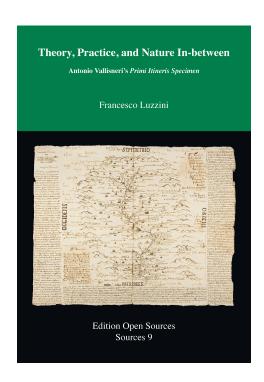
# Edition Open Sources Sources 9

Francesco Luzzini:

On Method

DOI: 10.34663/9783945561324-03



In: Francesco Luzzini: Theory, Practice, and Nature In-between: Antonio Vallisneri's Primi Itineris Specimen

Online version at https://edition-open-sources.org/sources/9/

ISBN 978-3-945561-32-4, DOI 10.34663/9783945561324-00

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The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at http://dnb.d-nb.de

# Chapter 2 On Method

For one thing after other will grow clear, [...] Thus things for things shall kindle torches new.<sup>1</sup>

#### 2.1 Studies and Influences

It is by now widely recognized that early modern science is as much about theories as it is about communication, travel, fieldwork, and exchange of information and objects. As we have seen, the case of Antonio Vallisneri is no exception to this thesis. Interestingly, it also applies to the history of science. On my part (in all due proportion, and humbly), I am no exception.

With respect to medicine and natural philosophy, Vallisneri was the leading Italian scholar of his time. It was by appealing to shared experimentalist values, and by endorsing a view of science as a collective and cumulative enterprise, that he came into contact with a great number of savants throughout Europe and eventually became the center of a broad epistolary network. In 2000, when the National Edition of Antonio Vallisneri's Works was established,<sup>2</sup> it was in acknowledgment not only of his impact on contemporary and later scholars but also of the influence exerted *on* him *by* the many other members of the Republic of Letters. Nor was it by chance that Antonio's keen awareness of the collective nature of science allowed him to merge successfully different streams of knowledge and practice (the Galilean experimental legacy, the empirical model, and the theoretical frameworks of Baconian philosophy and Cartesian mechanism) into an extremely interdisciplinary (and yet consistent) approach to medicine and natural philosophy.

Obviously, I cannot claim the honor of having, or of having had, any long-lasting or significant impact on any scholar other than myself. However, in regards to *my* approach to the history of science, it is undeniably the result of many different academic, scholarly, and educational influences—which, in turn, derive from various professional backgrounds, experiences, suggestions, and points of view. I acknowledge this fact with pride and gratefulness.

In 2003, when I first became interested in historical research, I was still a MA student in natural sciences at the University of Milan. Although I was an aspiring naturalist, I had only a vague idea of what the history of science was. Before reading a textbook devoted

<sup>&</sup>lt;sup>1</sup>"Namque alid ex alio clarescet, [...] Ita res accendunt lumina rebus" (Lucretius 2018, I, 1115–1117. English translation: Lucretius 1916, http://data.perseus.org/citations/urn:cts:latinLit:phi0550.phi001. perseus-lat1:1.1083).

<sup>&</sup>lt;sup>2</sup>See www.vallisneri.it; http://www.olschki.it/la-casa-editrice/collane-Olschki/edizioni-nazionali/edizione-nazionale-Vallisneri. For many years, the National Edition has produced many important studies, critical editions and digital humanities projects, thereby affirming itself as one of the most lively and renowned cultural institutions of this kind in Europe. As such, it has recently joined the ISCH COST Action IS1310—"Reassembling the Republic of Letters, 1500–1800," a digital framework for multi-lateral collaboration on Europe's Intellectual History (http://www.republicofletters.net/).

to this discipline,<sup>3</sup> all my notions were based either on my personal and desultory readings or on the concise and typically progressive lists of forerunners, pioneers, and triumphant discoveries that lecturers used to captivate us with at the very beginning of every course (in accordance with an unfortunate yet incredibly refractory habit of scientific faculties that nowadays still tends to pit "real" and "useful" science against "subjective" and mostly "ornamental" humanistic disciplines). In any case, the textbook I read was enough to arouse my curiosity and solidify my decision to prepare an MA dissertation in the history of science.<sup>4</sup> Thus, in a flagrant act of optimism I stepped into the office of one of the textbook's authors, Franco Andrietti; there, by chance, I found him talking with the other author, Dario Generali, who shortly afterwards would become my mentor.

