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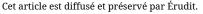
A discussion of Geomancy and Other Forms of Divination edited by Alessandro Palazzo and Irene Zavattero and of La magia naturale tra Medioevo e prima età moderna edited by Lorenzo Bianchi and Antonella Sannino.

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The Circulation of Treatises on Divination and Magic from the 12th to the 17th Century

by

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Abstract

A discussion of *Geomancy and Other Forms of Divination* edited by Alessandro Palazzo and Irene Zavattero and of *La magia naturale tra Medioevo e prima età moderna* edited by Lorenzo Bianchi and Antonella Sannino.

About the Author

PIETRO B. ROSSI studied at the Catholic University of Milan. He was a researcher and lecturer in the Department of Philosophy at the University of Parma (1974–1987), a professor of history of medieval philosophy in the Department of Philosophy at the University of Turin (1988–2018), where he is now an honorary professor. His research mainly concerns medieval and Renaissance Aristotelianism.

n the modern-day classification of the forms of knowledge, the divinatory arts have been viewed as tantalizing, even amusing, but unfounded practices. If we pay any attention to them, it is for some indefinite kind of superstition, at least in the minds of people who live south of the Alps, where I live. Nothing has changed in the epistemic status of such practices, and yet—no need to linger on it—scholarly interest has increased in divination insofar as it reveals a distinctive feature of the cultural history of *Homo sapiens sapiens* since our first inception as social beings.

The two books under review here do not contain anthropological or sociological studies in a strict sense. Rather, they examine the history and circulation of treatises on divination in a specific period of time beginning in the second half of the 12th century AD when divinatory practices, rooted in astronomy and astrology, migrated to the Latin world from their Arabic cradle. It is well known among medievalists what the so-called 12th-century "renaissance" meant for the Latin West. It is precisely this dynamic, indeed magmatic, context that provides the chronological starting point for the studies collected by Alessandro Palazzo and Irene Zavattero, covering plenty of ground up to the threshold of the 15th century. The subsequent history of magic, beginning with the later Middle Ages and extending all the way to the 17th century, is picked up by another collection of studies edited by Lorenzo Bianchi and Antonella Sannino² which also features in the present review.

I do not deem it necessary to justify the choice of having both volumes covered in one review. My reasons are clear enough in my comments on the following passage from Palazzo's introduction, "New Perspectives on Geomancy: Introductory Remarks" [ix-xxx]:

¹ Geomancy and Other Forms of Divination. Micrologus Library 87. Florence: SIS-MEL – Edizioni del Galluzzo, 2017. Pp. xxx + 572. ISBN 978−88−8450−842−3. Paper €75.00

 $^{^2}$ La magia naturale tra Medioevo e prima età moderna. Micrologus Library 89. Florence: SISMEL – Edizioni del Galluzzo, 2017. Pp. 361. ISBN 978−88−8450−848−5. Paper €55.00

Despite its fortune and cultural relevance, scholarly literature on medieval geomancy has thus far been relatively modest when compared with the massive output of studies dedicated to astrology. [xii]

Palazzo notes that his edited collection is probably the first attempt at a synchronic overview of this predictive form of knowledge as it was cultivated in the medieval civilizations surrounding the Mediterranean. This is certainly true. However, in order to understand this remark adequately, one should add that treatises on geomancy, as well as on astrology or magic, both Latin and non-Latin, cannot be appreciated without adequate background knowledge of astronomy and mathematics, their history, and also ideally the history of "numbers" and their symbolic representations. This is to call attention to the "applicative" status of geomancy as a practice which brought to fruition notions of astronomy and astrology by furnishing, as it were, a particular technique with a specific function. This is not to belittle the function that was once served, and is still ostensibly served to some extent, in geomancy and other forms of divination across the history of culture. These two collections of studies can, in this sense, be viewed as hosting investigations into various "applicative" aspects of astronomy and mathematics within the ambit and history of religious, philosophical, and social thought. Indeed, the range of competences that are required for a proper appreciation of geomancy and the predictive arts is not narrow, upon reflection, despite the typical technicality of treatises in geomancy.

The two volumes contain a true wealth of contributions and information. *Geomancy and Other Forms of Divination* hosts the proceedings of a conference that was held at the University of Trento on 11–12 June 2015. The conference was organized by scholars from the universities of Trento, Bari, and Lecce within the project Foreseeing Events and Dominating Nature: Models of Operative Rationality and the Circulation of Knowledge in the Arab, Hebrew and Latin Middle Ages, funded by the MIUR (Italian ministry of education, university, and research). It aimed to discuss the state of the art in studies on the history of divinatory techniques across the Latin, Arabic, and Hebrew Middle Ages.

In the introduction, Palazzo reminds the reader of what is meant by "geomancy", and notes the absence of geomancy in the Graeco-Roman world. He recalls its Arabic origin and dissemination among the Byzantines as much as the Latins. In addition, he provides an overview of contributions, organized into four main sections of unequal size:

- (1) "Texts and Geomantic Tradition" [5-221],
- (2) "Hebrew and Arabic Geomancy" [223-288],

- (3) "Divination and Astrology" [289-442], and
- (4) "Magic and Images" [443-535].

The volume ends with some observations by Agostino Paravicini Bagliani, "Géomancie et autres formes de divination. Remarques conclusives" [537–552], that bring out the common thread which runs throughout the collected essays.

The opening essay, "La géomancie médiévale: les traités et leur diffusion" [5–29], is the work of Thérèse Charmasson, to whom we owe the most important systematic treatment of geomancy in the western Middle Ages [Charmasson 1980]. Within a few pages, Charmasson introduces her readers to the nature of geomantic procedures, informs them of the main treatises which were composed in Latin, and outlines a general picture of research that came out after the publication of her doctoral dissertation.

The first section of the volume, thus opened by Charmasson, consists of three studies dealing with editorial work which was executed on three "manuals" of geomancy of Arabic origin:

- Irene Zavattero, "Estimaverunt Indi: la tradizione testuale di un anonimo trattato di geomanzia" [31–63];
- Pasquale Arfé, "L'Ars geomantiae di Ugo di Santalla: il testo e la sua tradizione" [65–91];
- Elisa Rubino, "Per una edizione della Geomantia di Guglielmo di Moerbeke: il testo del proemio e della prima distinzione della prima parte" [93–134]

and two other studies which relate in one case to the anonymous treatise *Estimaverunt Indi*:

Alessandro Palazzo, "L'Estimaverunt Indi e la condanna del 1277" [167–221])

and in the other, if indirectly, to William of Moerbeke:

Pasquale Porro, "Divinazione e geomanzia in Tommaso d'Aquino: qualche osservazione sul *De sortibus*" [143–166].

In addition, Charles Burnett, in "Hermetic Geomancy, 'Ratione certis experimentis usitata'" [135–141], discusses the extent to which unedited Latin texts of geomancy belonging to the so-called Hermetic tradition appeal to reason instead of inspiration. Burnett presents a comparative analysis of various enunciations found in the prologues to the anonymous *Lectura geomantiae* [Bos, Burnett, Charmasson, Kunitzsch, Lelli, and Lucentini 2001,

349–397], the *Ars geomantiae* of Hugh of Santalla, the anonymous *Speculum astronomiae*³ formerly ascribed to Albert the Great, and the *Tractatus geomantiae* composed "per magistrum Burnettum de Viella".

