

DEFINING A NEW HARMONY

THE EDITION OPEN SOURCES (EOS) PROJECT: TOWARDS A CRITICAL EDITION OF AN EARLY MODERN SCIENTIFIC TEXT



FRANCESCO LUZZINI

University of Oklahoma, University Libraries – History of Science Collections

fluzzini@ou.edu / francesco_luzzini@yahoo.com

1. WHAT IS EDITION OPEN SOURCES?



Edition Open Sources

Edition Open Sources (EOS) pioneers a new paradigm in publishing, devoted to open access and high-quality peer review. This collaborative scholarly endeavor publishes academic editions of primary sources in the history of science in online, digital and print formats and offers post-doctoral fellowships in the digital humanities.

Any pre-copyright work held by the University of Oklahoma Libraries History of Science Collections and by the Library of the Max Planck Institute for the History of Science is eligible for publication in Edition Open Sources.

Edition Open Sources follows the publication philosophy developed by the initiative Edition Open Access and is a joint venture of the following institutions and organizations:

HISTORY OF SCIENCE
COLLECTIONS



UNIVERSITY LIBRARIES
THE UNIVERSITY OF OKLAHOMA

University of Oklahoma (OU)

OU Libraries
OU History of Science
Collections
OU History of Science
Department



Max Planck Institute for the History of Science
(MPIWG)

MPIWG Library

Start

- About Edition Open Sources
- News
- Fellowships
- Instructions for Authors

Editor-in-chief

Matteo Valleriani
Max Planck Institute for History of
Science, Berlin
editor-in-chief@edition-open-sources.org

Other Editors

Stephen P. Weldon
Department of History of Science,
University of Oklahoma
Urs Schoepflin
Library of the Max Planck Institute for the
History of Science, Berlin
Kerry V. Magruder
History of Science Collections, University
of Oklahoma Libraries
Anne-Laurence Caudano
History Faculty, The University of
Winnipeg
Massimiliano Badino
Facultat de Ciències, Universitat
Autònoma de Barcelona
Robert G. Morrison
Department of Religion, Bowdoin College

The EOS Project (www.edition-open-sources.org) is a pioneering enterprise in the field of scholarly publishing. It aims to edit and publish open access, high quality, peer reviewed critical editions of primary sources in the history of science. The EOS workflow produces each publication in four different formats:

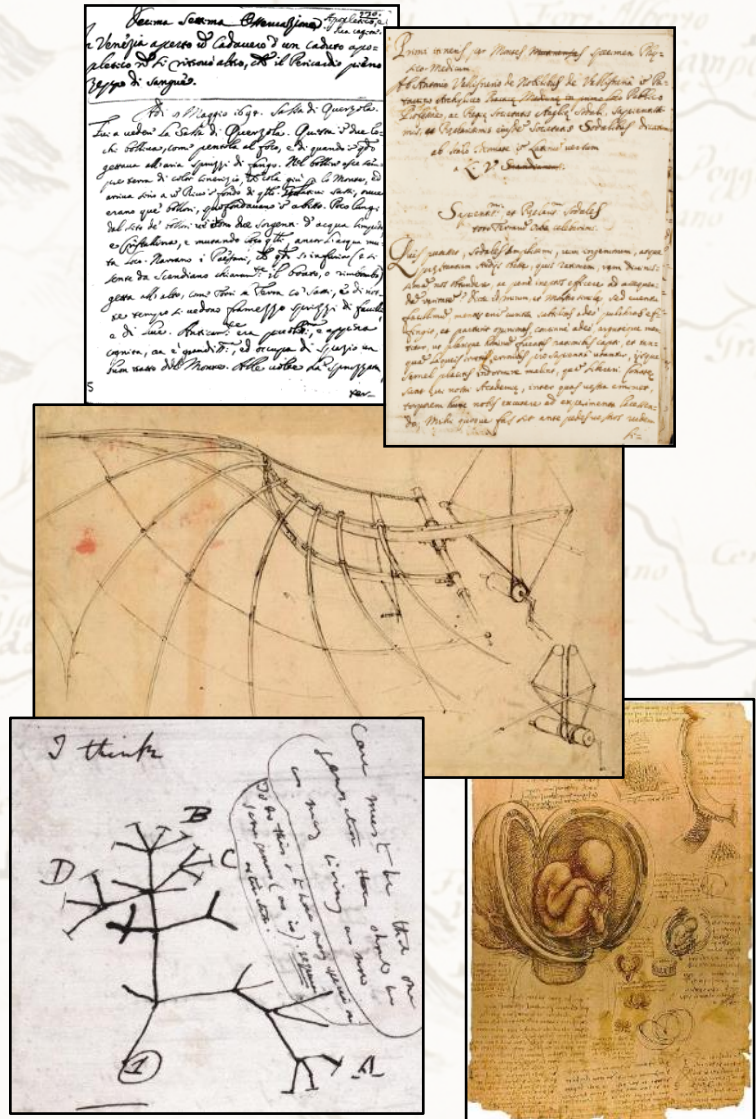
1. EOS Online: An online, freely accessible, HTML-based, interlinked, dynamic presentation, which supports digital tools for analysis and interlinking, accessed from computers and mobile devices;
2. EOS EPUB: A freely downloadable EPUB file (compatible with most eReaders and mobile devices);
3. EOS PDF: A freely downloadable PDF file for offline viewing and printing;
4. EOS Print: A printed edition for convenient purchase, and to ensure high visibility, wide marketing, and library acquisition.