Being an historian of science (and, furthermore, the coordinator of the Vallisneri National Edition), Generali introduced me to a scholarly tradition dating back to the beginning of the XX century. He himself had studied philosophy at the University of Milan, where he had been a student—and, later, a collaborator—of one of the main critical empiricist anti-metaphysical philosophers in Italy: Mario Dal Pra (1914–1992). This scholar belonged to the second generation of the so-called Scuola di Milano ("School of Milan"), a group of intellectuals that emerged in the 1920s and that followed the works of Piero Martinetti (1872–1943) and his pupil Antonio Banfi (1886–1957). In the decades which followed, even though the members of the Scuola explored an extremely wide range of subjects, their methodological approach relied on a set of well-defined common criteria: the adoption of critical rationalism and critical empiricism; a determined insistence on the centrality of sources and on the need for contextualization in historical inquiry (and, consequently, the scrutinizing of the methodological principles of philology and textual criticism); a general opposition to dogmatism of any kind; and, finally, a marked interest in interdisciplinary studies, with a special consideration for dynamic relationships and interactions between critical rationalism and scientific practices and technologies.

Throughout the first and second halves of the XX century, this school developed some strong (though partial) affinities with the concept of critical rationalism upheld by Karl Popper (1902–1994). Unlike Popper and his followers, however, the group in Milan relied predominantly (if not essentially) on a rather different epistemological model which—much more than the principle of falsifiability—supported the investigative potential of scientific objectivity and assertability for the development of human knowledge. Eventually, the Scuola became the vanguard of the philosophy and history of science in Italy, and trained a number of renowned academics: the aforementioned Dal Pra, Ludovico Geymonat (1908–1991), Giulio Preti (1911–1972), Paolo Rossi (1923–2012), and many others.<sup>5</sup>

Such was the cultural context from which the National Edition of Vallisneri's Works emerged, and by which—thanks to the teachings and advice I received from Generali, Maria Teresa Monti (who would become my supervisor at the University of East Piedmont from 2010 to 2013), Benedino Gemelli, Ivano Dal Prete, and other friends—I laid the foundation of my intellectual and professional identity. In learning the theoretical and methodological principles of historiography, philology, textual criticism, scholarly editing, and digital humanities (I joined Dal Prete in working on the electronic inventory of Vallisneri's correspondence, and transcribed and digitized hundreds of letters), I gradually acquainted myself with a research approach that was particularly suited to my inter-

<sup>&</sup>lt;sup>3</sup>Andrietti and Generali 2002.

<sup>&</sup>lt;sup>4</sup>Luzzini 2005.

<sup>&</sup>lt;sup>5</sup>On this topic, see Assael 2009; Beretta, Mondella, and Monti 1996; Dal Pra and Minazzi 1992; Generali 2015; Micheli 2016; Papi 1990; http://sdm.ophen.org/progetto/.

disciplinary background. To my utmost gratification, I was enthusiastically encouraged to make profitable use of the scientific competencies I had acquired in previous years by merging them with my new skills. Thus, soon enough the replication—both in the field and in the laboratory—of Vallisneri's medical and *philosophical* explorations, observations and experiments became a pleasant routine for me and a distinguishing feature of my work.<sup>6</sup> I was also able to present and discuss my research on an international stage thanks to several conferences and workshops promoted by the National Edition from 2004 to 2010. And, needless to say, all of these experiences made me painfully aware of how much I still had to learn.<sup>7</sup>

A further crucial step in my scholarly development occurred in 2006, when I became interested in the Earth sciences in early modern Europe, and in Vallisneri's contribution to this subject, after starting my Ph.D. at the University of Bari. I needed a supervisor, of course; yet another fortunate circumstance allowed me to meet the right person at the right time. In fact, among the collaborators involved in the Vallisneri National Edition was Ezio Vaccari, Professor of the History of Science at the University of Insubria, and one of the handful of historians of the Earth sciences in Italy.