With the exceptions of Charmasson, Burnett, and Porro, the contributions in this first section lay out the main results of scholars engaged in the aforementioned project to research the doctrines and traditions of three treatises of geomancy, two of them dating to the 12th century (the Estimaverunt Indi and Hugh of Santalla's Ars geomantiae) and one attributed to William of Moerbeke. The essays provide a special occasion to discuss crucial questions for the study of the traditions of such texts. As already mentioned, it is widely assumed that the treatises stemmed from material of Arabic, rather than Graeco-Roman or Byzantine, origin. On the present state of research, the sources behind the compilations by Hugh of Santalla and the anonymous translator of the Estimaverunt Indi remain unidentified. The same holds for any sources, other than the two just mentioned, of the Geomantia by Moerbeke, who was in no position to draw on Arabic material directly. This state of affairs is recalled by Charmasson in her opening essay, based on an analysis of Latin medieval geomancy: the earliest such treatise which is extant in Latin is by Hugh of Santalla and presents itself as a translation from Arabic:

Incipit prologus supra artem geomancie, secundum Hugonem Sanctelliensem interpretem, qui eam de arabico in latinum transtulit.

Here begins the prologue of the *Ars geomantie* as rendered by Hugh of Santalla, who translated it from Arabic into Latin.

At the same time, the extant Arabic treatises would date no earlier than the 13th century AD, even though some practice of geomancy is documented in North Africa, Egypt, and Syria already from the 12th century [6]. Increasing scholarly engagement with the subject of Arabic divination, Islamic and pre-Islamic alike, has led to the localization of several new manuscripts with writings in geomancy.⁴

Let us now turn to investigations into the manuscript traditions of the three treatises that shape the first section of the volume and their conclusions.

³ For a concise but complete discussion of the attribution of the *Speculum*, see the recent study by J. Hackett [2013].

⁴ Cf. Fahd 1966, 201 n2, quoted in Charmasson 1980, 72 n4. Charmasson admittedly failed to verify the information, having no knowledge of Arabic. Fahd lists numerous manuscripts in Arabic, Turkish, and Persian held in the libraries of Istanbul, Ankara, Cairo, Berlin, Gotha, Bankipore, Vatican City, Alef, Oxford, and Paris.

As stated, the earliest known work on geomancy written in Latin is Hugh of Santalla's *Ars geomantiae*, whose tradition is studied by Pasquale Arfé with an eye to a critical edition of the text [65–91]. Arfé notes that the earliest known manuscript of the treatise (MS Paris, lat. 7354) stands alone in preserving an addition, following the explicit, which appears to be a second *accessus* (introduction) but is termed "Epilogue" by Arfé. Based on comparative analysis of the structures of both the prologue and the "epilogue", Arfé concludes that, contrary to what was argued by Paul Tannery, both texts drew upon identical inspiration and, hence, both must be compositions by Hugh of Santalla "based on doctrinal, historical, scientific and paleographic grounds" [77]. Reading the prologue and the "epilogue" [see Tannery 1920, 324–329], however, one is struck by the apparent redundancy of the so-called epilogue, which has the typical structure of an *accessus*, and it is hard to see why Hugh should have felt the need to write a second introduction.

The treatise is transmitted by 13 presently-known testimonies. In examining their text, the editor was guided by the assumption that manuals of divination are similar to the literary genre

of encyclopedia entries, that is, they are endowed with their own formal as well as semantic distinction and completeness, as such liable to a kind of textual transmission that is often independent of the rest of the work to which they originally belonged. [79]

On this basis, it is argued that such texts may have had a kind of tradition, which Arfé calls "composite", that results from the incorporation of independent items into different compilations. While it is true that, in principle, sections from different kinds of manuals could be extracted from their wholes in accord with the aims of those who extracted them (just as glosses could, conversely, become incorporated into the body text), it remains unclear how this situation is supposed to bear upon the editor's procedure. Of the 13 codices carrying the treatise, three turn out to transmit very limited portions of text—as would appear from the sheer number of folios [80: MSS E, R, U]—while others would display various discrepancies in the arrangement of textual sections, including the arrangement of individual figures. Picking up on what is documented by Charmasson [97–109], Arfé takes as his starting point in his analysis of the tradition, the arrangement of the text as transmitted by MS P (= Paris, BNF, lat. 7354, 13th century), which is for two thirds of the text in agreement with MS W (= Wien, ÖNB, lat. 5508). The applied criteria are as follows:

(1) relations between testimonies as documented by the denomination and arrangement of geomantic figures in specific sections dedicated

- to them, and especially in the complementary figures of *Mundus facie* and *Imberbis*;
- (2) the relation between testimonies "based on the simplification and use of lemmatical formulas with conditional meaning" (i.e., *Si vis scire*);
- (3) significant additions and omissions.

Arfé lays out these criteria after distinguishing between "text" and "metatext" in accord with the definition proposed by Louis Holtz.5 However, Holtz's definition was to address entirely different genres and manufacts: that is, Latin classical or ecclesiastical manuscripts whose margins became furnished during the development of earlier medieval culture with ample sets of glosses and running commentaries, as documented in numerous studies. In addition, the final tripartite stemma [86] is left with no commentary: On what grounds should the text of P be regarded as the most complete, the best structured and, hence, in the closest relation to the supposed archetype? On what criteria will the critical text be established, since nothing is being said regarding the quality of the text transmitted by testimonies to different branches? Finally, in what sense and with reference to what transmitted text, and what transmitting manuscripts, does the editor affirm that what matters historically "is the state of the textus receptus rather than that of a presumed original" [88]? In present-day textual criticism, textus receptus means the vulgate text. But how can a text be vulgate when it is supposedly complete in only two out of 13 codices? Answers to such questions will, it is hoped, be supplied in a proper edition of the treatise. In the meantime, a further question remains to be addressed with regard to the sources of Hugh's treatise, which scholarly consensus locates in the Arabic tradition. The last question will be best addressed as we turn to the other treatises on geomancy discussed in the volume, in particular the Estimaverunt Indi. This work was translated from Arabic and it also constitutes a "manual" of geomantic technique. Its tradition is analyzed by Irene Zavattero [31–63], and we shall present Zavattero's results in conjunction with Palazzo's "L'Estimaverunt Indi e la condanna del 1277" [167-221], which focuses on an

⁵ Holtz 1984, 142:

J'entends par là tout ce qui vient se greffer après coup sur le texte d'un auteur connu ou inconnu, c'est-à-dire tous les éléments qui n'ont pas d'autre raison d'être que de faciliter, de guider, d'orienter la lecture: capitulation ou sous-titres ajoutés à l'œuvre,...et surtout éléments visant l'interprétation (paraphrases, gloses, commentaires).

aspect that is by no means secondary in this text, which was expressly cited by Etienne Tempier in his syllabus of 1277.

The Estimaverunt Indi has a tradition that is somewhat similar to that of Hugh's Ars geomantiae, and is even attributed to Hugh in some manuscripts, although it is currently held to be the work of an anonymous author. Its testimonies are relatively few: eight manuscripts, four of which carry a text that appears to be incomplete when compared to the text transmitted by the others. For sections of text of various lengths, an independent circulation has been documented (as is the case for sections of the Estimaverunt Indi in a different translation). Some dissimilarity affects the internal text division. There is also a problem with the actual *explicit* of the treatise [see 51-54]. In an appendix to her study, Zavattero prints the text of the prologue on the basis of six manuscripts, in fact accepting the short textual notes carried solely by MS Laurentianus, Plut. 30.29, from which Tannery transcribed the prologue [403-404]. Furthermore, her analysis of the tradition is exclusively concerned with the correspondence between parts of the treatise across its testimonies. It results in Zavattero's proposal, couched in merely tentative terms, to exclude a number of "chapters" of the treatise from the critical text. The rationale for these choices remains obscure, however. The reader would expect to be able to follow the argument through a synopsis of the text transmitted by those manuscripts which can be held to be reliable testimonies. What the reader is being offered is, however, nothing more than provisional reports on research projects that are still in progress and that fail as such to exhaust some inherent questions.