2. WHAT IS A CRITICAL EDITION?

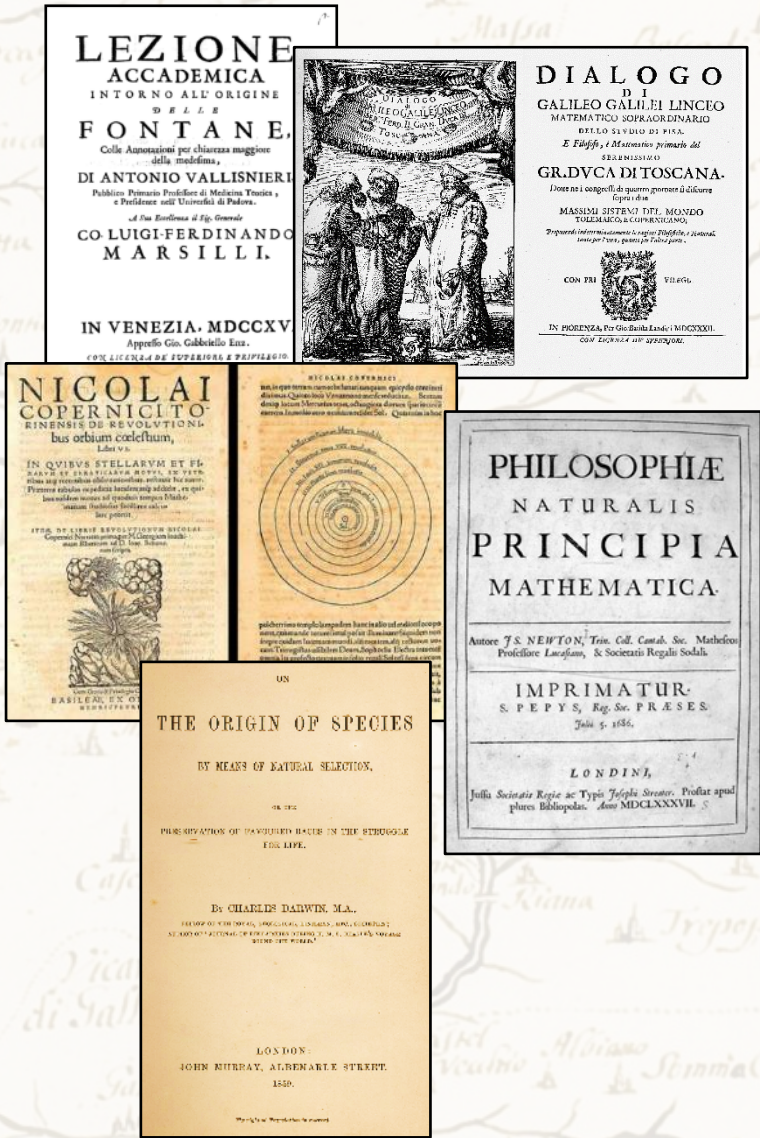
- In **textual criticism** (or **ecdotics**, i.e. the academic field studying the way texts are to be edited), a **critical edition** is the production of a text which aims to reconstruct the original version of the document, as closely as possible to the intention of its author.
- A critical edition is concerned with the study of variants and with the identification and correction of all the transcription errors or misprints in the examined text, through comparison of various versions (when available) or through an in-depth study of a single document.
- A critical edition is accompanied by a **critical apparatus**. This typically includes philological, historical, and scientific notes, along with a scholarly introduction, indexes, and bibliography of all the sources and the already existing studies.
- **A critical edition is an interdisciplinary work**, which requires different competencies. In the particular case of an early modern scientific text, a critical edition involves disciplines such as history, science, philosophy, philology, religion, languages, literature, Information Technology (Digital Humanities).