Like Generali, Vaccari persevered in encouraging me to replicate Vallisneri's travels and explorations in the field. In supervising my Ph.D. dissertation, he made sure to acquaint me with all the essential studies focused on the birth and development of the geological sciences. Thus, I familiarized myself with the vast literature devoted to this complex and intriguing subject: the works of Martin Rudwick, Rhoda Rapparort, Ken Taylor, David Oldroyd, Nicoletta Morello, François Ellenberger, Paolo Rossi, Sally Newcomb, Claude Albritton, Norman Cohn, and many, many others (including the ubiquitous Stephen Jay Gould, the only one I knew from my student years in Milan). Unexpectedly, I had the opportunity to meet some of these authors in person in 2007 when I attended the 32nd Symposium of the International Commission on the History of Geological Sciences (INHIGEO) in Eichstätt, Germany. As I would soon discover, this event marked another turning point for me in my growth as an historian of science. In fact, in the years which followed I attended two more annual INHIGEO meetings: one (2010) in Madrid, Spain, and the second (2014) in California's Asilomar Conference Grounds. Meanwhile, in 2012 I had officially become a member of this organization.

By joining INHIGEO, I entered an uncommonly supportive and inspiring community. I met a great number of passionate, expert, and genuinely curious people whose help and interest in my work were decisive in increasing my knowledge and understanding of the many dominant topics in the history of early modern natural philosophy: for example, the hydrogeological debate, the study of mountains and fossils, the practice of geological journeys and field research, and the intricate issues of diluvialism and geochronology. The positive impact this new stream of knowledge and connections had upon me bore fruit a few years later when the support and advice I received from INHIGEO members

<sup>&</sup>lt;sup>6</sup>See Luzzini 2007; 2008; 2010; 2011a; 2011b; 2011c; 2013a, 90–143; 2014a; http://www.vallisneri.it/osservazioni geologiche.shtml; https://vimeo.com/102054014.

<sup>&</sup>lt;sup>7</sup>The proceedings of the meetings were published by the Vallisneri National Edition in Dal Prete, Generali, and Monti 2011; Facchin and Spiriti 2011; Generali 2008; 2011a; Generali and Ratcliff 2007; Monti 2011. 
<sup>8</sup>Luzzini 2009a.

<sup>&</sup>lt;sup>9</sup>Albritton 1980; Cohn 1996; Ellenberger 1999; S. J. Gould 1987; Morello 1979a; 1979b; Newcomb 2009; Oldroyd 1996; Rappaport 1997; P. Rossi 1979; Rudwick 1972; Taylor 2008.

<sup>&</sup>lt;sup>10</sup>The proceedings of the meeting were published in Kölbl-Ebert 2009.

<sup>&</sup>lt;sup>11</sup>The proceedings of the meeting were published in Ortiz et al. 2011.

<sup>&</sup>lt;sup>12</sup>The proceedings of the meeting were published in the journal Earth Sciences History, 34 (2), 2015.

Kerry Magruder and Martina Kölbl-Ebert played a key role in the success of my applications for two resident fellowships (2012 and 2014) at the Linda Hall Library of Science, Engineering and Technology in Kansas City (MO).

At the Linda Hall Library, I reached another milestone in my scholarly formation. Overall, I spent six months in this amazing place, enjoying unlimited and easy access to not just one of the best and largest history of science collections in the world but to *all* of the original sources that I needed for my studies. This enormously enriching experience boosted my research and paved the way for the publication of several papers, <sup>13</sup> the completion of my first book, <sup>14</sup> and for the events that led to my becoming interested in (and qualified for) participating in the Edition Open Sources project, the latest turning point in my intellectual and professional path.