In order to bring out the importance of accessing the treatise in a critical fashion, Palazzo, co-editor with Zavattero, raises a question that is quite familiar to medievalists but has yet to receive adequate treatment. Of all writings on divination, the *Estimaverunt Indi* appears to be the only work that Etienne Tempier explicitly makes reference to, and targets, in both the *incipit* and *explicit* of his syllabus of 1277:

...item libros, rotulos seu quaternos nigromanticos aut continentes experimenta sortilegiorum, inuocationes demonum, siue as coniurationes in periculo animarum, seu in quibus de talibus et similibus fidei orthodoxe et bonis moribus euidenter aduersantibus tractatur....

...and also those books, rolls, or quires containing necromancy, sortilege, demon summoning, or oaths endangering souls, as well as those which expressly deal with any such or other practices that are opposed to orthodoxy and good customs.... [167]

In Palazzo's judgment, scholars have generally chosen to gloss over this datum, which is held to be of the utmost importance. Palazzo's informative study contains a reappraisal of the entire issue. The main thesis is that, by singling out the treatise for explicit reference, Tempier intended to identify it as the principal propagator of a divinatory technique which could cause great harm to the Christian doctrine. The attack was launched within the context of a general condemnation of views intertwining astral fatalism with magic and divination [171]. Palazzo then applies this historiographical perspective in interpreting various testimonies, censures, and condemnations subsequent to the year 1277. In his view, the main threat posed by geomancy consisted in its aspiration to constitute an all-embracing form of knowledge in the hands of human beings.

The analysis continues with a discussion of the extant testimonies to the treatise as well as the independent circulation of parts thereof, which would be evidence for its widespread dissemination. Some circulation of the *Estimaverunt Indi* in Paris would be attested by the aforementioned manuscript Laurentianus, Plut. 30. 29, dating to around 1280, and by the earliest manuscript of the *Speculum* formerly attributed to Albert the Great. It is not possible, within the limits of the present review, to trace the full argument in support of this conclusion. My own impression is that the argument rests upon David Pingree's claim that the codex was copied in Paris,

... it <*scil*. the Laurentianus manuscript> is the oldest manuscript, having been copied within 15 years of the composition of the *Speculum*. Already by 1280 then a manuscript was copied, presumably in Paris, from one that Fournival had used, and in the same codex were transcribed Fournival's own work and the *Speculum*. Laurentianus 30, 29 clearly comes from the same circle of Parisian scholars to which Fournival and Albert belonged. [Pingree 1987, 87]

as well as on Pingree's references to the edition of the *Speculum*, where the codex is dated between the years 1260 and 1280 on paleographic grounds [Caroti, Pereira, Zamponi, and Zambelli 1977, 3].⁶ Considering the importance that is thus assigned the Laurentianus, a detailed description of its paleographic features would have been highly desirable. There is hope that at least the announced edition of the text will be made a suitable home to it.

⁶ The description of the codex can be found at 130–131: "...Sec. XIII Seconda metà ...textus universitario di modulo assai minuto ...". Zambelli 1992, 110–111 also has a reference to Pingree.

The Paris condemnation punctuates Palazzo's analysis of a significant passage from the *Estimaverunt Indi* following the prologue, and his first treatment of the elements on which geomancy is grounded. The passage in question figures also in the shorter version of the treatise, which was specifically targeted by Tempier, and it is printed in an appendix to Palazzo's chapter [211–218]. In this passage, "the *compositor* illustrates the nature of the work, sets out the reasons for its composition, and highlights its religious character as well as divine origin" [196]. Palazzo builds upon previous studies in the alleged Arabic source of the Latin text—"... editus ab alatrabuluci translatione", with a reference to Abū Saʿīd al-Ṭarābulusī or "Tripolitanus"—and he lays emphasis on those aspects which could explain why the treatise is singled out in the Tempier's syllabus.

The opinion of this reviewer is that a coherent interpretation of such texts should be informed by specific knowledge of the rhetorical conventions in use among Arabic writers, e.g., the Arabist scholar would be best placed to identify what underlies medieval translations into Latin. I have no knowledge of Arabic, but anyone familiar with Arabic-Latin versions, and not so much from Aristotle or the ancients as from original compositions by Arabic-speaking scholars, is unlikely to be much impressed by such conventional phraseology as "Inquit compositor", or standard eulogies like "sublimis et magni". Furthermore, the stated connection in the treatise between geomancy and the Islamic tradition would make sense within the Islamic context (which notoriously includes figures and categories of biblical derivation, well known to Latin Christians). It is striking, however, that such ties were preserved in the Latin translation. To my knowledge, this is unusual for the scientific literature, where the tendency was rather to de-Islamicize the texts translated.

In drawing my first set of remarks to a close, I shall add a few notes about the presented and progressing editions of Hugh of Santalla's *Ars geomantiae* and the anonymous *Estimaverunt Indi*. To begin with, the tradition of these works would best be studied when complementary information is gathered about the history of testimonies (origin, chronology, composition, handwriting, notes of ownership) and areas of dissemination of the works themselves.⁷ This will prompt the further question of why so (comparatively) few testimonies are preserved from the 13th and 14th centuries, despite the fact that no printed editions were produced with the advent of

⁷ It would be interesting to know, for example, what hand, whether Italian or other, copied MS Digby 50, one of the earliest testimonies to the *Ars geomantiae*, acquired

the printing press. Next, textual analysis ought not to lay exclusive emphasis on the retention or alteration of the works' internal structure, and it should make clear on what grounds the arrangement that is found in a given codex qualifies as "complete and ordered", as opposed to that which appears in other codices. Finally, and most decisively, it is essential to define clearly the criteria that are applied in editing Latin translations from Arabic sources when the extant Arabic tradition underlying Latin geomancy is ignored. Such pioneers as Charles Homer Haskins, who explored the universe of 12th-century translators [Haskins 1924, 66–81], and Paul Tannery, editor of Descartes and the first to work towards a comprehensive picture of "Latin" geomancy informed by previous research, broke much new ground, but they failed to address the Arabic tradition in and of itself.

The essays just reviewed testify to the progress of scholarship since the second half of the last century by referencing several scholars of geomancy and other divination, beginning with Fahd (for the Arabic tradition) and Charmasson (for the Latin). At the same time, some of the essays themselves, as is the case with the two dealing with divination in the Jewish tradition, lament the limited availability of critically edited Arabic sources. Josefina Rodríguez-Arribas, in her essay "Divination According to Goralot: Lots and Geomancy in Hebrew Manuscripts", writes:

The author of this article is preparing a critical edition of this text (i.e.: Yehudah al-Ḥarizi's *Sefer ha-goralot*) with an English translation and commentary, however no serious study can be carried out without the consideration of the geomantic texts and practices among the Arabs (and Berbers), who seem to have been introducers and models of this divinatory technique in Europe and the Near East. Although geomancy had been studied (Binsbergen and Regound) Arabic treatises on geomancy remain mostly in manuscripts and a few are published in uncritical editions. All of them require critical edition and further study to understand their transmission and impact in the emergence and development of geomancy among Muslims, Christians, and Jews. [269]

A similar concern is voiced by Blanca Villuendas Sabaté, in "Arabic Geomancy in Jewish Hands: Specimens from the Cairo Genizah" [274 and n5], who is working to decipher, catalog, and pinpoint geomancy-related material in the numerous fragments retrieved from the Cairo Genizah and

by Kenelm Digby in Florence in the year 1620. Also wanting, as mentioned, is a detailed description of codicological and paleographical features of MS Laurentianus Plut. 30. 29.

presently housed in Cambridge. One of these fragments would—in Villuendas Sabaté's estimation—display some resonance with a passage from Hugh of Santalla's *Ars geomantiae* [287: cf. Villuendas-Sabaté 2012].

