur et agni, quia dum quis eos
attente videndo multiplici laude commendet,[28] fortius sui
malitiam per spiritum aeri ab ipsis attracto infundit, qui (125)
dum per inspirationem trahitur, tam spiritus, quam
humores, quam membra, utpote novitate generationis
mutationi habilia, corrumpuntur et corrupta tabescendo
depereunt. Sic leprosi et scabiosi confabulatione assidua
aliquos[29] inficiunt. (130)

Ut generaliter dicam, quaelibet res ea abhorret et aspernatur,
a quibus sui spiritus vel suae partes dissimilitudine naturali
vel accidentali discordant. Inde fit quod aliquis venenosos
habens spiritus vulnerans aliquem etiam ex levi vulnere
ipsum inficiendo occidit, qui etsi ab alio esset percussus et (135)
gravis vulneris poenam evaderet, sicut lupus et quaecunque
venenosa animalia mordendo, pungendo, videndo infusione[30]
suae malitiae infectos turbant, corrumpunt et aliquando
corrumpendo occidunt. Si vero spiritus curantis vel docentis
cum spiritu aegri seu discentis conveniat, confabulatione (140)
assidua aerem immutat, cui dum spiritus inspirantis aegri seu
addiscentis naturaliter consonet, idem spiritus ex ipso aere
tracto[31] facilius reparatur et confortatur, qui reparatus ad
expellandum[32] superflua citius naturam impellit.

Ex modo proferendi et attenta consideratione audientis, (145)
quia cum medicus suis dulcibus eloquiis et blandis
promissionibus promittendo firmiter salutem aegrotantis
animum demulcendo dilatat, aeger de sui iam confidens
salute, praeter solitum hilarescit. Sicque cor morbi vehementia
et mortis timore constrictum, spe salutis incipit dilatari et de (150)
dilatatione sui multum aerem et spiritum concipit, cuius
diffusione per membra virtus regitiva confortata ad
crisim perfectam faciendam potenter assurgit. Praeterea
si quis dolorem patiatur in parte, verbis medici consolatoriis
confortatus deinde de salute tota mentis attentione excogitat, (155)
spiritus a membro doloris ad instrumentum cogitationis,
scilicet cerebrum, revocatur. Unde tamen quia spiritus a
loco dolenti subtrahitur, per quem sensibilitas membro

27. cervi parvi] pueri teneri *NC* (See n. 50 on p. 332) 28. corridet *C* 29. aliquid *C NC. om* 30. infectione *C* 31. tractus *C* 32. expellenda *C*

tribuitur, tum quia a loco dolenti animae attentio amputatur,
per quam quantitas doloris metitur, dolor deficit vel (160)
minoratur. Unde etiam martyres in principio passionis
tanto minus flagella sentiebant, quanto magis a corporis
regimine sublatis spiritibus per contemplationem attentiori
mente caelestia gaudia suspirabant. Deinde in Dei gratia per
patientiam confirmati, ut flagellantibus et videntibus Dei (165)
miracula monstrarentur, quaslibet volebant poenas etiam
mortales; sine omni laesione evadebant, ut iam de futura
beatitudine certi securi pervenirent ad palmam martyrii.

Sic et quidam tota mentis intentione de victoria
cogitantes, sublata mentis intentione a membris, illata (170)
vulnera non sentiunt, unde primo exercentes plurimum
spiritum, per datam intentionem ad membra laesa
decurentem dolorem sentiunt manifeste.

Multotiens medicus de salute desperans horribili et
suspecto sermone aegrotum alloquitur eique mortem (175)
venturam quandoque denuntiat; quibus expavefactus
aeger subito et insperato timore concutitur, unde cor
immoderate constringitur, quo timore retractis spiritibus
a membris, sic naturae vires perduntur, ut ante tempus
statutum patiens ad interitum ducatur.[33] (180)

Translation

[Aphorism 39]

An incantation has effect by itself, with the cooperation
of that which it pertains to, through the trustworthiness
and merit in every way of the enchanter, or the trust and
merit in every way of the person for whom the incantation
is performed. When he believes in the power of incantation (5)
and already imagines its effect, he is delighted, and so the
spirits, purified by the movement and then directed toward
the [parts] in need of the incantation, put the incantation
into effect. Contrary things lead to the contrary.