The years I spent working as an EOS Postdoctoral Fellow at the University of Oklahoma Libraries (January 2015–June 2016) and at the Max Planck Institute for the History of Science (July–December 2016) changed my approach to scholarly work in a very profound way. By joining the EOS project, I took part in shaping an innovative method for the production of critical editions of scientific texts, a method where such terms as "digital humanities" and "interdisciplinarity" could mean more than just vague, rhetorically abused concepts.

Achieving this latter goal was no easy task for us. New skills had to be acquired, and new challenges had to be faced. We needed to harmonize the methodology used for the construction of a critical edition—which is typically meant to be the conclusive version of a given text<sup>15</sup>—with digital publication's new features which, by definition, imply the ideas of continuous improvement and change. Thus, I and my supervisors Kerry Magruder and Stephen Weldon, along with all of the scholars and faculty members involved in the project, were engaged in a constant dialogue with IT experts from both the OU Libraries and the Max Planck Institute (Logan Cox, Carl Grant, David Corbly, Klaus Thoden, and many others); consequently, the technical improvement of the EOS platform could proceed in concert with immediate feedback and iteration from users and developers alike. Not surprisingly, this activity required a mutual effort from both groups to become acquainted with each other's languages and research methods. It entailed plenty of discussions, meetings, seminars, and workshops and required countless notes, drafts, reports, last-minute rewrites, and emails. We all shared our knowledge and experience, and we all learned. And, sure enough, I had a lot to learn.

From this truly interdisciplinary, collective, cumulative, and scientific work I gained new competencies, a new book, and what so far is the most important landmark in my professional career. However, I also gained something even more precious, whose importance stretched well beyond the professional sphere and changed my personal life and my view of the world. I had become proudly aware, like never before, that I was an active part of a community and, before and above all else, that it was within this context that my work made sense.

All too often scholars forget—or worse, neglect—this simple and vital fact. On my part, I will not commit such an error again.

<sup>&</sup>lt;sup>13</sup>Luzzini 2013b; 2013c; 2014a; 2014c; 2014d; 2015a; 2015b; 2016b.

<sup>&</sup>lt;sup>14</sup>Luzzini 2013a.

<sup>&</sup>lt;sup>15</sup>This subject is still a matter of debate among scholars. A very interesting (though, in my opinion, not entirely convincing) point of view about the issues, goals, and methodologies of textual criticism and critical editions is provided by James Hankins, General Editor of the I Tatti Renaissance Library: http://nrs.harvard.edu/urn-3:HUL.InstRepos:6314663.

## 2.2 Note on the Text: Transcription

This critical edition of Vallisneri's *Primi Itineris Specimen* is based on a single source text, the draft version held at the State Archive of Reggio Emilia (Italy). The official copy of the document is, supposedly, still kept in the Archives of the Royal Society of London; however, no clear evidence of its existence and location has yet been found. Consequently, no collations of different manuscript versions were possible.

The text is written for the most part in Latin. Only a few significant paragraphs in the main manuscript (pp. V.r–VI.r) and in the additional papers (pp. XXVI.r, XXIX.r, XXX.r, and, partially, pp. XXVII.r, XXIX.v, and XXXI.r) are in Italian. The criteria used for the transcription conform essentially, though not entirely, to the editorial principles developed by the National Edition of Antonio Vallisneri's Works as these are extensively outlined and discussed by Concetta Pennuto's Note on the Text in the critical edition of the first volume of Vallisneri's *Quaderni di Osservazioni*. The primary aim of these guidelines is to reach a reasonable compromise between two apparently conflicting, yet equally unavoidable, needs: an accurate, comprehensive and faithful edition of the original document which is intelligible to modern and even non-specialized readers. In order to achieve this dual purpose, the transcription has been provided with a double set of notes: one for the philological apparatus (notes are marked with lower-case letters in italics and numbered in alphabetical order: *a, b, c, ... z, aa, ab, ac, ... az, ba, bb, ...* etc.), and one for historical and scientific analyses (notes are marked with Arabic numerals: 1, 2, 3, ... etc.). Both sets of notes are numbered independently for each chapter.