These remarks about the indispensability of trustworthy Arabic texts in editing Latin translations are aptly rounded out by an observation that comes from Hugh of Santalla. In the dedicatory epistle to Michael, bishop of Tarazona, accompanying the translation of the *Liber imbrium ab antiquo Indorum astrologo nomine Iafar editus*, Hugh censured the practice of translators who would produce free (and obscure) translations with the purpose of hiding their embarrassment whenever faced with Arabic words that they would not understand because the words were unusual or unintelligible, sometimes due to missing or unexpected diacritical marks (Latin: *apices*). Hugh's censure is glossed as follows by Charles Burnett, editor of the *Liber imbrium*:

It appears that Hugo is now speaking in his own person, since he discusses in some detail how the contents of the discipline can be perverted through the faults of scribes and translators. He specifically mentions the confusion caused by the absence of diacritical marks—a particularly acute problem for the translator of Arabic texts. This seems to be a general complaint—not levelled at this work or works on weather forecasting in particular. [Burnett 2004, 65]⁸

The treatise on geomancy attributed in our manuscripts to William of Moerbeke represents the third "manual" whose tradition and structure are examined in the volume. This was not a translation from Arabic (of which language William had no knowledge), nor a translation from Greek, but an original composition by the Flemish Dominican. The treatise is discussed by Elisa Rubino, in "Per una edizione della Geomantia di Guglielmo di Moerbeke: il testo del proemio e della prima distinzione della prima parte" [93–134], who studies its tradition and both provides an edition of the

Plerunque etiam interpres—sed tunc minime fidelis—inter angustiarum pressuras hanelans, nomen quodlibet peregrinum quod aut elementorum diversi apices aut eorum penuria, sepius etiam linguarum impacabilis diversditas quibus omnibus ethimologie variatur significatio, recte non patiuntur transmutari, ne quid pretermisisse aut ne iam desipiens <magis> desipere videatur, ad libitum transfert, ut quamvis natura neget, elationis tamen arrogantia versum profecto excutiat. Secundario autem assidua scriptorum et minus perfecta eruditio. Verum hec omnia lectoris industriam non possunt effugere.

See also the interesting article by Antonella Braga [1987, 347–348].

⁸ For the Latin text, see Burnett 2004, 88:

prologues and distinguishes for the first time the first of the eight parts comprising the text.

Aside from Rubino's own, two further contributions engage with the treatise, one more directly (Alessandra Beccarisi, "Guglielmo di Moerbeke e la divinazione" [371–395]), the other more tangentially (Pasquale Porro, "Divinazione e geomanzia in Tommaso d'Aquino: qualche osservazione sul *De sortibus*" [143–146]) in that it deals primarily with Thomas Aquinas' *De sortibus* and touches upon a recurrent issue in debates over the treatise and William's authorship.

William's *Geomantia* is transmitted in 15 manuscripts, five of which carry what is assumed to be its complete text, whereas the other 10 contain only the first four (or five, or six) of its eight parts. One exception is MS Würzburg, UB, M. ch. f 212, which contains a collection of excerpts [94–95]. The tradition of the *Geomantia* displays various analogies with that of the other manuals, beginning with the partial transmission of the eight parts of the text and some recurrent tendency towards innovation. In regard to the latter, Rubino speaks of "redactional tendencies" (from various copyists) and variant readings having a "substitutive" function, which would be so numerous and of such a kind as to make it "altogether inadmissible to subject these materials to a philological treatment based on Lachmann's methodology" [96].

It remains unclear, on this account, what exactly is meant by "substitutive" variants, a notion that would typically apply to authorial variants as distinct from scribal errors. Such errors have to be handled as equally plausible readings, unless they are obvious corruptions due to omission or lacunae; their use for the establishment of the text is dictated by the stemma of testimonies. Therefore, what transmitted text is to be considered closest to the original? Which of its testimonies enjoy higher status? Rubino's solution hinges on the notion of a codex optimus [99: "a good manuscript"]: that is, a complete and trustworthy testimony to the transmitted work. Of the five manuscripts transmitting the text in its integrity, one (E3) has damaged and partially illegible margins, another one dates to the 16th century and sticks out for the poor quality of its text; two more (E₁ and G) preserve a redaction of the text "which has a tendency to condensation", and is claimed to be derivative. There remains only K, namely MS Kassel, Landesbibliothek u. Murhardsche Bibliothek, 4° Ms. astron. 16 (second half of the 14th century). Rubino consequently chooses to give the text according to K, and, if necessary, to emend it with the aid of G, also dating to the 14th century. The editor's choice is somewhat puzzling, however, in that G itself transmits

what is, on Rubino's own account [99], a derivative redaction of the text of the treatise.

Beccarisi [371–395] tackles the attribution of the *Geomantia* to William of Moerbeke and she discusses its date of composition. She reviews existing proposals to conclude that the treatise can be ascribed to William and was composed during the pontificate of Gregory X (1271–1276). William's authorship would be corroborated by the testimony of the manuscript tradition and by the fact that no evidence has been produced to this day "which can contradict the attribution" [379]. As such, the treatise would be no translation but an original work of William, where the influence of the *Estimaverunt Indi* is often noticeable [379–380]. In the remainder of her essay, Beccarisi dwells on the art of geomancy, and addresses the oft-debated question of how Moerbeke's geomantic scholarship can have coexisted with the theology of Thomas Aquinas.

The alleged attribution to William has recently been questioned by Pieter Beullens in his review of both studies by Rubino and Beccarisi [2019]. Close analysis of the arguments for and against the attribution falls outside the scope of the present review. I shall confine myself here to observing that the attribution finds no support besides the manuscripts that carry it, the earliest of which date from the second half of the 14th century. Also noteworthy, all extant testimonies belong to the "Germanic" area, and contain colophons and opening rubrics informing us that William entrusted the text "pro secreto" to an otherwise unknown nephew of his named Arnulphus. The information should be interpreted in light of the widely documented practice of having unorthodox texts circulate under a false attribution to respected figures for their standing and doctrine, and it points as such in the direction of pseudo-epigraphy.

Among the least studied of Aquinas' writings is the *De sortibus*, forming the subject of Pasquale Porro's contribution. Porro outlines Aquinas' stance on the legitimacy of divination considered both in its own right and in its various applications. The unambiguous reproof that Aquinas expresses of divination, including geomancy, raises an obvious question of consistency between his mind and that of his Flemish confrère. Porro submits that Aquinas did not know of William's geomancy. One would wonder, however, whether William could also be in the dark about Aquinas' censure. This and other such questions remain unanswered and they are likely to bedevil future research on the authorship of the *Geomantia*.

Next in the wealth of essays collected by Palazzo and Zavattero is a section dedicated to geomancy in Jewish and Islamic cultures [223–288]. The section opens with a study by Marienza Benedetto, "Geomancy and Other Forms of Divination in the Jewish Middle Ages" [225–241], complementing the two aforementioned chapters by Rodríguez-Arribas and Villuendas Sabaté. Benedetto outlines the general question of geomancy and focuses on Maimonides' doctrine of divination, especially in his *Epistle on Astrology* and *Guide for the Perplexed*.