33. adducatur *C*

[Gloss]
Stones and things born from the earth have various (10)
powers. Therefore, we believe that intently pronounced
words also have powers; and this is often the case. But
sometimes maledictions do not harm the perfect, just
like benedictions do not benefit them. Some people simulate
incantations while administering a drug, not because [they (15)
believe that] a simulated incantation has any effect, but
only to administer the efficacious object competently. And
sometimes when one thing is joined to another, it enhances
the effect of the other, just like the conjunction of a formula
and a material substance effects a sacrament. For prayers and (20)
exorcisms, incantations, maledictions, and benedictions,
and other such things, have effect through two different
[channels], with the cooperation of the power of the things
the aforementioned [formulas] principally pertain to. [They
have effect] either through the merit and faith of the person (25)
pronouncing them, or through the merit and faith of the
person for whom they are pronounced, or through the
merit of both. Hence God, mollified by the Saints' just merits
and works, hearkens to their prayers, so that on account of
these prayers He frees and liberates the unworthy and (30)
preserves them from due punishment. And in order to
convert those who have strayed or improve the good, He
reveals signs and wonders at [the Saints'] request. When
the unworthy pray for the worthy, God often grants their
prayers, not because of their own merits, but because of (35)
the merits of those for whom they pray. So this is the case
even more so when the worthy pray for the worthy.

According to God's just judgment, it often happens that
men get implicated in various errors while searching for abject
things, and that those who are already entangled in sordid (40)
business get even more soiled. God allows those who believe
that incantations have the power to harm or help to be caught in
the traps of incantations, when demons, thanks to the
powers they received [from Him], incline the hearts of the
enchanters and the enchanted even more into believing in (45)
incantations in order to seduce them. And so it happens
that demons, misusing knowledge, put the words which [the
enchanters] already believe in their hearts and pronounce

with their lips into effect all the more easily. Consequently,
by granting their prayers and fulfilling their illicit desires, (50)
[demons] ensnare them even more in their errors.

And for this reason, because of the faith and merit of
the enchanter, through the incantation a dragon is summoned
from the deep caverns of the earth, forceful winds arise, and
storms at sea grow stronger. And when various magical illusions (55)
are shown, the senses of some people are modified or made
to perceive corporeal things differently than they really are.
Alternatively, demons imprint shapes of different things into
condensed air, in accordance with [the enchanters'] wishes,
or they take on a garment of air. Transforming themselves (60)
by changing this airy body, they use it to show images of
various animals or other things and to [simulate] perceptible
actions. By these visions they try to deceive. A demon can
transform himself into any kind of brute animal, just as
he once could disguise himself as an angel of light (65)
(cf. 2 Cor. 11–14).

Sometimes [incantations have effect] because of the merit
of the target of the incantation. When traces of iniquity
are found in them, a demon presents images to the soul that
match with the meaning of the incantation. [They do this] (70)
via the spirit, as we said before. And when the images which
they induce via the spirits are thought to be alive, [demons]
inflame their [targets'] hearts violently toward hate or love.
Or sometimes they remove other things that they [earlier]
applied to the [targets'] body to harm their animal powers, (75)
so that they seem to cure by ceasing to harm. Thus demons
are incited to do many different things by different
idolatrous actions.

In order not to bore the reader by dwelling on this any
longer, let us now turn to discussing this question according (80)
to natural philosophy. Through rational investigation it can be
understood that words have effect, according to a natural
philosophical understanding, because of the nature of the
person uttering them, because of the way they are uttered,
or because of the nature or the intense consideration of the (85)
one for whom the words are uttered.

[They have effect] through the nature of the speaker,
when a physician who is born from pure matter and
whose life functions are ensured by pure spirits frequently

addresses the patient with soothing speech. As such, he (90)
purifies the air around him, changing it through the pure
spirits emitted through his respiration. This air is then
drawn in by the patient through frequent inspiration,
and his spirit is either changed and purified by this
union, or a new, purer spirit is produced out of it. And (95)
thus it happens that the humors and members are purified
by the diffusion of pure spirits throughout the members,
leading to an alleviation in the patient. Alternatively,
these spirits strengthen the members even more, so that
nature, invigorated, removes harmful things that must be (100)
expelled more easily from the painful spot. Consequently,
the disease is defeated and the patient is liberated.

For the same reason a student is more easily brought
to understand his master's words, when his spirit, purified,
renewed and cleansed by the spirit of his master via the (105)
air drawn in, moves the reasoning power more easily toward
concordant reflection upon the things heard. And through
assiduous speech the spirits of the pupil and the spirits of
the teacher are brought into such conformity, that [the
pupil] easily assimilates his [master's] teaching through (110)
effortless learning.

For the same reason, enduring cohabitation can cause
a man to conform so much to a woman, that his love binds
him [to her] by an unbreakable bond. So sweet is the soil
of the native fatherland! When a person is born in a region, (115)
his spirits correspond so well to the air of this region and his
members so well to the food produced there, that when
he leaves his fatherland he is hurt by the intake of unaccustomed
air and food and does not recover easily unless he goes back
home. For this reason anyone desires those things ardently, (120)
with which his spirits or body parts are in natural or acquired
conformity. And thus some people hold each other very dear
and care so much for one another because of some hidden
or manifest conformity of nature, that neither can stand the
ruin of the other. And for the same reason a handsome (125)
[man] can be more rapidly inflamed with love for an ugly
woman than for a beautiful one.