# 2.2.1 Transcription guidelines

As a general rule, the spelling, punctuation, grammar, capitalization, and paragraph formatting of the original manuscript have been preserved. With the exception of the parts in Italian, and with a few exceptions for the Latin text, original abbreviations—for example, contractions (the omission of medial letters: e.g. "obblig.mus" for "obbligatissimus"; "v.ae" for "vostrae") and suspensions (the omission of terminal letters: e.g. "lib." for "liber"; "tab." for "tabula")—have not been expanded. However, superscript and subscript letters, whether abbreviated or not (e.g. "ill." "minerar"; "non"; "qua,"; "pra, dictam"; etc.), have always been lowered—or, accordingly, raised—to the line ("ill.mus"; "minerarum"; "non"; "quae"; "praedictam"; etc.). Likewise, cautious modernization and normalization have been made wherever the clarity of the original text was compromised by extremely difficult or uncommon (though correct) abbreviations and variants of Latin words, or by obvious misspellings and errors, or by misleading punctuation and/or capitalization. In any case, all editorial interventions and corrections have been conveniently specified and explained in the philological notes, where words and passages from the transcription are written in normal font, and editorial comments are rendered in bold (e.g. "In the text: Provincia"; "In the text: enucleatione"; "These lines are written in regular font"; "From this point on, text at p. 22 continues on the recto of an additional, unnumbered paper (XIII)").

In accordance with a widely held typographical convention, all the underlined words, phrases and passages from the manuscript have been rendered in italics in the transcription.

<sup>&</sup>lt;sup>16</sup>http://www.vallisneri.it/criteri.shtml. Concetta Pennuto's Note on the Text is in Vallisneri 2004, LXXXV–XCIII. The same guidelines have been extensively outlined and discussed by other authors in Vallisneri 2007, IX–XXXV; Vallisneri and Cogrossi 2005, 25–27, 85–89; Vallisneri 2006, CXXXV–CXLVI; 2011, LXXI–LXXXI; 2009, CXCI–CXCVII; Vallisneri and Davini 2010, LXIX–LXXVIII; Vallisneri 2012, LXI–LXVI.

#### 2.2.2 Variants

Many letters, words, passages, and—often—entire paragraphs in the manuscript are marked for deletion with either a strikethrough or with black ink scribbling. In most cases, the content of these deleted parts is as rich and significant as the content of the main text, providing the reader with crucial data on the author's original intention and on the development of his thought. In order to preserve the textual information in its entirety, all variants have been inserted in the philological notes: deleted text is rendered in italics and indicated in its phrase context, and normal text is rendered in normal font. For example, a variant in the manuscript is explained as follows:

Text in the manuscript (facsimile):



Transcription (main text):

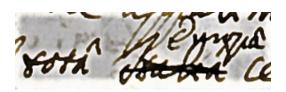
fontes, omnesque perennes qui

Transcription (philological note):

fontium, omnium que perennium copiarum qui

When a word in the manuscript is marked for deletion and specifically replaced with another term, the new variant (in normal font) always follows the deleted one (in italics) at the end of the corresponding philological note. For example:

Text in the manuscript (facsimile):



Transcription (main text):

tota Europa

Transcription (philological note):

tota *Italia* Europa

# 2.2.3 Integrations

Editorial insertions are provided in case of uncertain readings, or in case of missing, illegible, or damaged text. Both in the transcription and in the philological notes, these integrations are indicated by angle brackets (e.g. "qui<br/>bus>"; "<maxime acta>"). Ellipses within angle brackets indicate partially, totally illegible, or missing text ("<...>"; "<...>lino-nitrosum"; "<...d...>i"; "<...f...ex...>"). Editorial insertions can concern both the main body of the transcribed text and the philological notes.