The following section opens still wider horizons by ranging across various forms of divination and astrology. The first that we encounter, in David Juste's essay "A Medieval Treatise of Onomancy: The Spera Sancti Donati" [291-328], is onomancy, as it features in the edition of another medieval treatise. The Spera Sancti Donati is a compilation of passages taken from the Alchandreana, a collection of astrological texts of Arabic origin that was assembled in Catalonia during the 10th century. The Alchandreana was published in an important study by Juste [2007], who has made it the subject of several first-hand explorations. His essay stands out in this volume for its author's complete command of the subject. The Spera has not reached us in its original form, nor do we have any information about what the original was like. It is transmitted principally by MS Egerton 821 of the British Library (second half of the 12th century, southern France) as well as MS Vienna, ÖNB, 5327 (15th century), which has only some of its chapters. Of special interest, in the analysis, are Juste's remarks concerning the peculiar syntax and the Latin vocabulary of the Spera. Those who like myself chance to have a "Romance" dialect besides Italian as their mother tongue encounter relatively few difficulties in reading the text [315-328], to be sure. In regard to authorship and the place of composition, Juste advances several reasonable yet tentative proposals, which he judiciously presents as such.

Our journey into Latin divination treatises continues in the third section of the volume with contributions by Danielle Jacquart, Irene Caiazzo, Sebastià Giralt, and Stefano Rapisarda. Jacquart, in "La gamme diversifiée des condamnations des techniques divinatoires dans les commentaires bibliques (XIIe-XIIIe s.)" [331–350], explores various condemnations of divination in biblical exegesis, particularly on the Book of Genesis. She takes as a starting point the reaction against divination by Raymond of Marseille, and proceeds to discuss the different attitudes exemplified by Hugh and Andrew of Saint Victor (more lenient) *vis-à-vis* Abelard and Robert Grosseteste, who fiercely opposed divination in his *Hexaemeron*, following in Basil the Great's footsteps. No further commentaries on Genesis were produced over the course

of the 13th century, and yet the stances of such masters as Bonaventure, Albert the Great, and Thomas Aquinas can be extracted from their theological writings.

Irene Caiazzo's essay, "Causalità celeste, astrologia e predizione nel secolo XII: qualche considerazione" [351–370], traces summarily the Western reception of a large amount of Arabic astronomical and astrological material, and its philosophical impact on scholars such as Herman of Carinthia and Raymond of Marseille. At the same time, the study of divination propagated well beyond philosophy, percolating into other sciences and medicine in particular.

A renowned physician, the Catalan Arnaldus de Villa Nova, is the focus of the next piece by Sebastià Giralt ("The Astrological Works Attributed to Arnau De Vilanova: The Question of Their Authenticity", [397-420]). Giralt begins with a reference to Giovanni Pico della Mirandola, who cites Arnaldus in his *Disputationes adversus astrologiam divinatricem* for he (erroneously) predicted the advent of the Antichrist in the years 1345 or 1454 based on a couple of astral conjunctions. Giralt raises the question of whether this astrological calculation could truly be found in Arnaldus. He inclines towards a negative answer. Arnaldus' authentic work does contain some application of astrology to medicine, but only in specific contexts, and—on Giralt's account—Arnaldus' main contribution was, rather, the medical use of the so-called astrological seals, dating to the last decade of his life. The attribution to Arnaldus of various astrological writings, which can be found in the manuscript tradition, remains an open question. Giralt concentrates on the tradition and text of three such writings: the De aqua simplici et composita, the De sigillis (along with other texts on astrological seals), and the very popular Introductorium ad iudicia astrologie quantum pertinet ad medicinam.9 Giralt concludes that none of these writings is the work of Arnaldus.

The section is brought to an end by Stefano Rapisarda, who offers some outlook onto the large tradition of translations of various kinds of treatises on divination into the vernacular. Rapisarda, in "Chiromanzia e scapulomanzia in anglo-normanno nel ms. Londra, British Library, Add. 18210" [421–442], focuses particularly on exchanges and connections between the Iberian Peninsula and the British islands between the 12th and 13th centuries. With Eleanor of Aquitaine's marriage to Henry II, contacts intensified between

⁹ See pages 416–419 for an appendix with a list compiled in collaboration with David Juste of manuscripts transmitting the longer and shorter versions of this text.

the British islands, the Ebro Valley, and reconquered Spain: an area that lay at the intersection of different cultures and civilizations and has long attracted the attention of medievalists. As recalled by Rapisarda, parallel to the dynastic and political channel, "a channel of intellectual communication" gained momentum. This channel transmitted not only a good deal of science and philosophy, but also material related to the art of divination such as chiromancy and scapulimancy, "whose earliest texts emerge almost simultaneously in Spain and England at the end of the 12th century" [423–424]. After a brief outline of historico-cultural trajectories followed by the two arts in the classical and the Byzantine worlds, Rapisarda moves on to his analysis of a London codex which contains a translation into the vernacular—previously published by the author—of several tracts: the *Chiromantia parva*, a Latin scapulimancy treatise titled *Liber alius de eadem*, and another text on "l'art del saut", i.e., the study of involuntary movements of bodies and their parts, sneezing, and spasms.

The fourth and last section of the volume, "Magic and Images", hosts only one study: Nicolas Weill-Parot's "Des images qui disent et font dire l'avenir? Talismans, divination et bonne fortune (XIIIe-XVe siècle)" [519–535], which concerns "operative" magic performed by images and talismans as distinct, in the texts themselves, from divination through images. Weill-Parot builds on his experience to clarify the different functions and connotations assumed by talismanic arts. The clarification is made necessary due to the amount of confusion that, beginning presumably with Albert the Great, affected geomantic figures and talismanic techniques as astrological images. Another short but interesting contribution, "Nigromantia': brève histoire

Another short but interesting contribution, Nigromantia: breve histoire d'un mot" [445–462] by Jean-Patrice Boudet, is dedicated to the term "nigromantia" and helpfully highlights the polysemy of the term in Western culture since Graeco-Roman antiquity. "Necromantia" is a calque from the Greek meaning the interrogation of the dead for divinatory purposes. Boudet's investigation runs across an extended period of time in collecting suitable sources (classical authors; juridical, theological, and astronomical texts) to classify meanings of "necromantia" and "nigromantia" from the 12th to the 15th century.

I shall conclude my remarks on this collection with observations on the rich study by Isabelle Draelants, "'Magica vero sub philosophia non continetur': statut des arts magiques et divinatoires dans les encyclopédies et leurs 'auctoritates'" [463–518], which is specifically centered on the place of "magical sciences" in the medieval encyclopedia of sciences and philosophy. Draelants is a scholar of the medieval encyclopedia genre, among other subjects,