SOURCES

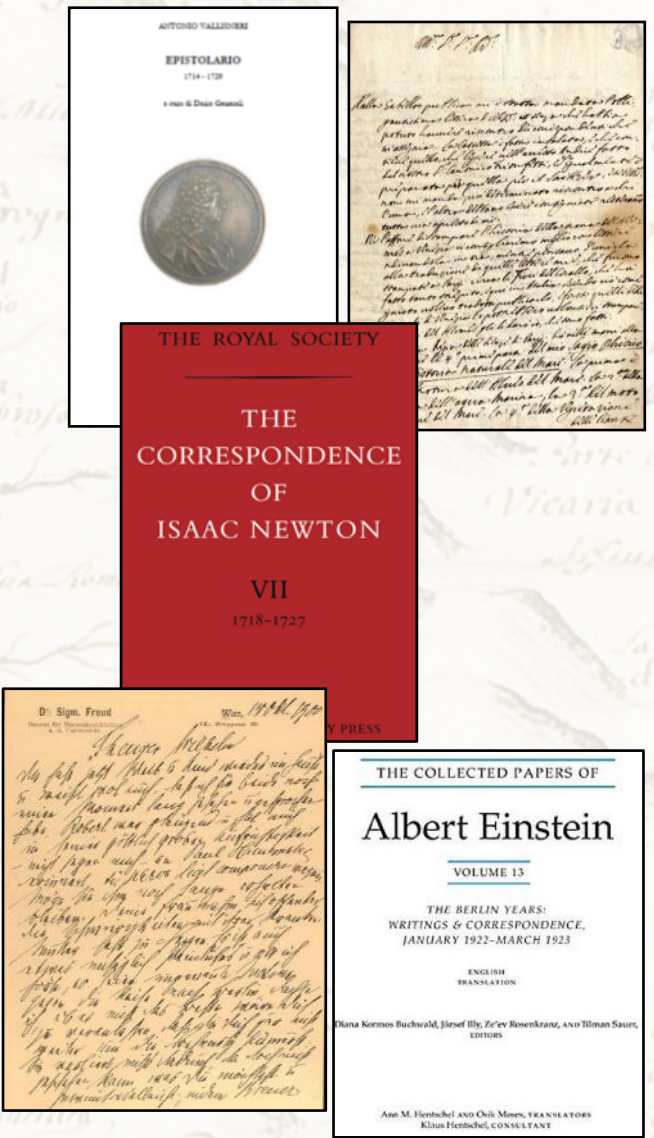
MANUSCRIPTS (REPORTS, NOTEBOOKS, ETC.)



PUBLISHED TEXTS



CORRESPONDENCES



3. WHY ARE CRITICAL EDITIONS MPORTANT FOR THE HISTORY OF SCIENCE?

- Textual criticism helps historians to avoid fatal errors and ideological preconceptions in the study of an author's research and thought. Therefore, it fosters the contextualization of scientific knowledge.
- A critical comparison between a published work and its related manuscripts (as laboratory notebooks, field reports, or letters) makes it possible to look behind the curtain of public communication. Light is shed on a too often unexplored, grey zone, where many factors – dead ends, errors, attempts, reconsiderations, private debates, censorship problems, personal events, etc. – influence theories, discoveries, and publications.
- Just like science, history of science itself is a collective and cumulative enterprise. Hence the crucial importance of a critical edition: it marks the state of the art for a specific topic, at the same time providing a solid base for further progress.

4. WHY IS VALLISNERI'S MANUSCRIPT IMPORTANT?

Primi itineris per Montes Specimen Physico-Medicum.

Ab Antonio Vallisnerio de Nobilibus de Vallisneria in Pa-
tavis Archylice Praeside Medicae in prima huc Publico
Lecturae, ac Regiae Societatis Anglica Sodali, Sapientissi-
mis, et Praeclarissimis eiusdem Societatis Sociis dicitur
ab Italo Domate in Latine vestum
a R. V. Salsolanensi.

Sapientissimi, et Praeclari Sodales
soto Terrarum Orbe celeberrimi.

Quis putaret, Sodales Amphitruoni, vim ingeniorum, atque
perfructum studij Orbis, quis rationem, rem divinis-
simam, nos obstrudere, ac penitus ineptos efficere ad attingen-
dam veritatem? Dicit id mihi, et mihi simile, sed euenit
facillimum, mentis enim cuncta subitibus adeo pulchris ef-
fingit, et parturit opiniones, concinne adeo, arguteque men-
ditur, ut plerumque hominum fideat rationibus capti, et tan-
quam laqueis irremediabilibus pro sapientia utantur, ipsique
semel placitis indormire malint, quam liberari. Sonant
sunt qui nostri Academiae, inter quas uestra eminet,
torporem hunc nobis excutere ad experimenta licen-
do, mihi quoque fas est ante pedes vestros reuoluen-
do.

Primi itineris per Montes Specimen Physico-Medicum (1705)



GALILEO'S EXPERIMENTAL LEGACY IN ITALY: BEYOND THE BORDERS OF PHYSICS AND ASTRONOMY.

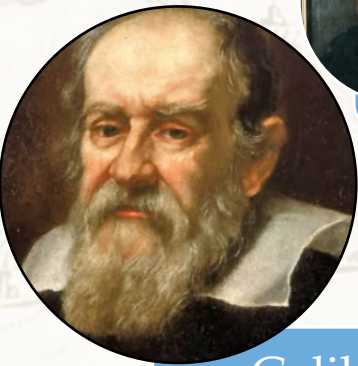
MATHEMATICS

ASTRONOMY

PHYSICS/HYDRAULICS

MEDICINE/BIOLOGY

EARTH SCIENCES



Galileo
(1564-1642)



Benedetto Castelli
(1578-1643)



Giovanni
Alfonso Borelli
(1608-1679)



Evangelista
Torricelli
(1608-1647)



Giovanni
Battista
Baliani
(1582-1666)



Vincenzo
Viviani
(1622-1703)



Francesco Redi
(1626-1697)



Geminiano
Montanari
(1633-1687)