A different kind of integration is provided in the historical and scientific notes, where editorial omissions in the quoted passages are indicated by ellipses within square brackets (e.g. "ammites vel ammonites [...] ovis piscium similes"; "life was sustained [...] through the presence of a life spirit"; "Leguminum specie lapidem quidam inveniuntur, pisis [...] aut lentibus similes [...]").

# 2.2.4 Margin notes

The manuscript features several margin notes or "marginalia." These have been transcribed and inserted in the philological notes where—as remarked above—transcribed text is in normal font and editorial comments are rendered in bold. For example, a margin note in the left (or right) margin is indicated with a reference number placed after the closest word in the main body of the manuscript and is explained as follows: "Margin note (right): Volve unam paginam"; "Margin note (left): De Thermal. Aq. Cap. 25, pag. mihi 324"; "Margin note (left): Nimis implicata <...> periodus."

# 2.2.5 Page numbering

The Manuscript pages are numbered with a combination of Roman and Arabic numerals. The Arabic numbering (1–54) is the one provided by the author, whereas the unnumbered folios (the several additional papers in the main manuscript, the eight additional papers not included in it, and both the maps) have been assigned by the editor with Roman numerals (I–XXXIII). Each unnumbered folio, in turn, has a recto (r) and a verso (v) side which are specified accordingly (I.r, I.v, II.r, III.v, III.v, ... etc.). Both in the transcription and in the translation, the passage from one page to the next is marked by the number of the ending page, which is printed in bold charachters and followed by a closing square bracket in normal font (e.g. 17]; 34]; XVIII.r]; XXVIII.v]).

In the facsimile section, manuscript page numbers are given in normal font at the top of each page. Each manuscript page number is followed by the sequence number (expressed in Arabic numerals, in normal font, and within parentheses) of the corresponding digital file (e.g. 26 (049); XVIII.v (063); XXIX.r (106)).

#### 2.3 Note on the Text: Translation

The English translation of the *Primi Itineris Specimen* includes the same apparatus for historical and scientific notes that is featured in the transcription. Accordingly, this set of notes is also marked with Arabic numerals (1, 2, 3, ... etc.), and each chapter is numbered independently.

The page numbering in the translation coincides with the numbering given in the transcription.

## 2.3.1 Translation guidelines

Unlike the transcription, where most of the original abbreviations in the Latin text have not been expanded, all contractions and suspensions have been silently extended in the translation. For example: "l/lib/libr.," i.e. "liber," is rendered as "book"; "c./cap.," i.e. "caput," is "chapter"; "t./tab.," i.e. "tabula," is "table"; "a./an./ann.," i.e. "annus," is "year"; "f./fig.," i.e. "figura," is "figure"; etc. Accordingly, the same procedure has been followed for honorary and formal appellations (for example: "Ill.us/Ill.mus," i.e. "Illustrissimus," is rendered as "Most Illustrious"; etc.). The only exception is the Latin word "pagina" ("page"), whose abbreviations and plural form ("p./pag./pagina/paginae") are rendered as "p./pp." in the translation.

As a general rule, toponyms (cities, provinces, regions, mountains, rivers, etc.) have been written in normal font—even when they are in italics in the transcription—and translated into Italian (e.g., "Regium" is rendered with the Italian name "Reggio"; etc.). Latin has been maintained in the case of names with no modern equivalents (for example, "Armorum Pratum"). Exceptions were made for English translations of Italian and European toponyms that are widely and currently used: for example, "Apeninus" is not rendered with the Italian name "Appennino" but with the English "Apennine"; "Roma" is translated as "Rome"; etc.