which she investigates in the present volume with regard to short texts of magical and divinatory knowledge in Latin encyclopedias from 1225 to 1260. After a quick survey of the literature, Draelants focuses on Vincent of Beauvais' Specula, to discuss recurrent exempla of sorcerers, Gerbert of Aurillac and Simon Magus. She situates them in the context of their sources (Varro, Augustine, Isidore, Hugh of Saint Victor) and also touches on some 13thcentury masters (Alexander of Hales, Albert the Great, Thomas Aquinas). In addition, she shows how definitions and views of divinatory sciences fared across the medieval millennium. Eloquent in this regard is the comparison between Hugh of Saint Victor's and Vincent of Beauvais' works [476–482] concerning the question of where (ad quam partem philosophiae) divinatory sciences can be assigned. Hugh's answer, taken up by Vincent, is unambiguous: Magica in philosophiam non recipitur, which runs against the inclusion of magic under natural astrology, postulated since the 12th century by Arabic sources in their classifications of natural sciences qua concerned with the "natural properties" of beings. In fact, for all the interest taken by Arabic authors in divination, it would never be regarded "comme une véritable discipline théorisée" [515] according to Draelants. Nor did the proprietates rerum enjoy right to citizenship in the Aristotelian epistemology of science. After all, Robert Kilwardby himself followed Hugh on divinatory sciences in his De ortu scientiarum, which was composed precisely in the period that is investigated by Draelants. Like Hugh at the end of his guide, so Kilwardby ended his introduction to the encyclopedia of sciences with a transcription of the closing chapter of the Didascalicon: "Cap. LXVII De artibus magicis brevis sermo secundum Hugonem" [Judy 1976, 225-226]. We have fared a long way, but our journey is not over yet and it is now going to take us to different centuries, authors, and perspectives. The papers collected by Lorenzo Bianchi and Antonella Sannino belong to a series of studies presented between 2005 and 2015 at the international workshop "La magia naturale tra Medioevo e prima età moderna" of Università degli Studi di Napoli "L'Orientale". The introduction to the collection guides us throughout themes and problems discussed in the various chapters. These are concerned not so much with textual or editorial issues as with the nature and function of magic and divination, explored through a selection of moments and figures across more than three centuries. They squarely belong in the "Latin" tradition, although the first three essays examine once again the decisive influence of Jewish and Islamic thought on the transformation of science in Latin Europe between the 12th and the 13th centuries. At the same time, we cannot ignore the unprecedented possibilities that were opened by the new

access to Greek sources in the early 1100s. While northern Spain borders on the "Arabic" world, the Italian peninsula and the commercial partners of Maritime Republics were mostly rooted in the Greek *milieu*.

With Carmela Baffioni's chapter, "L'Epistola 52 degli *Iḥwān al-Ṣafā 'Sulla Magia*" [15–37], we remain, as it were, within the genre of encyclopedia and on the side of sciences somehow esoteric, like magic. Baffioni skillfully guides the reader through the complex and complicated history of the grand encyclopedia ascribed to the "Brethren of Purity". At the same time, important and longstanding questions are not eluded as regards the origin, authorship, and purpose of this collection, comprising 52 treatises or epistles, and divided into four sections. The collection incorporates various elements from nearly all ancient civilizations, from the Babylonians to the Indians, Persians, Jews, and Christians, as well as the Greek scientists and philosophers, to the extent that "the encyclopedia can be considered as a compendium of foreign sciences, albeit reinterpreted in the light of religious convictions proper to the Iḥwān" [17].

Special attention is devoted to epistle 52, "On Magic", with regard to the contents of both its "short" and "long" versions. Baffioni dwells on some of the stories narrated in the epistle, which become allegories, one might say, of the peculiar knowledge that is discussed therein, in sharp contrast to the custom of similar encyclopedic texts in the Latin tradition. Two passages from the epistle dealing with the operations of the "agent Intellect" and the "universal Soul" stand out in the analysis. These agencies shape the lower world, along with the "souls" of its inhabitants, in dependance on the souls of the stars. This dependence is then claimed to ground the connection between astronomy and magic, "since magic consists in the influence of a soul on another one" [29].

A similar doctrine is detected by Daniel De Smet in the *Kitāb Ġāyat al-Ḥakīm*, better known as *Picatrix* from its Latin version (second half of the 13th century). Here, doctrine serves the purpose of legitimizing magic on a philosophical level so that it may gain legitimacy within Islam. De Smet's piece, "La cosmologie néoplatonicienne du Kitāb Ġāyat al-Ḥakīm et la légitimation philosophique de la magie" [39–54], opens up with an outline of issues pertaining to the attribution and also to the composite, unsystematic nature of the text. It continues with an analysis of the Arabic original—the Latin being allegedly preserved in an altered form—which is centered on the influence of cosmological doctrine of Neoplatonic ancestry. The author finds a vocabulary which he takes to derive not so much from al-Fārābī as the Arabic compilation of Proclus' *Elementatio theologica*, that is, the famous

Liber de causis, in its Latin version. Alongside the hierarchical metaphysics that is typical of Neoplatonism, De Smet identifies the characteristic five substances theory (Prime Matter, Intellect, Soul, Nature, Corporeal Matter) that issued from the so-called *Empedocles Arabus* and reemerges in other doctrines that are discussed here. Such metaphysics and the "Platonic" theory of Forms jointly ground the "science of talismans" for those capable of decoding its symbols, with the figure of the sorcerer even enjoying the status of a revived demiurge.

Marienza Benedetto, in "Tra illusione e scienza: la magia nel medioevo ebraico" [55 – 79], brings to a close the handful of studies dedicated to comprehensive investigations of the magical tradition in non-Latin cultures. In the collection edited by Palazzo and Zavattero, Benedetto concerned herself with geomancy and other kinds of divination in the Jewish Middle Ages, with special regard to Maimonides. This more recent essay is also focused predominantly, if not exclusively, on Maimonides. From a comparative reading of the two pieces, various topics and references appear to recur with some frequency and match across the papers. Finally, Benedetto expounds Isaac Pulgar's (13th century) words in his 'Ezer ha-dat (The Support of Faith) about magical practices, and reports on the views of his contemporary Qalonymos ben Qalonymos ben Me'ir. An appendix presents an Italian translation of section 4 of 'Ezer ha-dat, on believing in magic.

With the essay by Antonella Sannino, we delve into the Latin Middle Ages and explore the metamorphoses, so to speak, of literature on magic. The exploration is paralleled by a similar venture into discussions of magic up to the drastic change in scholarly attitude towards the nature of science in the 16th and 17th centuries. In the opening of Sannino's work on natural magic in William of Auvergne—"Nigromantia secundum physicam, nigromantia imaginum: arte e immagine in Guglielmo d'Alvernia" [81–130]—prominence is given to a vexed historiographical question concerning the contentious dignity of "magical" knowledge as a science. The question has been long debated, and we will come back to it in the conclusion of my remarks. William was notoriously involved in the early debates at the University of Paris, first as a theologian and subsequently as bishop (1228–1249). Sannino proposes a careful reading of William's position in some of his texts on magic. In addition, she supplies an Italian translation of passages from the De legibus and De universo creaturarum et spiritualium, whose Latin editions

¹⁰ Compare page 228 in the former with page 60 in the latter; 233 with 61; 234 and 235 with 63.

she currently has underway [115–130]. Sannino has a longstanding familiarity with William and eases the reader's way throughout his translated texts. Despite such care and guidance, however, the reader's impression is that in the featured texts William is somewhat inconsistent in his semantics of *scientia*, *ars*, *experimentum*, or in the use of such recurrent and ambiguous phrases as *secundum physicam*.

With her chapter on Thaddeus of Parma, "Note sulla magia nell'averroismo bolognese: Taddeo da Parma" [131–148], Valeria Sorge takes us into the specific context of philosophical instruction at the University of Bologna in the first half of the 14th century. Close analysis of the prologue to the *Expositio super Theorica planetarum Gerardi* brings out Thaddeus' view on magic and his Arabic (or other) sources, as evidenced by Thaddeus' account of the position of astronomy within theoretical sciences. Here it may be worth noting that Thaddeus' reference to the *Lincolniensis in principio secundi posteriorum* [137n7] is precisely to the words:

Et in his dictis cum his que predicta sunt in priori libro completa est scientia demonstrativa et universaliter faciens scire, quia quicquid scitur aut per artem demonstrandi aut per artem diffiniendi scitur. [Rossi 1981, 289.45–48]

With what has been said here and in the previous book, [the study of] demonstrative science affording knowledge by universal concepts comes to completion. For all that is known, is known either through demonstration or the technique of definition.