And contrary causes sometimes lead to the contrary
of the aforementioned [effects], as when a physician,
who is born from corrupted matter and nourished by (130)

corrupted humors and whose life functions are ensured by
impure spirits, corrupts and changes the air around the
patient, via his breath, through his sedulous speech. When
the patient draws this air in by inspiration, it changes
and disturbs his spirit, and this corrupted spirit, circulating (135)
through the members, corrupts the humors and the
members by affecting them. Because of the corruption
of these three constituent parts the disease in the body
grows stronger, and as it grows stronger it often kills the patient.

Moreover, since the spirits are the instruments of all (140)
the powers, their corruption disturbs all the powers of
the soul and the body in their action, and the appalling
state of the spirits so weakens the body that it easily
succumbs to disease. Similarly, the corrupt spirits of the
teacher engulf the spirits of the pupil via the intermediate (145)
air with his malignant influence. And once they are
corrupted [too], the soul is disturbed in its action and
loses its acuity, so that [the pupil] neither understands
nor assimilates anything from the lectures he hears.
This is also why fawns and lambs are fascinated: When (150)
someone cajoles them and looks at them intently, his spirit
engulfs the air they draw in with his malice. And when they
draw in [the air] by inspiration, [their] spirits, humors,
and members, which are very susceptible to change because
they have only just been born, are corrupted; and once (155)
these are corrupted, they waste away and perish. Similarly,
lepers and those suffering from scabies infect others through
intensive conversation.

Generally speaking one abhors and fears any thing
with respect to which one's spirits or one's body parts are (160)
in disharmony, on account of a natural or acquired
dissimilarity. This is why someone who has poisonous spirits
can kill someone else by infecting him, even though he has
wounded him only slightly, and even if [the victim] would
survive a more serious wound inflicted by someone else. (165)
Similarly, wolves and some poisonous animals disturb, corrupt,
and sometimes even kill those that they have infected by
engulfing them with their malice, through their bite, sting,
or gaze. But if the spirit of the healer or the teacher
corresponds to the spirit of the patient or the pupil, (170)
it changes the air through assiduous conversation;

and since the spirit of the patient or the pupil who
inhales it naturally corresponds to it, the spirit [of the
patient or the pupil] is easily repaired and fortified by
the air drawn in; and once repaired, it impels nature to (175)
expel superfluities more rapidly.

[Incantations also have effect] through the manner
of speaking [of the enchanter] and the intense consideration
of the person who listens. When the physician gently eases
the patient's mind, by promising health firmly with soothing (180)
speech and pleasant promises, the patient, now confident
of recovery, grows exceptionally cheerful. The hope of
regaining health causes his heart, which is constricted by
the intensity of the illness and the fear of death, to begin
to dilate. This dilation makes it take in a lot of air and (185)
spirit, and the diffusion [of this spirit] throughout the
members boosts the power that governs [the body] to
such an extent that it forcefully brings on a perfect crisis.

Moreover, if someone suffering from pain in one
part of his body is comforted by the consolatory words (190)
of the physician and thinks with full concentration of
the mind about recovery, his spirit is called away from the
member in pain toward the instrument of thought, that is,
the brain. Then the pain either subsides or diminishes,
because the spirit on which the sensitivity of the member (195)
depends is called away from the painful spot, and because
the attention of the soul which makes one fear the severity
of the pain is no longer focused on the painful spot. This is
what happened to the martyrs in the beginning of their
passion: The more they yearned for celestial joys through (200)
attentive contemplation of the mind—their spirits withdrawn
from managing the body—, the less they felt the pain of
torture. Hence, confirmed of being in God's grace by
their patience, they wanted the punishments to be mortal,
so that God's miracles would be shown to both the (205)
torturers and the spectators when they escaped unscathed;
and so they safely reached the palm of martyrdom, already
assured of future beatitude. The same phenomenon applies to
those who do not feel the wounds they have suffered,
because they think of victory with undivided attention (210)
of the mind and take away the attention of their mind

from the body: They only feel the pain racing when they agitate a lot of spirit by giving their attention to the wounded members.

When a physician despairs of his patient's health, he often addresses him with dreadful and suspect speech and sometimes announces his impending death to him. Terrorized, the patient is shaken by a sudden and desperate fear, leading to a severe constriction of the heart. The fear makes the spirits retreat from the members, causing the natural powers to go to waste, so that the patient is led to ruin before the assigned moment. (215) (220)