Marcello Malpighi (1628-1694)



Bernardino
Ramazzini
(1633-1714)



Lorenzo
Magalotti
(1637-1712)



Domenico
Guglielmini
(1655-1710)



Luigi Ferdinando
Marsili (1658-1730)



Eustachio
Manfredi
(1674-1739)



Antonio Vallisneri
(1661-1730)

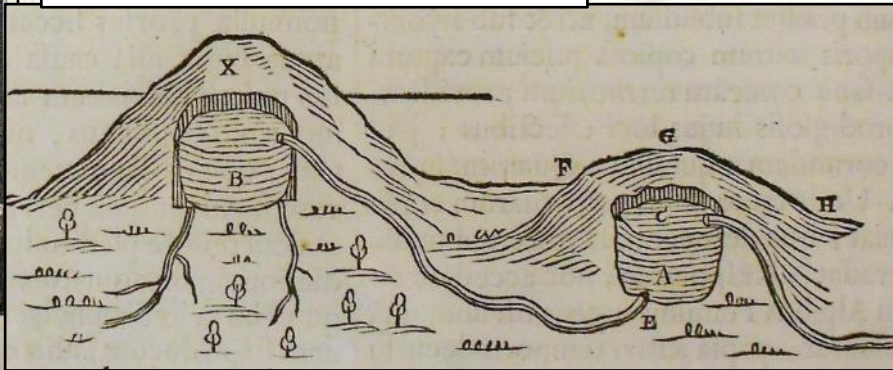
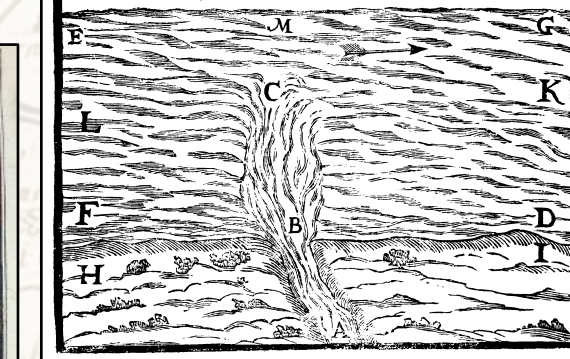
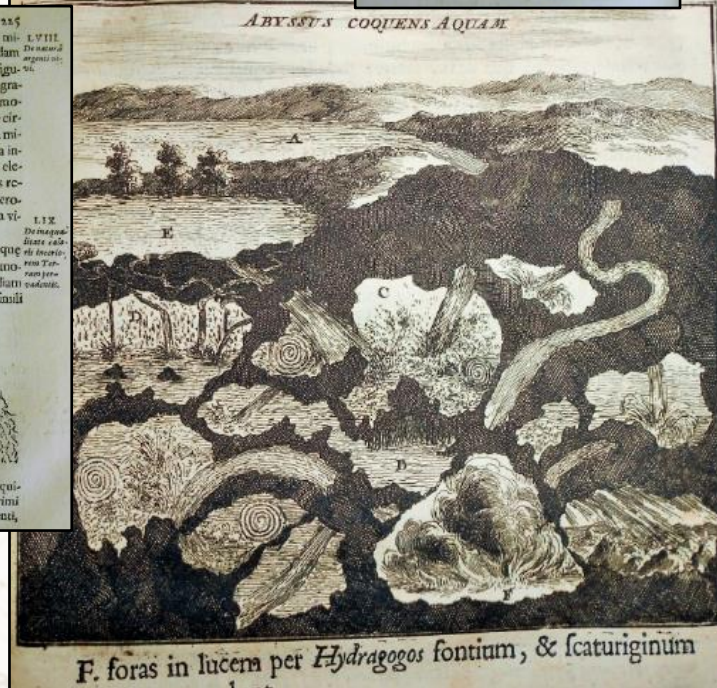
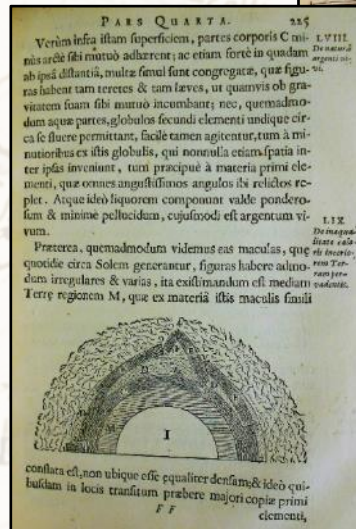
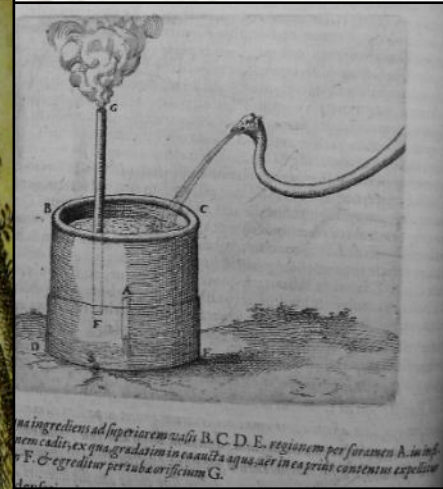
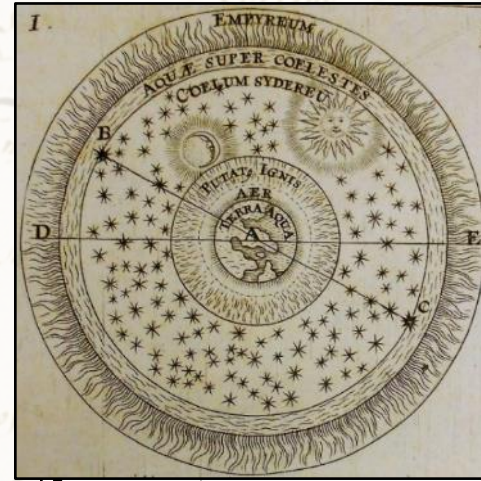