Likewise, the reference to Grosseteste that follows in the text [137 n8] is to the well-known passage on modes of cognition in God, separate intellects, and man. However, unlike what seems to be the case with Thaddeus, Grosseteste assigns no illuminative function to the agent intellect in his theory of knowledge [Rossi 1981, 212–214.216–252].

As remarked by the editors [4], the first of the two ideal sections which make up the volume is brought to completion by Nicholas of Cusa. At the same time, the Cusan might also be viewed as releasing that peculiar, pervasive force which, over the 1400s and 1500s, propelled novel and almost alternative interpretations of nature and man in both science and philosophy. The phenomenon is well documented by the next contributions, the first of which, "Hermetic Magic in Cusanus" distills Pasquale Arfé's long experience in the "hermetic" thread running through Nicholas' thought. Arfé presents us with Nicholas' reflection on magic in his pastoral work. He examines a number of sermons which illustrate how the bishop's attention to, and censuring of, magic in his preaching is evidence for the wide circulation of such censured practices and forms of magic.

The following analysis by Simonetta Bassi, "Figure della trasformazione: Circe fra magia e politica" [175–202], traces the transformations undergone by the myth of Circe. More precisely, it analyzes the significance of the myth in 15th- and 16th-century thinkers. Lorenzo Bianchi introduces us to Italian philosophy through the works of Giovanni Battista Della Porta and Tommaso Campanella in "La magia naturale a Napoli tra Della Porta e Campanella" [203–228]. Oreste Trabucco moves on to the complex world of 17th-century France and the life, work, and "vainglory" of Lazare Meyssonnier, in "La 'Belle magie' di Lazare Meyssonnier" [229–274]. Mariassunta Picardi's "'Il ne s'en faut servir que par récréation': Charles Sorel, la magia e l'unguento delle armi" looks into the activity of Charles Sorel, which aimed at stigmatizing magic and especially its application to medicine. These are all rich and thought-provoking readings, offering a variety of diachronic outlooks from the vantage points of specific themes and figures.

Myth in the Renaissance is one of the most researched features in the mind-set of its protagonists and their accomplishments. Within this framework, Bassi recalls the interpretations of the myth of Circe by Giovanni Pico, Ficino, and Agrippa, to highlight its reappraisal by Pomponazzi and Jean Bodin. Pride of place is accorded to Giordano Bruno, in whose mind "the figure of Circe assumes a radically different meaning in the context of the 1500s" [186]. That is a social and political meaning: Circe is the figure who assigns animal bodies to humans with human bodies and animal souls. Further material is taken from Erasmus and Machiavelli, which Bassi connects with Bruno.

The livelihood of 16th- and 17th-century Neapolitan culture is the frame of reference within which Bianchi traces the history of Campanella's *Del senso delle cose e della magia*, where

the analysis of magic is developed in the fourth and last book, in completion of a complex "sensible" itinerary that involves not only humans but also animals and all elements. For it is not just animals who "have sensation" but "it must be said that elements themselves do too". [204]

From this observation, Bianchi proceeds to track contacts, interactions, and explicit references in Campanella to Della Porta—author of the well-known *Magia naturalis*—as well as other of his contemporaries. The result is a picture of interests and doctrines ("sympathy" and "antipathy", attraction and repulsion across the natural world) which would circulate parallel to the Aristotelian tradition.

Trabucco and Picardi take us to 17th-century France. Lyon is Trabucco's chosen setting, as the venue of the overwhelming publishing activity of Meyssonnier, a physician who boasted connections with numerous acclaimed and sometimes truly outstanding figures, including Descartes. In Trabucco's account, Meyssonnier's debut on Lyon's editorial scene dates to the year 1639, with the *Pentagonum philosoph.-medicum sive ars nova reminiscentiae*. This was a concoction "of the most disparate sources, flavored with heavy Hermetic and cabalistic ingredients" [235], and the manifesto of a medical doctrine with "a magical-astrological basis abundantly advertised and also, arguably embedded within it, a strong proclivity for Paracelsus' medical alchemy" [238]. Trabucco's itinerary takes off from the hectic publishing activity and the various connections, both direct and indirect, boasted by Meyssonnier, the admirer of Campanella and editor of the French edition of Della Porta's *Magia naturalis*. His itinerary leads to *La Belle Magie* or *Science de l'esprit* that appeared in Lyon in 1669, which is described by Trabucco as

the comprehensive picture where he came to situate the meaning of all his work; Meyssonnier's *belle magie* was not mere *magie naturelle*, as he immediately made clear, since he placed his devotional writings under *magie surnaturelle*, beginning with his *Philosophie des anges* and the peculiar mysticism in which it was rooted. [268]¹¹

An opposite view on magic and its applications was defended by Charles Sorel (1602–1674), an intellectual related to the *libertinage érudit*. His *Science universelle* is examined by Picardi with special regard to the sections on magic, and in connection with the construction of a "universal science", "in light of the new ideas on the methodology of knowledge" [278]. The *Science universelle* is an encyclopedic work in four volumes where Sorel "validates Bacon's doctrine, and develops an encyclopedic system in which priority is accorded to natural science" over metaphysics and theology [278]. Picardi's constant reference is the so-called treatise "Ointment of Arms", published in Paris in 1636 together with other writings of Sorel, and used in the "remote" healing of blade-inflicted injuries. An annotated translation of the entire treatise into Italian features in an appendix to Picardi's piece [313–341].

The last of the contributions illustrate the scholarly change of attitude to, and respect for, the knowledge of magic since Humanism and the Renaissance. Parallel to this, the relevant vocabulary underwent similar transformation

Due to the complexity of the work, Trabucco refers the reader to Trevisani 1979 for further details.

and "dignification", if not in its more technical component, at least inasmuch as it was directed at the philosophical foundation of magic, astrology, and divination. I am aware that, with such general observations, we stand on the threshold of one of the vexed questions of philosophical historiography and the history of science: that is to say, the question of scholarly prejudices injected, since the 19th century, into the study of sciences and methodologies developed in the past. In presenting Sannino's essay, "Quid sit magica naturalis? Scientia aut ars? Quid sit scientia imaginum?" [84-91], we noted that it opens with a paragraph on "The Historiographical Debate" that is concerned, apparently, with the questions that William of Auvergne posed for himself, either expressly or implicitly. In her quick incursion into historiography, Sannino starts from James G. Frazer's The Golden Bough, goes through Wittgenstein's notes about Frazer's work, Lynn Thorndike, Sarton, and Duhem, and reaches the Italian context between the previous and the present centuries, ending with a reminiscence of the views of Paolo Lucentini, her mentor and the initiator of the Hermes Latinus. Without going into the details of this debate, I will recall the contributions of such distinguished scholars as Richard Lemay and David Pingree which mark the historiography of science since the second half of the last century, including the historiography of magic, astrology, and divination in the Middle Ages. It is probably an established fact for medievalists that the methodology of historical research suffers from various limitations and prejudices, both subjective and objective. Every researcher knows how to deal with the sources; and it is widely known that, when Aristotelianism established itself in the 13th century, a specific notion of science shaped up from which other forms of knowledge would be both distinguished and evaluated. Research in the medieval interpretations of Aristotle's theory of science has documented an important shift in its reception. First received as a kind of meta-theory of knowledge (e.g., Robert Grosseteste, whose Commentary is at the origin of the medieval exegesis of the Posterior Analytics), the Aristotelian theory was gradually subjected to a "deconstructivist" interpretation. On this model, Aristotle's system was made, as it were, more fluid by appealing to such notions as the subalternation or subordination of sciences naturally suited to legitimate a certain measure of osmosis between different disciplines. Over the course of the 14th century, increasing attention was given to the problematic status of the "sciences of nature" and the "empirical sciences". Whenever information is required about the meanings of "scientia", "experimentum", and "scientia experimentalis", it is in the commentaries on the Posterior Analytics that it can be found. Equally important are Aristotle's

passages about the nature of *scientia*, the *accessus* to his treatises, and the prologues to the commentaries on Peter Lombard's *Sentences*—where the question "Utrum theologia sit scientia" morphs progressively into an independent treatise on the nature of human knowledge, its forms, and the conditions for its certainty.