Technical and/or specific terms with modern English equivalents have been written in normal font (even those that are in italics in the transcription) and translated: thus, "nitrosum" becomes "nitrous"; "vitriolum" is "vitriol"; etc. Dialect and slang terms have been rendered in italics, and have not been translated (e.g. "cretone"; "canopi"; "filone"; "scaiola"; "salsa"; etc.).

#### 2.3.2 Quotations

In the translation, all book titles are written in their original language, in full, and in italics (e.g. "as Jüngken attests in his *Chymia Experimentalis*, in the chapter on sulphur"; "Sir Fulvio Azzari, in *Compendio dell'historie della Città di Reggio*, writes that").

Prose quotations have been translated, written in normal font, and included within English quotation marks ("") in the main body of the text (e.g. "I shall use the words of Saint Jerome: "They do not embellish the face by artificial means, with purple, nor do they arrange towering crowns with strange ornaments." Neither Minerva, nor Ceres, nor Bacchus dispenses his gifts in that place").

Poetry passages have been translated, written in normal font, and placed in block quotations: these are indented and separated from the main body of the text, and are without quotation marks. For example:

"Claudian, in Panegyricus de Consulatu Manlii, De Monte Olimpo:

He rises above the rains, hears the rushing clouds beneath his feet, and treads upon the roaring thunders.

So was I when I was in the mountains, etc."

#### 2.3.3 Integrations

Like the transcription, editorial insertions are provided in case of uncertain readings or in the case of missing, illegible, or damaged text. These integrations are indicated by

angle brackets (e.g. "<I> pound"), and ellipses within angle brackets denote illegible or missing text (e.g. "<...>"; "of <...> false"; "did <...> <...> they"). In addition, the translation includes another kind of editorial insertions; these have been added wherever a strictly literal rendering of the Latin text was too unclear or ambiguous, and additional words were necessary to clarify the sense of a sentence. Such integrations are indicated by square brackets (e.g. "it covers about three hundred [square] feet"; "it can be seen not far [from there]"; "of which I will [speak] later").

As stated above, in the case of passages quoted in the historical and scientific notes editorial omissions are indicated by ellipses within square brackets (e.g. "ammites vel ammonites [...] ovis piscium similes"; "life was sustained [...] through the presence of a life spirit"; "Leguminum specie lapidem quidam inveniuntur, pisis [...] aut lentibus similes [...]").

# 2.3.4 Margin notes

Consistent with what has been done in the transcription, all margin notes have been translated and inserted in footnotes where they have been marked with lower-case letters in italics (and numbered in alphabetical order: a, b, c, ... z, aa, ab, ac, ... etc.). As for the philological notes, translated text is in normal font and editorial comments are rendered in bold. For example, a margin note in the left (or right) margin is indicated with a reference number placed after the closest word in the main body of the manuscript, and is explained as follows: "Margin note (right): Turn one page"; "Margin note (left): De Thermalibus Aquis, Chapter 25, p. 324 of my [book]"; "Margin note (left): The <...> sentence is too complicated."

#### 2.3.5 Capitalization

In the translation, the capitalization of words conforms to English grammar rules. For example, the Italian term "agosto" is rendered as "August"; the Latin "gallicus" becomes "Gallic"; etc. All honorary and formal appellations have been capitalized whether or not they have an uppercase initial in the Latin text (e.g. "viri Gravissimi" is rendered as "Most Severe Men"; "amicorum optime" is "O Best Friend").

#### 2.3.6 Numbers

The rendering of numbers—whether written in digits, in words, or in Roman numerals—conforms to the style of the Latin manuscript. For example, "bis centum" is rendered as "two hundred"; "vigintiquatuor mille" is "twenty-four thousand"; "XII" is "XII"; "189" is "189"; etc. This rule applies even to ordinal numbers (e.g. "tertium" is "third"; "5°" is "5°").

The rendering of numbers with decimal and thousands separators conforms to English writing conventions. Therefore, in the translation a period is used to indicate a decimal place and a comma is used to indicate groups of thousands (e.g. "1.000,012" is rendered as "1,000.012," etc.).