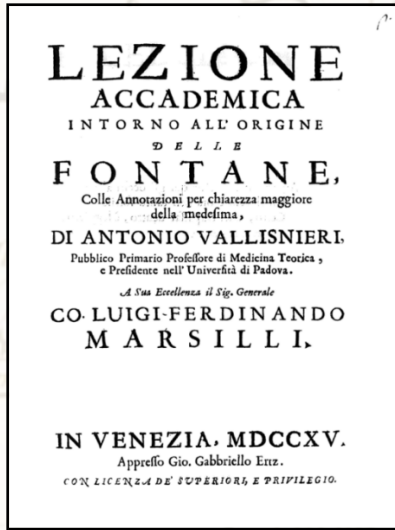
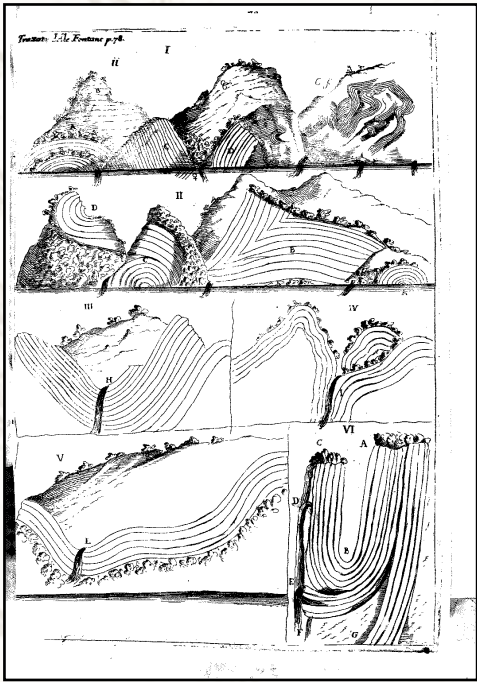
Giambattista
Morgagni
(1682-1771)



Jacopo Riccati
(1676-1754)

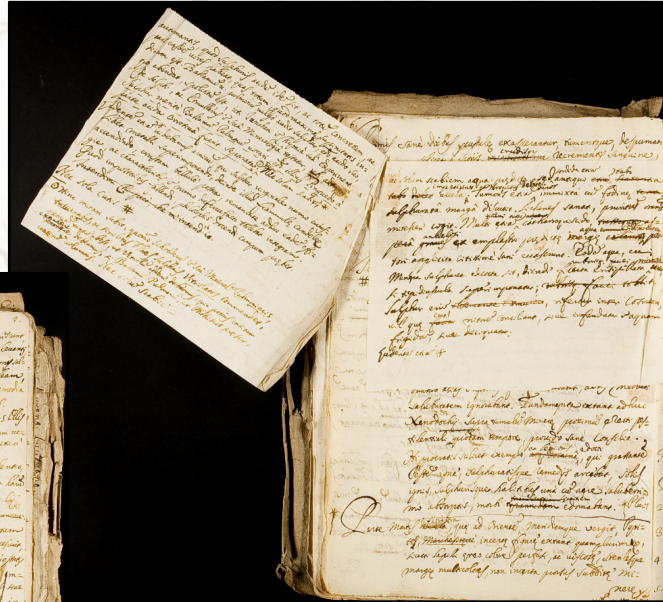
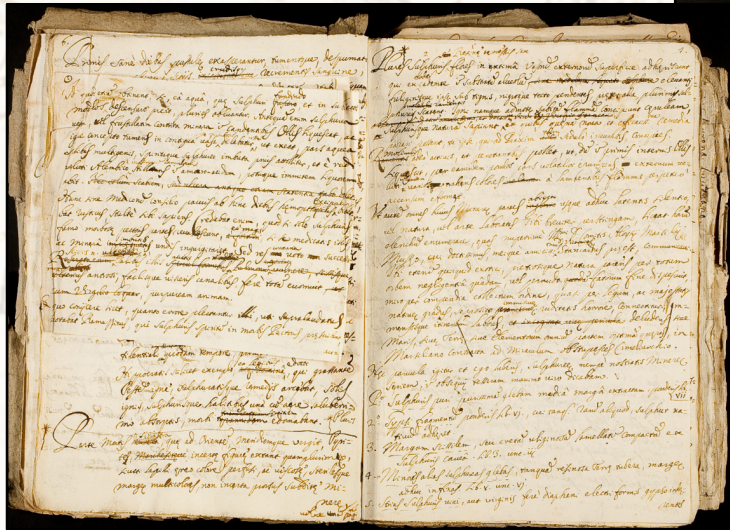
ON THE ORIGIN OF SPRINGS: AN EARLY MODERN DEBATE