As I said at the outset, the two volumes discussed here contain mostly reports on research that is still in progress. Other papers provide scholars of medieval thought and culture with the status quaestionis of specific subjects and problems. Still others introduce them to features and texts of divination and astrology. The first group includes the majority of papers in the volume on geomancy. (As a matter of fact, the edition of Particule I-IV, 4 of the Geomantia attributed to William of Moerbeke, came out while the present discussion was going to press). But some of the papers are the work of eminent scholars who have long distinguished themselves in the vast and complex fields of astronomy, astrology, and related sciences such as those which have been explored. We have been able to gain insight into some of the freshest research that is being developed, and we have looked at comprehensive overviews of some of the trajectories followed by sciences and techniques at a given point of time, across different lands in the multimillennial history of civilization. We could appreciate how far sciences and techniques travelled across time, space, linguistic barriers, contributing in the end to shape and define the modern worldview. Such is the area of scholarly activity that has long distinguished the editorial policy of the Micrologus Library, where the two volumes discussed here first appeared.¹²

BIBLIOGRAPHY

Akasoy A.; C. Burnett; and R. Yoeli-Tlalim. 2008. *Astro-Medicine: Astrology and Medicine, East and West*. Florence.

Beullens, P. 2019. "Why William of Moerbeke Is Not the Author of 'His' 'Geomantia' (And Why That Does Not Make the Text Less Interesting)". *Mediterranea* 4: 239–244.

See Akasoy, Burnett, and Yoeli-Tlalim 2008; Bianchi 2019; Bohak and Burnett 2021; Boudet 2020; Boudet, Collard, and Weill-Parot 2013; Boudet, Osterero, and Paravicini Bagliani 2017; Ducos and Lucken 2018; Martinez Gasquez 2016; Jacquart and Paravicini Bagliani 2021; Picardi 2019; and Rapisarda and Niblaeus 2014.

- Bianchi, L. 2019. *Naturalismo*, scetticismo, politica. *Studi sul pensiero rinascimentale e libertino*. Florence.
- Bohak, G. and C. Burnett. 2021. edd. *Thabit ibn Qurra* On Talismans *and Ps.-Ptolemy* On Images 1–9. *Together with the* Liber prestigiorum Thebidis *of Adelard of Bath*. Florence
- Bos, G.; C. Burnett; T. Charmasson; P. Kunitzsch; F. Lelli; and P. Lucentini. 2001. edd. *Astrologica et divinatoria*. *Hermes Latinus* 4.4: 349–397.Turnhout.
- Boudet, J.-P. 2020. *Astrologie et politique entre Moyen Âge et Renaissance*. Florence.
- Boudet, J.-P.; F. Collard, and N. Weill-Parot. 2013. *Médecine, astrologie et magie entre Moyen Âge et Renaissance: autour de Pietro d'Abano.* Florence.
- Boudet, J.-P.; M. Osterero; and A. Paravicini Bagliani. 2017. *De Frédéric II à Rodolphe II. Astrologie, divination et magie dans les cours (XIIIe-XVIIe siècle)*. Florence.
- Braga, G. 1987. "Le prefazioni alle traduzioni dall'arabo nella Spagna del XII secolo: la Valle dell'Ebro". Pp. 323–354 in B. Scarcia Amoretti ed. *La diffusione delle scienze islamiche nel Medio Evo europeo.* Rome.
- Burnett, C. 2004. "Lunar Astrology: The Varieties of Texts Using Lunar Mansions, With Emphasis on Jafar Indus". *Micrologus* 12: 43–133.
- Caroti, S.; M. Pereira; S. Zamponi; and P. Zambelli. 1977. *Alberto Magno*. Speculum astronomiae. Pisa.
- Charmasson, T. 1980. Recherches sur une technique divinatoire: la géomancie dans l'Occident médiéval. Geneva/Paris.
- Ducos I. and C. Lucken. 2018. edd. *Richard de Fournival et les sciences au XIIIe siècle*. Florence.
- Fahd, T. 1966. La divination arabe. Études religieuses, sociologiques et folkloriques sur le milieu natif de l'Islam. Leiden.
- Hackett, J. 2013. "Albert the Great and the *Speculum astronomiae*: The State of the Research at the Beginning of the 21st Century". Pp. 437–449 in I. M. Resnick ed. *A Companion to Albert the Great: Theology, Philosophy and the Science*. Leiden/Boston.
- Haskins, C. H. 1924. *Studies in the History of Mediaeval Science*. Cambridge, UK.

Holtz, L. 1984. "Les manuscrits latins à gloses et à commentaires de l'antiquité à l'époque carolingienne". Pp. 139–167 in C. Questa and R. Raffaelli edd. *Atti del convegno internazionale: "Il libro e il testo". Urbino, 20–23 settembre 1982*. Urbino.

- Jacquart D. and A. Paravicini Bagliani. 2021. edd. *Le Moyen Âge et les sciences*. Florence.
- Judy, A. G. 1976. ed. Robert Kilwardby: De ortu scientiarum. Toronto.
- Juste, D. 2007. Les 'Alchandreana' primitifs. Étude sur les plus anciens traités astrologiques latins d'origine arabe (Xe siècle). Leiden/Boston.
- Martinez Gasquez, J. 2016. ed. *The Attitude of the Medieval Latin Translators Towards the Arabic Sciences*. Florence.
- Picardi, M. 2019. Il geroglifico della natura. Filosofia, scienza e magia in John Dee. Florence.
- Pingree, D. 1987. "The Diffusion of Arabic Magical Texts in Western Europe". Pp. 57–102 in B. Scarcia Amoretti ed. *La diffusione delle scienze islamiche nel Medio Evo europeo*. Rome.
- Rapisarda, S. and E. Niblaeus. 2014. edd. *Dialogues among Books in Medieval Western Magic and Divination*. Florence.
- Rossi, P. B. 1981. ed. *Robert Grosseteste:* Commentarius in Posteriorum Analyticorum libros. Corpus Philosophorum Medii Aevi, Testi e Studi 2. Florence.
- Rubino, E. and A. Beccarisi. 2021. edd. *Guillelmi de Morbeka Geomantia*, *I–IV*, 4. Corpus Philosophorum Medii Aevi, Testi e Studi 26. Florence.
- Tannery, P. 1920. "Le Rabolion" (œuvre posthume). Pp. 295–401 in J.-L. Heiberg and H. G. Zeuthen edd. *Paul Tannery. Mémoires scientifiques* 4.14. Toulouse/Paris.
- Trevisani, F. 1979. "Un corrispondente di Cartesio: alcune note su Lazare Meyssonnier (1611/12–1673), medico e astrologo lionese e sulla sua 'Belle Magie' (1669)". *History and Philosophy of the Life Sciences* 1: 285–308.
- Villuendas-Sabaté, B. 2012. La geomancia en los manuscritos judeo-árabes de la Gueniza de El Cairo. Cordoba.
- Zambelli, P. 1992. The "Speculum Astronomiae" and Its Enigma: Astrology, Theology and Science in Albertus Magnus and His Contemporaries. Dordrecht/Boston/London.