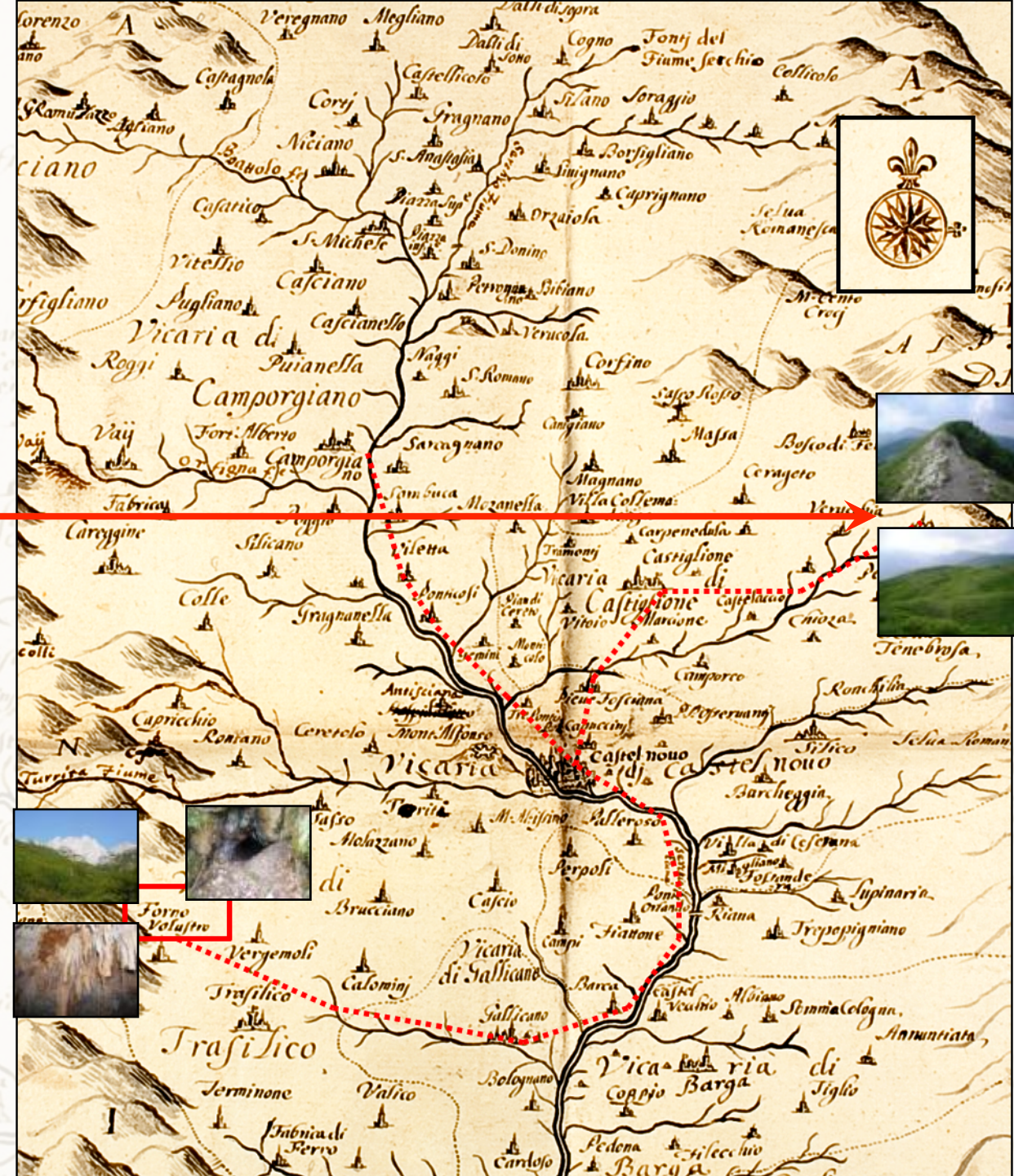


In the *Lezione Accademica intorno all'Origine delle Fontane* (1715), the centerpiece of Vallisneri's thesis was a mass of experimental data that he collected during a journey across the Northern Apennines.

Already in 1705, he had written a report in Latin of this adventure, the *Primi itineris per montes Specimen physico-medicum* (Physical-medical example of a first journey through the mountains). He also sent a copy of it to the Royal Society, hoping for publication in the *Philosophical Transactions*. Anyway, the piece remained unpublished. Two decades later a synthesis in Italian was published in two parts, or *Extracts* (1722; 1726) in the *Supplementi al Giornale de' Letterati d'Italia*.



As to the original draft manuscript, it was considered lost until 2009, when it was found in the State Archives of Reggio Emilia. This text provided such a huge amount of information that it was possible to study the itinerary in great detail, including an experimental replication of Vallisneri's journey and observations.



5. AIMS OF THE PROJECT

1. **BREAKING NEW GROUND IN OUR UNDERSTANDING OF SCIENTIFIC KNOWLEDGE, THEORIES, AND FIELD RESEARCH IN THE EARLY MODERN PERIOD.**

Vallisneri's manuscript is one of the earliest and most well-documented attempts of its time to define an experimental and systematic approach to naturalistic and anthropological explorations.

2. **THE DIGITAL HUMANITIES CHALLENGE.**

How to harmonize a 'classical' critical edition with an online, open-access digital edition? Which are the most appropriate methods and tools?

Unlike other publication workflows, EOS requires authors to assume responsibility of preparing the work for press. To achieve this goal, the EOS platform employs a simplified version of the professional **L^AT_EX** typesetting coding system. LaTeX enables authors to have full control over their books: this automated EOS workflow differs from standard publication models by requiring authors to manage all aspects of the production of their manuscript from drafting to copy editing to typesetting.

7. ~~CONTENT OF THE~~ PUBLICATION IN EDITION OPEN SOURCES

1. ACADEMIC INTRODUCTION: a scholarly essay will provide an analysis of the scientific, philosophical, and cultural background in which Vallisneri performed his research, interacting with other scholars all over Europe.

2. FACSIMILE OF THE SOURCE: high-resolution, open-access licensed images are provided of the original document, which is held in the State Archive of Reggio Emilia. All the files are already available both in TIFF and PDF format.

3. TRANSCRIPTION OF THE SOURCE: a transcription of the Latin manuscript. This will also include author's marginalia, autograph alterations, and original notes. The final text will be complemented with a double set of:

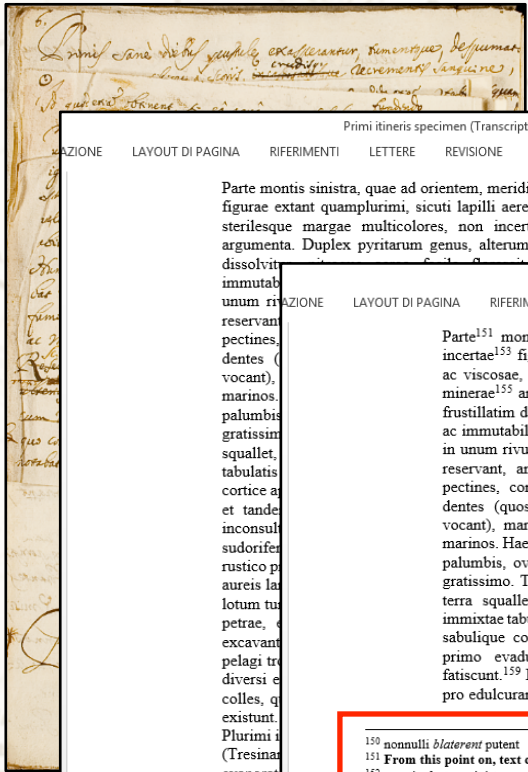
- **Philological notes;**
- **Historical and scientific notes.**

4. AN ENGLISH TRANSLATION OF THE SOURCE.

5. ADDITIONAL MATERIALS: foreword, bibliography of sources and studies (use of  zotero), additional images (including an interactive map), index of names, index of places, index of images, index of subjects, links to related websites, and other features (acknowledgements, etc.).

8. EDITING PROCESS

FACSIMILE (MANUSCRIPT)



TRANSCRIPTION

150 nonnulli blaterant putent
151 From this point on, text of
152 montis dextra sinistra
153 pyrites, marchesive in cer
154 quamplurimae
155 From this point on, text of
156 Duplex
157 G/abellum
158 immixtae stratis tabulatis
159 pollinem rediguntur fatiscu
160 quodam non inerudito, me
161 sudoriferis, tanquam alcha

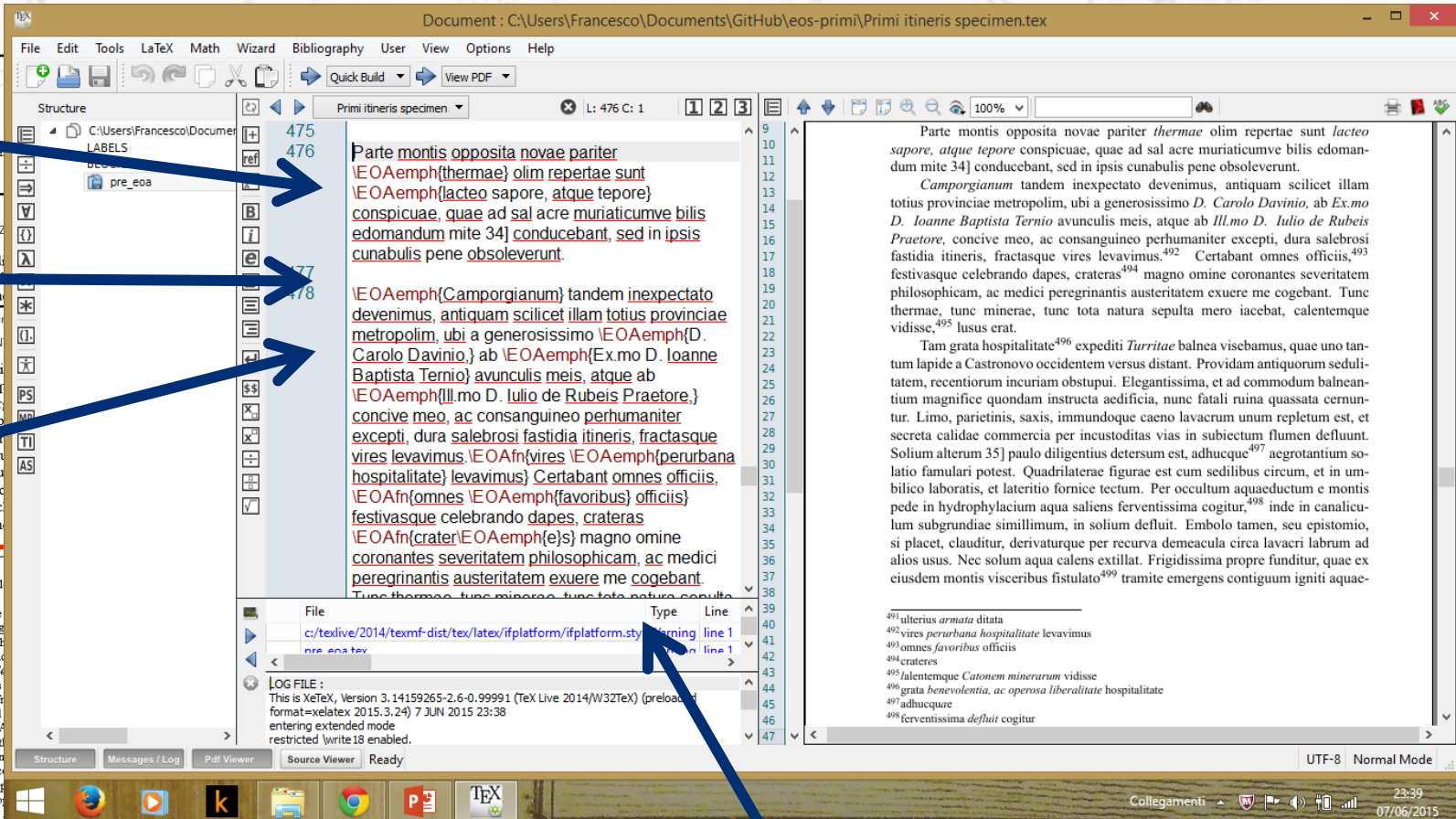
PHILOLOGICAL NOTES

Primi itineris specimen (Transcription only) - Word
Primi itineris specimen (Philological notes) - Word

38 See note 17.
39 Arguably, a sort of cal
40 See note 31.
41 Pyrite, an iron sulfide
figurae ("of uncertain form") sug
pyrite). This mineral has an orth
associated with marl, gypsum, and
See F. LUZZINI, *Il miracolo inutile*
42 This statement seems
distinction between marcasite ("fir
43 Rio Riazzone, a small
north from the city of Scandiano. A
shales. These rocks date back to th
In proceeding further, the Riazzone
(3.6-2.5 Ma). Cartographic sourc
LUZZINI, *Il miracolo inutile*, cit., p
44 Tusk shells, or scapho
On this topic, see *Encyclopaedia*
supersedes the use of other books of reference, Second Edition, vol. XVII, Edinburgh, Printed by John Brown, Anchor
Close, 1816, p. 574.
45 The description may refer to various kinds of corals (Phylum Cnidaria/Coelenterata, Classes Anthozoa and
Hydrozoa).
46 Genus *Pecten* (Phylum Mollusca, Class Bivalvia).
47 Gastropod shells (Phylum Mollusca, Class Gastropoda).

HISTORICAL AND SCIENTIFIC NOTES

LATEX EDITING



wander in the mountains near me; nor my hands wielded spears to pierce wild
beasts, but styluses and writing tablets, so as to pursue truth. My main goal
was the benefit of my students, as on my return I would show them hidden
springs, and new medical properties of the waters.
Climb down a little from that knowledge, O most severe men, by the side
where you look to the seas, lands, and sky as advisors to the Republic of

ENGLISH TRANSLATION

9. ACKNOWLEDGEMENTS



Richard Luce

HISTORY OF SCIENCE
COLLECTIONS



UNIVERSITY LIBRARIES
The UNIVERSITY of OKLAHOMA



Kerry Magruder
Stephen Weldon
JoAnn Palmeri
Melissa Rickman
Jenna McDonald

David Corbly
Logan Cox
Mark Laufersweiler
Barbara Laufersweiler
Jason Sherman
Tao Zhao

Carl Grant
Tara Carlisle
Sarah Clayton
Eric Zemke

Kenneth L. Taylor
Rienk Vermij
Kathleen Crowther
Kraig J. Bartel
Jackson R. Pope
Younes Mahdavi